Classic Melody: What Are the Little Notes For?

I: Introductory

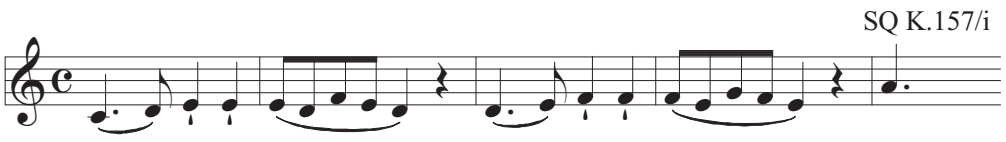
[1] I have argued (Solie 2006) that the salient feature of melody (or theme, or tune) in Western art music of the common-practice period which a genuine theory of melody must confront is that of the "coherence of the incipit" – the fact that in a well-made theme, virtually any change we might suggest in the first few notes, the first motive or two, is distinctly for the worse. As this opening idea is repeated, elaborated, transposed, and spun out into a fully-organized melody by means of manipulations which it has been the work of generations of writers on music to describe, the requirements of this coherence can be relaxed; but at a melody's very opening a handful of notes must seem to bind together with an almost molecular force.

It seems clear that any such theory must be repertorial in nature – explicitly derived from and tested against a specific corpus of music generally recognized to be of the same style and to obey the same principles, whatever they may be. Studies of a homogenous musical repertory – "corpus studies" – have recently become more common in the literature,[1] many of them designed for "machine computation, hence as a form of computational musicology" with results intended to "have import for the study of music cognition." (Gjerdingen 2014, 192) Our main concern in this study, however, will not be with music perception as such: our aim is simply to describe as best we can what occurs in the music at hand, and to suggest some reasons for the patterns we can discover by looking at the repertory as a whole.

[2] That repertory is the music of the Viennese High-Classic style as embodied in the work of its four greatest composers: virtually all of the music, setting aside juvenilia, composed by Haydn, Mozart, Beethoven, or Schubert that has come down to us.[2] We will be examining, however, only major-mode melodies, and just the incipits – their very openings, the first few notes – of these. We want to ask, why does this theme begin exactly this way, and not otherwise? How difficult is it to explain just why virtually any proposed alternative is unsatisfactory?

As a beginning to this kind of narrow-focus inquiry, we will here consider, out of a total corpus approaching 10,000 items, a specific subset of melodies beginning with one of just four pairs of rhythmic patterns, a sub-repertory of about 4000 Classic themes. And about this repertory we will ask, what are the little notes for? Why and when do these composers write dotted rhythms in the incipit? Why exactly is the opening of the first-movement theme of Mozart's String Quartet K.157

Fig 2.1

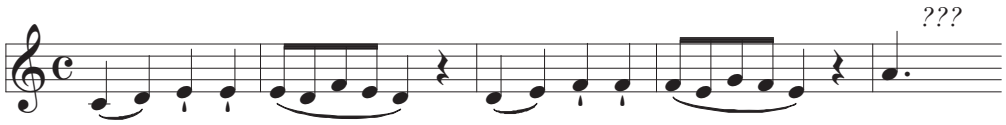


so much better than this hypothetical undotted version?

1. See the two special issues of *Music Perception* Vol. 31, No. 1 (September 2013) and Vol. 31, No. 3 (February 2014), and the review of recent literature by David Temperley and Leigh VanHandel introducing the first of these.

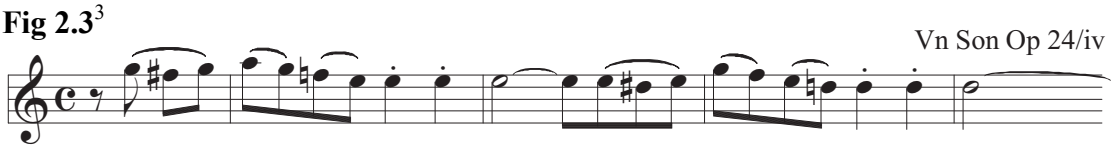
2. In Haydn's case, that means works from 1759 onwards; for Mozart works from 1770; for Beethoven from 1790, and Schubert from late 1813.

Fig 2.2



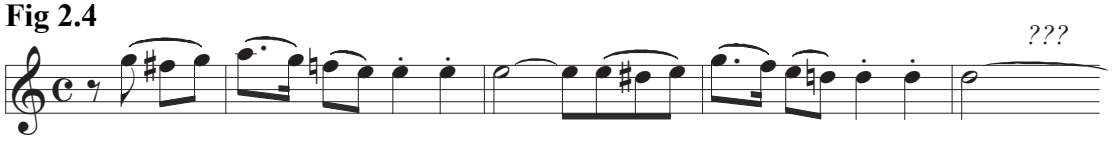
Or on the other hand, why is the incipit of the fourth movement of Beethoven's "Spring Sonata" so much better as he wrote it:

Fig 2.3[3]



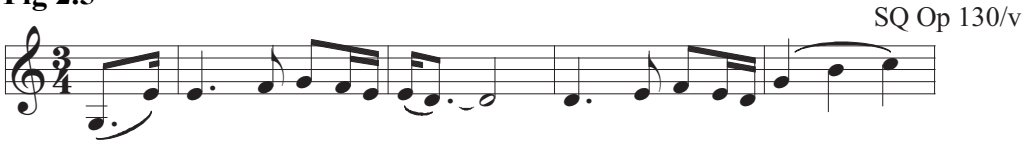
rather than with a dotted rhythm?

Fig 2.4



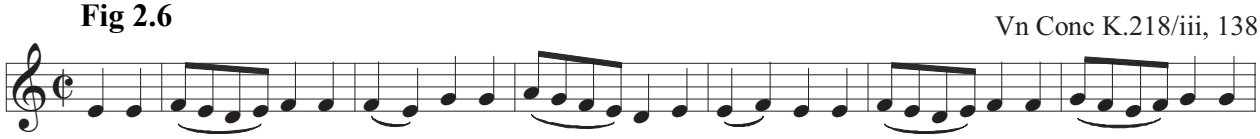
Why is the first full measure of this theme, from the fifth movement of Beethoven's Op 130 String Quartet, dotted?

Fig 2.5



Or why does this theme, from the last movement of Mozart's D-major Violin Concerto, begin with two quarters, rather than a dotted quarter and an eighth-note?

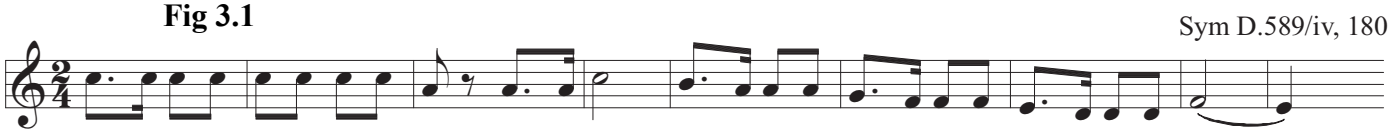
Fig 2.6



And is it always true that there is a clear choice to be made between dotted and undotted versions, or in some, perhaps many, instances would either version be acceptable?

[3] This discussion will be primarily about contours, durations, and groups, but we need to mention here several other factors that obviously influence the choice between dotted and undotted rhythms, and that for the most part we will neglect going forward. One of these is tempo: other things being equal, faster tempos will generally favor undotted rhythms, although Schubert demonstrates that dotted notes can succeed in quite a quick tempo, at least when uncomplicated by contour considerations:

Fig 3.1



A second factor that we shall also, unfortunately, need to neglect for the most part, is prosody in texted incipits, which may account for the difference in the rhythm between these two incipits:

3. The music in all the examples, in the text and in the hyperlinks, has been transposed to C-major to facilitate comparison.

Fig 3.2

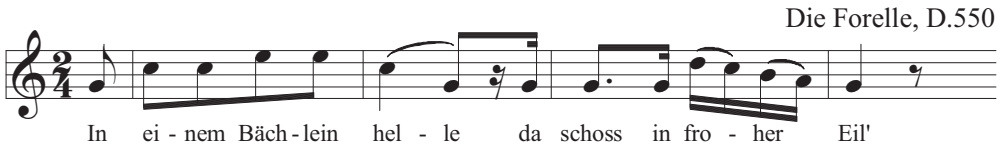
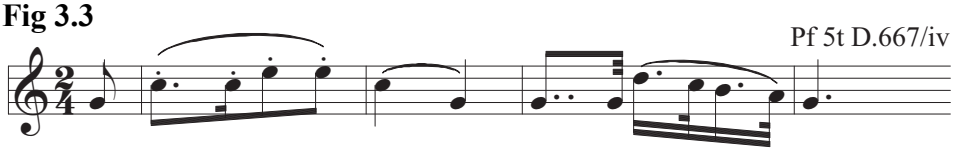


Fig 3.3



although I'm not sure that the word *einem* requires an undotted rhythm. It may be rather that the straightforward undotted version is meant to convey a certain naïve simplicity appropriate to a song about a fish, a reminder of another factor that can influence the choice of dotted or undotted rhythms: themes of a certain specific character (liturgical or hymn-like tunes, fugal subjects or *canti fermi*, folk-like, child-like, or deliberately *semplice* melodies) may choose to set aside the decorative and elegant coherence we usually associate with the Viennese High-Classic style.

In fact, we're going to find that in many cases we're not going to have a good explanation for the choice between dotted and undotted rhythms; it can at times seem virtually arbitrary, perhaps especially in the many dance collections:

Fig 3.4

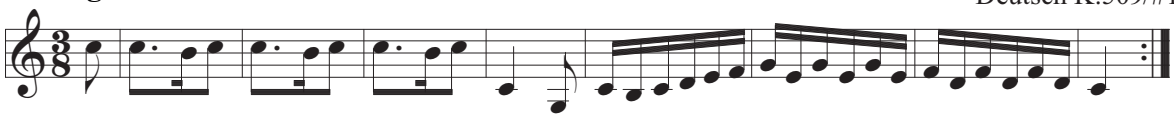
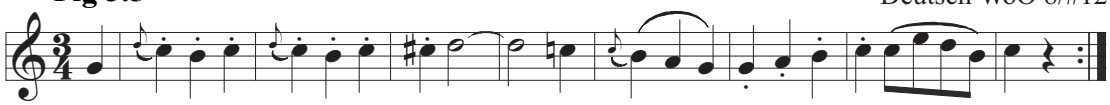


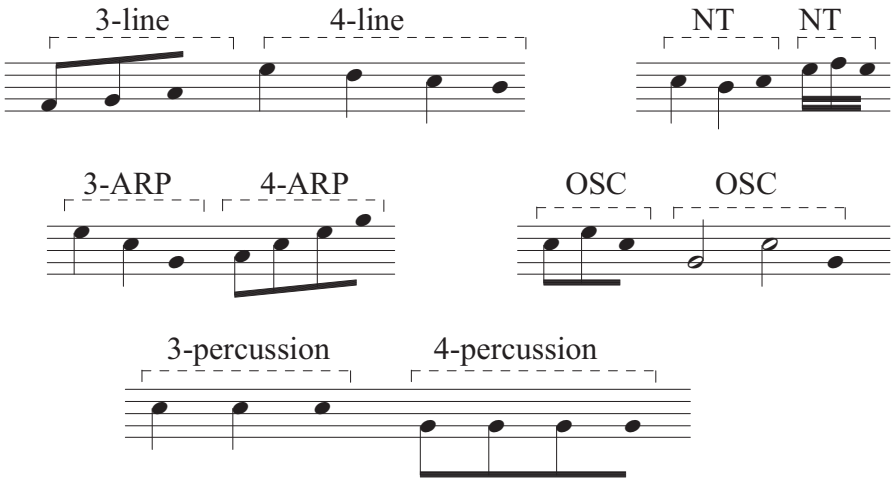
Fig 3.5



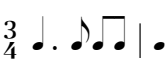
It is a remarkable feature of this repertory, however, that almost never does a dotted and an undotted version of the same contour coincide for more than the first 5 or 6 notes; the Schubert themes cited above are virtually the sole example of an extended melodic phrase existing in both a dotted and an undotted version. It is as though for given a contour, and limiting the alternatives to either a dotted and an undotted setting, there's just one right choice.

[4] However, we are, I repeat, going to set aside most of these explanations, and focus instead on those cases in which contour and its influence on grouping can lead us to anticipate the dotted/undotted choice. The concepts required for this are for the most part familiar: the conjunct line (L, when necessary 3L or 4L for a line of three or four notes); the neighbor-tone figure (NT); the arpeggio (ARP, when necessary, 3ARP or 4ARP); and two more which are ubiquitous in music, but less remarked in the literature: the "oscillation" (OSC) which is, as one can see illustrated below, a kind of inflated NT, just as an arpeggio is a kind of inflated line; and the "repercussion" (RP, when necessary, 2P or 2-percussion, 3P or 3-percussion, etc.). These are considered here only in their equidurational versions (that is, where the "inter-onset intervals" between the first 3 notes – or 4 notes, in the case of the "4-line" and the "4-ARP" – are equal):

Fig 4



[5] In order to study the whole repertory of Classic melodic incipits, it has been necessary to place each into one of 11 broad rhythmic genera, each subdivided into multiple sub-types[4]. For the purposes of this study, however, we will need just these eight rhythmic categories, to be considered in pairs:

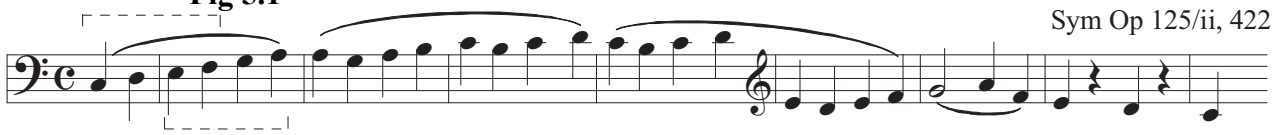
zeta-3 (Z3)	and its undotted counterpart	kappa (K)
also and and		also
delta-2 (Δ2)	and its undotted counterpart	beta-1 (B1)
zeta-5 (Z5)	and its undotted counterpart	alpha-3 (A3)
also and		also and a few and
delta-4 (Δ4)	and its undotted counterpart	beta-3 (B3)
		

We're going to be talking about just the first four to six notes of the theme or melody, counting from the

4 The whole array of these rhythmic categories is given at http://www.rsolie.com/database_general_content/rhythmic_genera_for_website.pdf. Cf. also note 6, p.37.

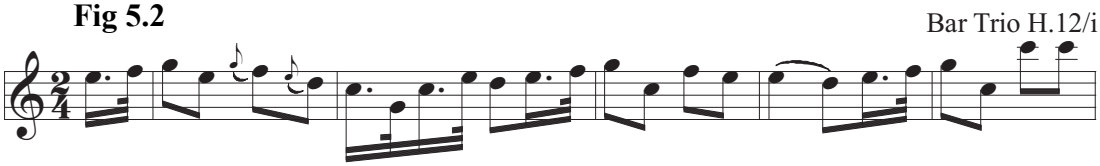
first real downbeat, "downbeat 0" (db^0). We will for the most part ignore upbeats to db^0, though they can play a crucial role in determining melodic grouping in all sorts of ways. However, themes beginning with an extended upbeat that in fact initiate a gavotte-meter will often be interpreted as beginning on the half-bar before db^0, or even at times interpreted in both ways:

Fig 5.1



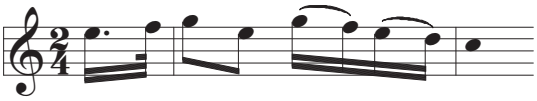
The use of grace-notes too can produce multiple rhythmic interpretations of a given incipit. In the Haydn baryton trio below, for example:

Fig 5.2



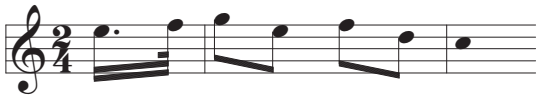
one would normally interpret the grace notes as sharing half the value of the principle note:

Fig 5.3



and so the incipit would be considered a member of the A3 rhythmic category. But just in case the grace-notes are performed so quickly that the opening approaches the sound of this:

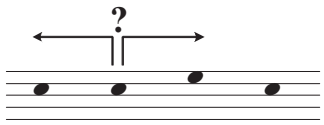
Fig 5.4



the same incipit is also considered a member of the K (kappa) rhythmic category, on the principle that it's better to cast a net too wide than too narrow when assembling a repertory.

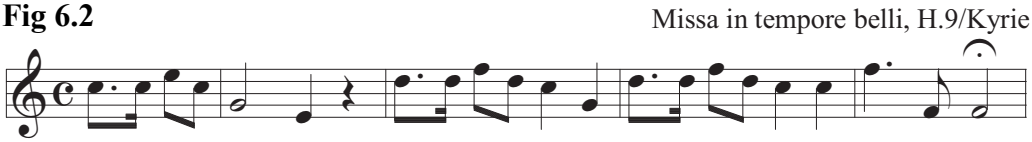
[6] The fundamental idea being explored here is that Classic melody requires the rhythmic grouping of the incipit to be exceptionally clear, even elegant, and that dotted rhythms are often used in preference to the undotted version when the contour of the incipit is such that an undotted version would be ambiguous and difficult to group. In the case of zeta-3 or a kappa rhythm, for example, the contour 2P+OSC is potentially ambiguous – should we group the second note (counting always from db^0) back with the repercussion, or forward with the OSC-figure?

Fig 6.1



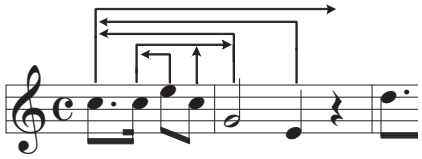
Writing the Z3 rhythm clarifies the grouping:

Fig 6.2



by placing the second note closer to the third; and the ensuing group then groups back with db^0 via what we might call "iambic reflex": the tendency of subgroups with a (weak) upbeat to group retrospectively, a consequence of the preference for enclosing weaker beats, especially upbeats, within a larger group, something like this:

Fig 6.3

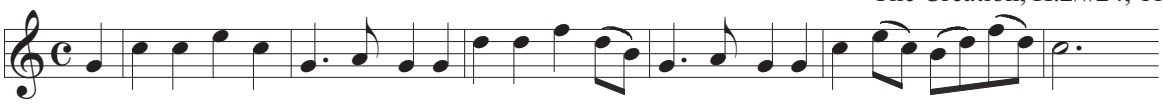


There are alternative interpretations of the grouping for this motive (for example, the sixth note might be an afterbeat to the fifth, rather than to the whole group), between which I am not sure how to choose, or whether it makes a difference; but it does seem clear that the dotted rhythm has removed the contour-induced ambiguity.

This is a common solution for the small group of incipits with this contour, but it is not the only one: an upbeat can be used instead to pull db^0 back, letting the OSC-figure form its own subgroup:

Fig 6.4

The Creation, H.2/#24, 11



This use of an upbeat is just one of several means available for use with an undotted rhythm to clarify the grouping, and we shall have occasion, mostly in passing, to mention others: the use of grace-notes or other ornaments, slurs and other articulations, the use of gavotte-meter, etc. For the most part, however, we will be looking only at dotted rhythms in this role.

We'll begin by considering incipits in the contrasting Z3 and K rhythms – that is, those with an opening rhythm of 𝄵 ♩. 𝅘𝅥𝅯 ♩ 𝅗𝅥 compared to those with the rhythm 𝄵 ♩ ♩ ♩ 𝅗𝅥 – starting with those contours in which very few dotted rhythms occur, and proceeding to those contours very much more likely to be written as dotted Z3s. Before going very far with the discussion, we will need to pause (in §§ [9-11]) to try to define the notion "degree of grouping ambiguity" with sufficient precision to be useful.

II: Zeta-3 and Kappa incipits

[7] Z3^K, miscellaneous contours

The first contour we will inspect, the one with the lowest proportion of dotted incipits – the "Z3/[Z3+K]" ratio – is the "miscellaneous" contour category, that in which the first few notes can be considered neither a line (L), an arpeggio (ARP), a neighbor-tone (NT), an oscillation (OSC), nor a repercussion (RP): **EX 7.1**

As one can see, kappa-rhythms far outnumber Z3 incipits in this category: 460 K vs. 40 Z3, with Z3/[K+Z3] = 40/500 = .080, implying that absent complicating factors, such as the concatenation of a pair of our basic shapes, kappa-rhythms can be considered the default configuration for contours in the Z3^K repertory. Though one can invent *ad-hoc* explanations for some of the few zetas listed here (several of them, for example, seem to be motivated by a gap between notes 2 and 3 that might, in a kappa-rhythm, confuse the grouping), they do not suggest a systematic procedure or pattern, and many indeed may be simply prosody-driven, a matter of tempo, and/or an arbitrary choice.

A note on the examples: all the incipits, both in the main body of the text and in the extended examples, have been transposed to C major, and placed in "contour order" (lowest to highest, starting on C descending, then C ascending, then beginning on D, then E, etc.), for easy comparison between dotted versions on the left, and similar undotted incipits on the right. The dashed brackets above some of the incipits indicate which group of notes determined the placement of the incipit in a particular rhythmic genus or in a particular contour order, in cases (such as long upbeats, grace-notes, etc.) where that might be in doubt.

> Works are identified by Hoboken numbers (for Haydn) without the Roman numerals of the larger subdivisions (thus the second movement of the String Quartet H.III/70 is referred to simply as "SQ H.70/ii"); by the traditional (pre-Einstein) Köchel numbers (for Mozart); by opus number, "WoO" number, or Hess number (Beethoven); and by Deutsch catalog number (Schubert). Where not otherwise specified, the melody in question is that at the beginning of the movement; otherwise it is identified by the measure in which it begins. A list of abbreviations used in these examples can be found **here**.

It is clear, I hope, that the point of extended examples such as this, aiming exhaustively to include every incipit of each contour in the rhythms we have set out to study, is to give the reader every opportunity to evaluate the whole landscape of evidence upon which are based any conclusions set out below.

The triple-meter Z3 and K incipits in this "miscellaneous" category skew even more decisively toward the kappa rhythms, due possibly to the presence of many quick-tempo minuets, waltzes, Ländler, Deutscher, etc.: **EX 7.2**

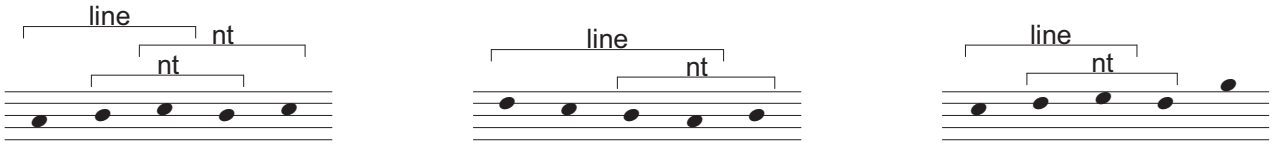
[8] Z3^K, 4-linear

Among incipits in the Z3^K repertory which begin with a line of four or more notes, it's again difficult to specify exactly why any given example is dotted, though speed still favors kappas. They continue to predominate (211 of them, as opposed to 24 Z3s; Z3/[K+Z3] = .102) in this category. All the 4-linear kappas and Z3s are listed in **EX 8**, in contour order.

There is, however, occasion in this group for the conjunction of a pair of the figures we've been talking

about. There are just two 4L+ARP concatenations (marked with the "arp" bracket), but no 4L+OSC incipits that I can see. The conjunction of a line with an NT is not amenable to the methods we're going to develop (below, §§[10-11]), which will depend on figures coinciding on a single note: any L+NT or NT+L conjunction will necessarily result in a two-note overlap, and possibly also three overlapping figures:

Fig 8



But there are quite a number of 4L+RP conjunctions (marked with the "rp" bracket); I find 39 of them, and all of them are undotted kappas. Many of these lines, that is, subject note 4 to immediate repercussion over the barline (or in the triple-meter versions, on beat 3), something that occurs just once among the zetas here. As we'll see, this is an event – a contour – that effectively tends to separate, rather than to link, groups.

[9] Z3^K, ARP

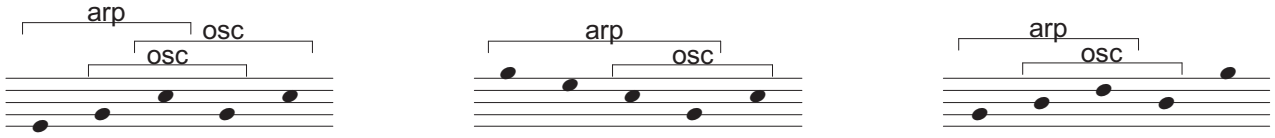
Kappas continue greatly to predominate (188 of them, vs. 21 Z3s; Z3/[K+Z3] = 21/209 = .100) in this contour. Here (**EX 9.1**), in contour order, are all of the incipits beginning with at least a 3-note arpeggio-figure, except for those beginning with a 3ARP-figure and concluding with a repercussion; those are discussed instead in **[23]** below.

There are a few instances here of the conjunction of several of our contour-figures:

> The combination 3ARP+NT occurs four times, three times as a zeta, but there's just a single kappa instance of the conjunction 4ARP+NT: **EX 9.2, p.1**
>
> Slightly more common is the contour 3ARP+L, and it seems to be less ambiguous with respect to grouping, to judge by the fact that just one zeta-form version of this contour occurs among nine instances: **EX 9.2, p.2**. If the line starts with the fourth note on an arpeggio (4ARP+L), then kappa rhythms seem even more unproblematic: all six instances are undotted: **EX 9.2, p.3**
>
> The figure 3ARP+RP will be taken up below, in **[23]**, since incipits including repercussion-patterns provide some of the most interesting tests for any attempt to explain rhythmic procedures in Classic melodic incipits. There are just three instances, all kappas, of a four-note arpeggio intersecting with a repercussion (4ARP+RP) **EX 9.2, p.4**.

And finally, we note that the combination ARP+OSC presents the same kind of definition problems as L+NT: the figures cannot conjoin on just a single note:

Fig 9



If these relatively small samples reflect some real principles, the question is then, why is the contour ARP+NT seemingly ambiguous to some degree, and so is more often written as a dotted Z3, but ARP+LINE is evidently less so, since it's more often written as a kappa-rhythm?

What seems to be going on here is that the note whose grouping is in question, the third note in most of these incipits, is pulled back as the end of a three-note arpeggio to about the same degree as it is pulled forward as the first note of a line beginning on a strong beat, and so in such a case the third note is held, so to speak, securely within the group. But if the third note is instead the first note of an NT-figure, it seems to be bound forward to a lesser extent, and so it approaches some sort of "ambiguity threshold" that begins to favor a clarifying zeta-rhythm. This implies that we need to talk about the degree to which a note is pulled forward or backward by contour considerations (more precisely, the degree to which a listener experienced in the style is encouraged by the contour to group the note in question forwards, backwards, or neither), and, we are forced most reluctantly to conclude, there is no way to do this without applying numbers to notes.

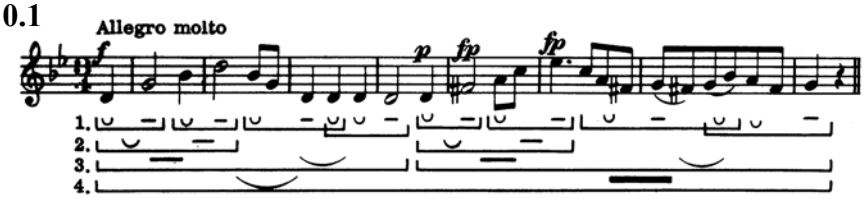
[10] Grouping-angles

We are speaking of the degree of connection between a note and its neighbors, when it is a member of one of the patterns – L, ARP, NT, OSC, RP – we've been using, and the degree of grouping ambiguity arising from the conjunction of these figures. We will need to do this in a variety of melodic situations, and without a more precise idea of what these relative "binding-strengths" are, it will be difficult to avoid logical contradictions; claiming, for example, that the bond A between two notes is stronger than connection B, and in another context arguing that B is stronger than C, but in a third case claiming that C is stronger than A. What we require is a kind of bookkeeping system, an arithmetic to help us deal with these notional quantities in a consistent way.

This is, however, about the grouping of single notes on the border of two adjacent figures of different kinds – for example, a note that is the end of a line and simultaneously the beginning of a repercussion. A note in the incipit that is the intersection-point of two separate lines, or two arpeggios, for example, seems to give rise to little grouping ambiguity, and will therefore be disregarded when it comes to discussing when and why dotted forms are used. We are also not talking about the grouping of groups, or anything more elaborate.

Now, consider two representative examples of lower-level grouping analysis:

Fig 10.1



Cooper and Meyer (1960), 103 (their example 117): Schubert, Symphony D.485/iii

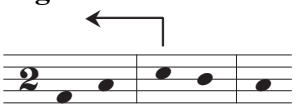
Fig 10.2

Lerdahl and Jackendoff (1983), 37 (their example 3.1): Mozart, Symphony K.550/i

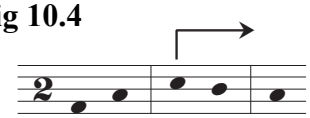
In analyses such as these, a note is either the beginning of a group or subgroup (its left boundary), the end of a group or subgroup (its right boundary), or internal to the group. Cooper and Meyer (1960, 6-7) prefer to use first-order groupings of just two or three notes, with seemingly longer units the result of "pivoted" notes, those that belong simultaneously to both of two adjacent groups. I see no reason to

limit grouping to just two or three units, however; it seems clear that sometimes we understand groups to have just a beginning, an end, and a collection of notes enclosed in the middle. As David Temperley (2001, 63-64) points out, music is full of rhythmic groups with equivocal, ambiguous, or no discernible internal structure.

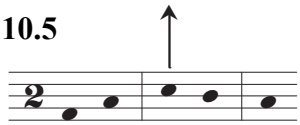
Useful as these grouping-analyses may be as an interpretation of a listener's musical experience, they don't tell us very much about the relative difficulty or ease for the listener of the grouping so represented, a concept we will require in order to explain what occurs, what does not occur, and what only occasionally occurs, across a repertory. If we represent a single note grouped securely to the left like this: **Fig 10.3**



to the right like so: **Fig 10.4**

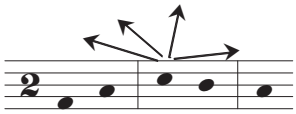


and internal to the group like so: **Fig 10.5**



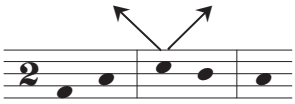
then it is easy to imagine many intermediate situations in which the grouping is far less definite:

Fig 10.6



and in this representation, the most ambiguous situations would be depicted by "grouping-angles" of ±45°:

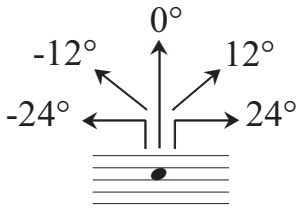
Fig 10.7



If, in our bookkeeping system, we assign left- or rightward values to notes in certain situations – a kind of vector – we could evaluate in a consistent way the competing forces, so to speak, on a given note. We might then sum these forces, and determine how far away the resultant "grouping angle" is from the maximum ±45° ambiguity.

Rather than deal with 180° of discrimination between grouping left, grouping internally, and grouping right, let us instead divide the hemisphere representing the range of connection into 48 "degrees" – so that grouping completely and unambiguously leftward is equivalent to -24 of these degrees, grouping straight up – a note securely enclosed within the group – would be 0, and grouping completely to the right – emphatically and unequivocally beginning a new group – would be equivalent to a "grouping angle" of +24:

Fig 10.8

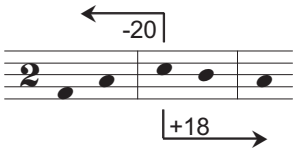


Let us call this summary grouping-angle value "Q". What we wish to know in a given situation, then, is how far away Q is from 12 or -12 : the midway points, those of maximum ambiguity. Let us refer to the absolute value of the distance, negative or positive, from Q to ±12, as "C", or the "C-value": it's a kind of inverse measurement of ambiguity; a measurement of certainty, or clarity, in the grouping. A high C-value indicates that the grouping-angle value of the note in question is either close to ±24, or close to 0; and that a note in this contour situation is thus relatively easy to interpret as either a group boundary, or as a

note securely enclosed within a group.

An example: suppose we assign the grouping-angle of the third note in a duple-meter ARP a value of -20, and to the first note of a line beginning on a strong beat in duple a value of +18. This produces the following "grouping angle calculation" (GAC):

<GAC 1>



Q thus = (18-20) = -2, and C = 10. This is a high C-value, meaning (in this case) that the third note in this concatenation of an ARP and a line is quite clearly balanced between leftward and rightward forces, and so is held securely within a group. This in turn implies that the undotted kappa-rhythm presents little grouping ambiguity, and so is quite acceptable for this contour, and thus we should expect to find relatively few dotted zeta-rhythm settings in the repertory. When we look at them, as we did in **[9]** above, we find just one zeta-rhythm incipit among nine instances of this configuration (**EX 9.2, p.2**), for a Z/[Z+K] ratio of 1/9 = .111.

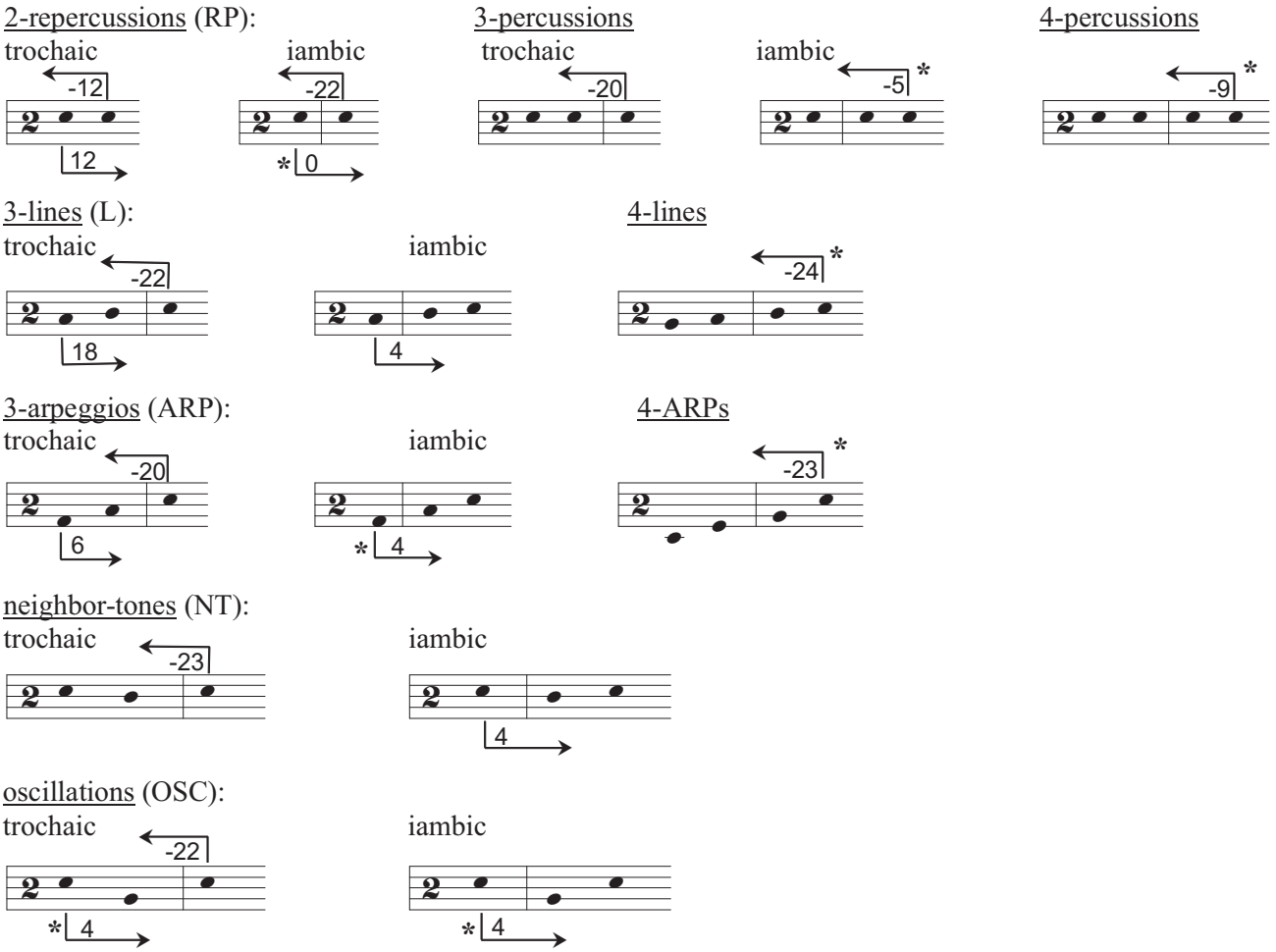
The question then becomes, to what extent can plausible "grouping-angle" values be assigned to notes in various contour/metric situations such that the results of grouping-angle calculations accord with the facts of the repertory?

[11] The assumption that will be used to evaluate these values and this method will necessarily then be, somewhat unsatisfactorily, a vaguely statistical one: that as the C-value for a given configuration diminishes (and so the grouping-angle Q approaches its point of maximum ambiguity, ±12), a straightforward kappa-rhythm setting of a given contour becomes progressively more difficult to group, and a dotted zeta-rhythm becomes therefore more likely, until as C → 2, 1, or 0, dotted rhythms become virtually the only viable way in this style to compose an incipit of the given contour – given, that is, just the choice between kappa and zeta-3 rhythms. In the middle values of C, we should expect to find a mix of dotted and undotted settings of the contour in question, and as C approaches 12 (as in the example we just examined) kappa-rhythms should increasingly predominate.

[12] Let us now look at some of the previous contours we've examined to see how this "grouping-angle" method can be applied. We will, somewhat arbitrarily, use these calculations only for contours with five or more representatives in our repertory, letting the more populous groups have the greater voice in determining grouping-angle values; which, in the case of Z3 (dotted) and K (undotted) incipits, have been assigned as follows:

Fig 12

Grouping Angle Values: Duple (for zeta-3 and kappa rhythms)



Before proceeding to grouping-angle calculations, we should pause to consider these values on their own merits: do they display at least some minimum intuitive plausibility?

1) It seems appropriate that the beginning of a figure should group forward less strongly than the end of it groups backwards, since we hear music left-to-right; but note that this is violated in the case of the trochaic 2-percussion: repercussions in general behave in surprising ways.

2) The beginning of a line may seem to have a suspiciously high value, compared to the beginning of an ARP, or an OSC, but this may reflect the difference between conjunct and disjunct figures. The value of the beginning of a trochaic NT, the other conjunct figure, is not given, since it is not required in the calculations below – there aren't enough incipits that combine an NT with a preceding figure – but see just below in **[13]**, under "From **[9]**", for the suggestion that the first note of a strong-beat NT could have a value of ca. +11.

3) The values for various repercussive configurations may seem arbitrary, but they do follow a pattern: weak-beat endings group back less strongly than strong-beat endings (-22 vs -12 for 2-percussions, -9 vs -5 for 3-percussions), though this is in itself a surprise if one expects it always to be easier to begin a new group on a strong beat than on a weak one.

5. The "0" right-grouping value for the first note of an iambic 2-percussion may also seem

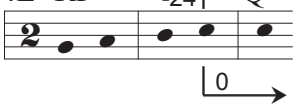
peculiar, but in fact a pitch repeated across a barline (or across a virtual barline, as between beats 2 and 3 in 4/4) seems to be a potentially disjunctive event. (This value occurs just once in calculations within the Z3^K repertory, but an identical value for triple-meter incipits will be used multiple times in the Δ2^B1 repertory, below in Part III.)

4. Most of these numbers will appear in several calculations, but a few are "singleton values", used only once, and so can be hand-picked to fit the statistics. These values – which are not, then, subject to test via consistency, and so should be viewed with yet more skepticism than the others – are marked on the chart above with an asterisk. Values have been assigned only to those contour situations for which they're required in the calculations below.

[13] Turning back now to some of the previous contours we've considered, and evaluating those categories with at least five representatives, let's see how the above values work out in practice:

From **[8]** above: the contour of a four-line overlapping with a repercussion is relatively common; I find 39 incipits with this pattern in **EX 8** (marked with "rp" and a bracket), none of which are zetas. Evidently this configuration is quite stable as a kappa. The calculation using the values given above is:

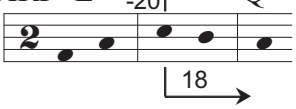
<GAC 2> duple: 4L+RP -24 Q = -24; C = 12



In other words, the repercussion at the barline tends to separate cleanly the four-note line from whatever group succeeds it, and the configuration is stable as a kappa-rhythm (C = 12), which agrees with the statistics in this case: Z/[Z+K] = 0/39 = 0.

From **[9]**: The combination 3ARP+L occurs nine times **EX 9.2, p.2**, once as a zeta. Here is the calculation:

<GAC 3> duple: 3ARP+L -20 Q = -2; C = 10



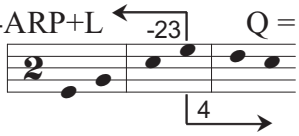
which is, as we noted above, consonant with the Z/[Z+K] ratio of 1/9 = .111.

The combination 3ARP+NT occurs just 4 times (3x as a zeta) **EX 9.2, p.1**, so we exclude it from consideration, but we mention in passing that a hypothetical value of +11 for the strong-beat opening of an NT gives values of Q = -9 and C = 3, consistent with the Z/[Z+K] ratio of .750 for this small sample.

3ARP+RP will be dealt with later, along with other figures of the form {--RR}. The ARP+OSC concatenation is, as we have noted, not amenable to these methods.

There are just 3 examples of 4ARP+RP, and one of 4ARP+NT. However, there are 6 instances of 4ARP+L **EX 9.2, p.3** all of them kappa rhythms. Evidently this is a readily groupable situation, even though the calculation is:

<GAC 4> duple: 4ARP+L -23 Q = -19; C = 7

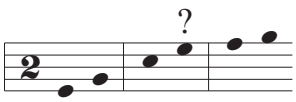


The C-value here, 7, implies (to judge by calculations we'll undertake throughout this study) that up to a

third of the instances of this contour should be composed as zeta-rhythms; yet this is not the case, and musically the contour seems perfectly acceptable in its undotted kappa version. So this calculation fails (and it won't be the last time). The value of +4 for the iambic onset of a line is used in one other calculation (where it succeeds), and it is also consistent with the corresponding beginnings of an ARP, NT, or OSC. The value -23 for the end of a 4ARP is a singleton value, but no plausible adjustment gives us the appropriate result, C = 11 or 12, consistent with the dotted ratio here.

One solution might be to take account of turning points, or "pivot points", as they have been termed, in the melodic line, of which note 4 here is an instance: the suggestion has been made from time to time that these are more prominent ("stressed", points of "melodic accent", etc; cf. especially Huron and Royal, 1996), and if it is also true that "stress" (or "phenomenal accent" as it sometimes termed, prominence other than the relative positional prominence embodied in a meter) tends to begin groups (Cooper and Meyer 1960, 20), perhaps the true forward value of note 4 here is more like +15, and the (singleton) backwards value of the end of a 4ARP should be closer to, say, -16, in view of the gap before it and its weak metric position, and in that case Q = -1 and C = 11. If one considers a 4ARP+L contour in which note 4 is <u>not</u> a turning-point:

<GAC 5>



it certainly seems more difficult to group than the contour depicted in <GAC 4>.

However, for the most part "turning points" have been not been taken into account in the evaluation of these contours, nor has direction – the difference in coherence which may possibly obtain between, for example, an ascending and a descending line – mostly because even in the current population it's hard enough to find enough examples of certain specific contours, without specializing them further. Instead, we will just live with the current result, on the understanding that there will be going forward several failures of our "grouping-angle calculations" to match the facts of the repertory, especially in the present Z3^K collection, which is populous enough to include small groups of the less-common contour concatenations.

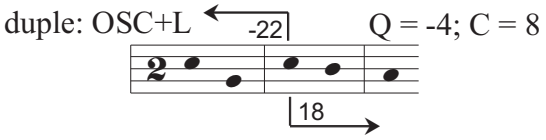
Now we will proceed to the remaining possible contours in their zeta-3 and kappa rhythmic manifestations:

[14] Z3^K, OSC

In incipits beginning with an OSC – an "oscillation"-figure – kappas continue to dominate the landscape (Z3/[K+Z3] = 9/79 = .114): **EX 14**

There are just 3 examples of OSC+NT (marked with brackets). The concatenation OSC+ARP is not susceptible to evaluation by these methods, for the same reasons as ARP+OSC, discussed above. OSC+RP will be dealt with later, in **[23]** (but there are just three of them). The combination OSC+L, however, occurs six times (marked with brackets), twice as a zeta. Again it's a small sample; here is the grouping-angle calculation:

<GAC 6>



The value C = 8 is not quite consistent with the Z/[Z+K] ratio here of 2/6 = .333; more convenient

would be a value of 7; but it's reasonably acceptable for a population of this size.

[15] Z3^K, {RRSS}

(The notation {RRSS} denotes two separate repercussions, "R" and "S"; other repercussion-patterns will use a dash, as in {-RR-} below, specifying a repercussion in notes 2 and 3 of a 4-note contour.)

This contour (**EX 15**) continues to favor kappa-rhythms (Z3/[K+Z3] = 10/85 = .118), in which the opening notes group readily by default in pairs. Two comments:

> 1) All the notes in kappa-rhythms are equidistant, yet the grouping in this contour falls quite automatically into 2+2. This is in fact grouping by repeated pattern, a phenomenon we're not going to deal with very much in this study, since only a two-note pattern is small enough to fit more than once into a 4-or 5-note incipit, and the other figures (ARP, NT, OSC, line) are defined by at least three notes. But this mode of grouping is of course critical to the construction of Classic themes as a whole, as well as larger formal schemes.
>
> 2) In spite of the pattern, notice how easy it is, by mere articulation, to group the notes in iambic units across the repetition-pattern. Repercussion-groups, at least 2-percussions, are evidently quite frangible; their ends can be detached with little difficulty.

Since our "grouping-angle" calculations apply only to contours which join figures of two different types, it cannot be used here. We can only note that there seems to be little compulsion to write a dotted rhythm in this contour – one could perhaps imagine a line beginning at note 4 which would muddy the grouping enough to require a zeta, but this situation rarely occurs in the incipits of **EX 15**, and when it does, other clarifying measures are used. All this implies that the choice of dotted rhythm for this contour, when it occurs, is largely arbitrary, and in fact one incipit – that of the Schubert song *Die Forelle* and the same theme used in his "Trout" Quintet D.667, already cited above in **[3]** – occurs in both dotted and undotted forms.

[16] Z3^K, NT

Continuing to survey various contours in the direction of the increasing use of dotted zeta-rhythms, we now come to incipits beginning with a neighbor-tone or "auxiliary" figure (NT), in which the Z3/[K+Z3] = 21/147 = .143: **EX 16**

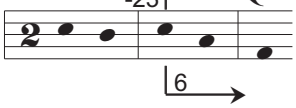
The intersection, at note 3, of an NT with an ARP or an OSC (or with a RP, but we defer those until **[23]** below), does not happen very often, and the intersection of an NT with a line is, as we have noted, necessarily an overlap rather than an intersection. More important in this population for the choice of a dotted or undotted rhythm is the nature of the opening NT: in the case of an upper whole-step NT opening, and especially in the case 121°, zeta-rhythms predominate, presumably because they divide and so neutralize the most troublesome (i.e., unlikely) type of NT (Solie 2006, §15): **EX 16, pp 1-2**

In the other NT configurations (upper half-step, lower half-step, lower whole-step) there seems to be little difficulty writing kappa-rhythm incipits, except that of course unmodified 545° incipits will not occur. So in these, zeta-rhythms are much less numerous, and appear to be largely tempo-dependent or arbitrary: **EX 16, pp 3-9**

Likewise in the case of triple-metered K and Z3 incipits in this contour, the relatively few zetas cluster in the upper-whole-step NT configuration: **EX 16, p 10-14**

Across this population, the concatenation of NT+OSC (marked with brackets) occurs just four times, always as a kappa. The combination NT+ARP (likewise marked) occurs nine times, twice in a dotted Z3 rhythm, so for these Z/[Z+K] = 2/9 = .222. The grouping-angle calculation for this configuration is:

<GAC 7> duple: NT+ARP ← -23 Q = -17; C = 5



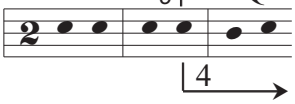
This does not provide a very satisfactory result: the value C = 5 predicts a Z/[Z+K] ratio in the vicinity of .45, meaning we would expect maybe four zeta incipits here, not two. Alternatively, for this distribution a value of C = 7 would be more appropriate; but given the use of these numbers in other calculations, we'll just have to abide by the result.

[17] Z3^K, {RRRR}

In an incipit of the form {RRRR} **EX 17.1** there are obviously no contour issues within the first 4 pitches, and the dotted ratio is Z3/[K+Z3] = 29/159 = .182

There just one equidurational example of 4P+ARP, and two of 4P+OSC, from which we draw no conclusions; but 4P+NT is slightly more common, occurring 7 times, twice dotted: **EX 17.2, p 1**. If one accepts as plausible the singleton value of -9 for the end of a 4-percussion, the grouping-angle calculation

<GAC 8> duple: 4P+NT ← -9 Q = -5; C = 7



accords reasonably well with the Z3/[K+Z3] value = 2/7 = .286

It's worth noting that one kind of 4-percussive contour-rhythmic situation seems to preclude the dotted zeta rhythm, namely, when note 5 is lengthened enough to suppress beats 6 and 7: **EX 17.2, pp 2-3**. This seems not to be written in dotted form, for reasons that are so far mysterious. (This rhythm does occur with the contour {-RRR}, in several Haydn *Gloria* settings: cf. **[19]** and **EX 19** below. Likewise in the contour {RRR-} it's possible to find this rhythm, but again it's a composer specialty, this time of Schubert – cf. **[20]** and **EX 20.1**)

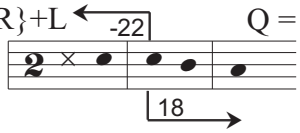
[18] Z3^K, {-RR-}

The proportion of dotted zeta-forms in this category is Z3/[K+Z3] = 19/100 = .190: **EX 18.1**

In this contour, the third note is linked to its predecessor by repercussion, but second note is apparently bound forward not at all. It's not difficult for a kappa-rhythm in this contour to group successfully 2+2, across the repercussion, via articulation, especially if (as frequently occurs, and marked with ↓) the 5th note repeats the pitch of the 4th, establishing the crosslinked pattern {-R, RS, S-, …}.

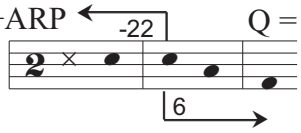
There are eight instances in which an equidurational line begins with note 3: **EX 18.2, p 1**. The grouping-angle calculation for such a situation is:

<GAC 9> duple: {-RR}+L ← -22 Q = -4; C = 8



– implying that the third note can be held in balance within a group fairly readily; the C value (= 8)

accords well with fact that just one of these instances is written as a zeta (Z/[Z+K] = 1/8 = .125). On the other hand, the contour {-RR-}+ARP , which occurs six times here (**EX 18.2, p 2**), seems more difficult to group – does note 3 belong back with the repercussion or not? – and the grouping-angle calculation:

<GAC 10> duple: {-RR}+ARP 

Q = -16; C = 4

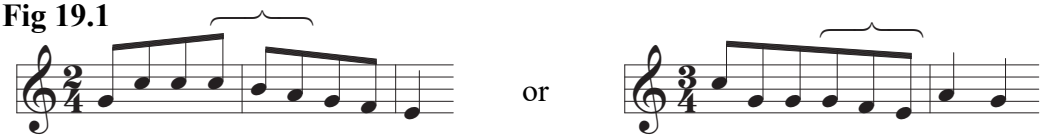
indicates a situation just 4 degrees from ambiguity, matching the Z/[Z+K] ratio here: Z/[Z+K] = 4/6 = .667.

(There are just four incipits in this group that begin an NT on note 3 (all kappas), and none that begin an OSC on note 3.)

[19] Z3^K, {-RRR}

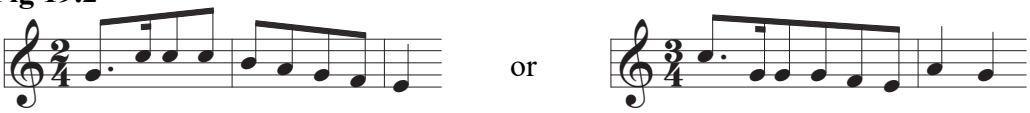
Kappas again predominate in this contour (53 of them, vs. 13 Z3s; Z/[Z+K] = 13/66 =.197): **EX 19.** There is no opportunity in these for contour-induced grouping ambiguity before the repercussion; and while one can imagine this contour conjoined at note 4 to a line

Fig 19.1



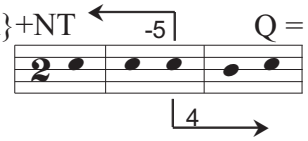
which would create enough ambiguity in a kappa-rhythm to at times render a dotted rhythm slightly preferable,

Fig 19.2



the configuration {-RRR}+L simply does not occur in these incipits. There is just one instance of {-RRR}+ARP, and just two of {-RRR}+OSC.

There are six instances of {-RRR}+NT, all kappas, and the calculation for this configuration would be:

<GAC 11> duple: {-RRR}+NT 

Q = -1; C = 11

– which is consistent with the fact that zeta-rhythms don't seem especially necessary for clarification here (if, again, one can accept the singleton value assigned to the last note of a 3-percussion).

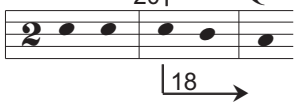
Otherwise, the zetas which do occur in this population evidently represent either a free choice, or one possibly occasioned by the text: fully half of the relatively few dotted incipits in this contour-pattern are from the Gloria movements of Haydn masses, settings of the text *Quoniam tu* [*solus sanctus*,] – seemingly a personal tradition of the composer.

[20] Z3^K, {RRR-}

Altogether there are 23 zeta-rhythm incipits out of 90 total in this contour (Z/[Z+K] =.256) **EX 20.1**

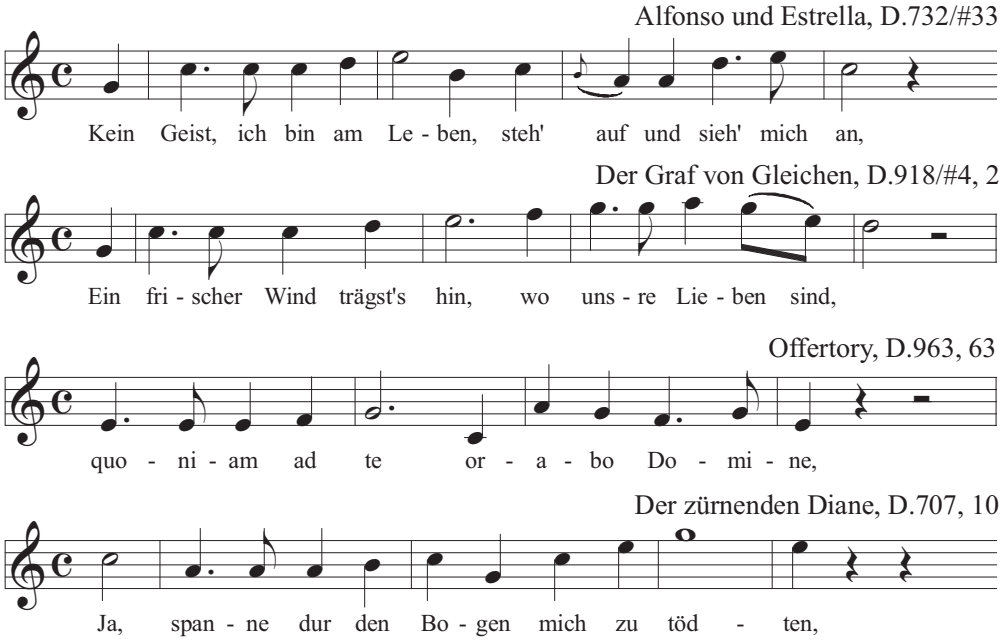
There are 10 instances in which this opening overlaps with a line, and four of them are written as zetas **EX 20.2, p 1**, so that Z/[Z+K] = 4/10 = .400. The grouping-angle calculation, however,

<GAC 12> duple: 3P+L -20 Q = -2; C = 10



implies that the kappa-form should be quite stable, with note 3 pivoted; and indeed it seems intuitively to be so. This may be a case where we need to refer to prosody, and/or the personal habits of a single composer, to explain the discrepancy: here are the four Schubert Z3-form incipits in question, and the reader will have to decide whether prosody alone is responsible for Schubert's choice of dotted rhythms here:

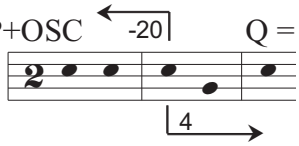
Fig 20



This particular contour, and the case of NT+ARP discussed above in **[16]**, represent the two most annoying failures of our grouping-angle arithmetic in this entire enterprise.

The combination of 3P+OSC **EX 20.2, p 2** is similarly distributed in this contour: (Z/[Z+K] = 4/9 = .444): The C-value given by this calculation, however:

<GAC 13> duple: 3P+OSC -20 Q = -16; C = 4



is within acceptable limits, and makes more sense.

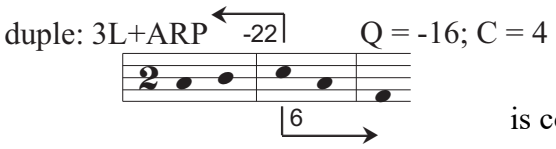
There are just four 3P+ARP incipits, and only one 3P+ (equidurational) NT, all kappas, in this group.

[21] Z3^K, 3-linear

Among the 154 kappa and zeta-3 incipits opening with a line of just three notes, 44 of them use the dotted Z3 rhythm (and so Z/[Z+K] = .286).

In the configuration 3L+ARP **EX 21.1** we have 12 instances, 6 of them zetas (Z/[Z+K] = .500). The grouping-angle calculation:

<GAC 14>



is consistent with this ratio.

I find just two incipits here with the 3L+OSC contour (marked with brackets on **EX 21.3**), and the contour 3L+ RP is considered below in **[23]**.

The contour 3L+NT is, as we've noted, not susceptible to grouping-angle calculation, because the figures overlap on two notes, not just one. One might nevertheless expect that such a contour, in which the first four notes form basically a turn-figure, would be exceptionally coherent in an undotted kappa version; and yet, Z3-form incipits occur in relatively high proportion (Z/[Z+K] = 21/51 = .418) among duple-metered themes: **EX 21.2** The aspect of this contour that requires these dotted-rhythms, if it does, remains obscure, and whatever it is, it does not obtain among the (usually quicker, dance-movement) triple-meter instances: **EX 21.2, p 6-7**

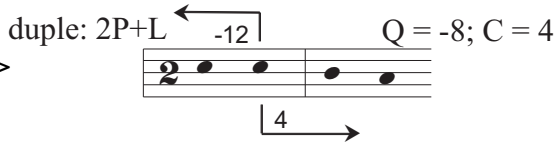
The remainder of the 3-linear incipits can be inspected here: **EX 21.3**

[22] Z3^K, {RR--}

As we come to the final two categories of contour in our Z3 vs. K comparison, both of which include a trochaic 2-percussion within the first 4 notes, we find the proportion of dotted zeta-rhythms rises substantially. In this one, {RR--}, **EX 22.1**, Z/[Z+K] = 56/97 = 0.577.

Consider first the contour 2-percussion+line (beginning with note 2): **EX 22.2, p 1-3**. In these, Z/[Z+K] = 11/23 = .478. The grouping-angle calculation

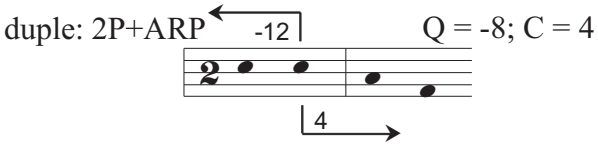
<GAC 15>



produces a C-value consistent with the .478 ratio. Notice, by the way, that there's a small collection of themes in kappa-rhythm at the pitch-level 3345°, and a group of Z3-rhythm incipits at the 5543° pitch-level. There are few occasions in this study, aside from the case of melodies opening with an NT-figure, to detect modal principles at work, and this particular kind of modal clustering does not seem to be replicated elsewhere in the repertory.

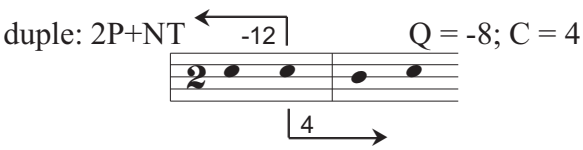
Next we have the contour 2P+ARP (**EX 22.2, p 3-4**), with Z/[Z+K] = 8/12 = .667. The grouping-angle calculation again produces a value C = 4, within the range for such a dotted ratio:

<GAC 16>



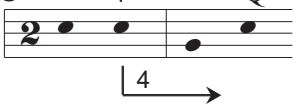
The contour 2P+NT (**EX 22.2, p 4-6**), displays the dotted ratio Z/[Z+K] = 10/18 = .556. The dotted ratio here is intermediate between the last two, and the grouping-angle calculation is similar:

<GAC 17>



Finally, the contour 2P+OSC (**EX 22.2, p 6)**, with Z/[Z+K] = 4/5 = .800, for which we have another version of the same calculation (given the singleton value of +4 for the opening of an iambic OSC):

<GAC 18> duple: 2P+OSC -12 Q = -8; C = 4



If this result is acceptable, it means assigning a rather wide range of Z/[Z+K] values for C = 4, from about .45 to .80.

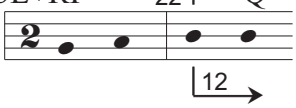
In the remaining (unclassified) 2P+ contours in **EX 22.1**, the proportion of zeta-rhythms remains high (Z/[Z+K] = 23/39 = .590), implying that many other unnamed figures following a 2-percussion give rise to a certain amount of ambiguity about the grouping of the second note.

[23] Z3^K, {--RR}

Zetas predominate to a considerable degree in this contour (there are 63 of them, vs. 30 kappas; Z/[Z+K] = 63/93 = 0.677): **EX 23.**

The potential ambiguity in this contour is greatest in the situation line+2percussion – does note 2 group back, forward, or neither? The grouping-angle calculation is:

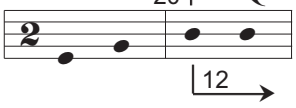
<GAC 19> duple: 3L+RP -22 Q = -10; C = 2



The low C-value here is consistent with the relative predominance of zeta-rhythms: for 3L+RP, Z/[Z+K] = 43/50 = .860 (**EX 23, pp 1-5**). The effect of the dotted rhythm is usually to group the repercussion, notes 3 and 4, back as a subgroup, as an afterbeat to db^0. The few kappas here are almost all either quite slow or quite fast, and use ornamentation and/or gavotte-meter to clarify the grouping.

In the situation ARP+2P (**EX 23, pp 6-8**) , the proportion of kappa incipits rises, compared to the zetas, because the third note of an arpeggio is less tightly bound than the third note of a line, and so the grouping of a kappa-rhythm is a little further removed from ambiguity. The grouping-angle calculation

<GAC 20> duple: 3ARP+RP -20 Q = -8; C = 4



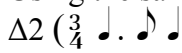
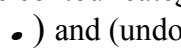
produces a C-value consistent with the distribution of zeta-forms here: Z/[Z+K] = 13/28 = .464.

Of the remaining 15 incipits in the {--RR} configuration, 7 are zetas (Z/[Z+K] = .467); there are just two instances of the NT+RP configuration, and three of the OSC+RP contour, too few from which to draw conclusions. Here are all the remaining Ks and Z3s in this contour: **EX 23, pp 9-10** .

[24] To see a tabulation of the calculations we have made for all the various combinations of figures in the repertory so far, see **EX 24, Z3^K dotted-ratio table**; in which the proportion Z/[Z+K] is depicted in a bar graph, with the width of the bar proportional to the population of the particular configuration. The contours are arranged in order of their calculated C-value, with the cases in which the calculation gives a C-value inconsistent with the Z/[Z+K] ratio highlighted in yellow (or light yellow for a C-value just

one degree removed from what we should expect). The most egregious violation is the case of 3P+L (**[20]**), followed closely by NT+ARP (**[16]**), but any adjustments we might make to the grouping-angle values involved in these configurations would have regrettable consequences for contours yet to be evaluated.

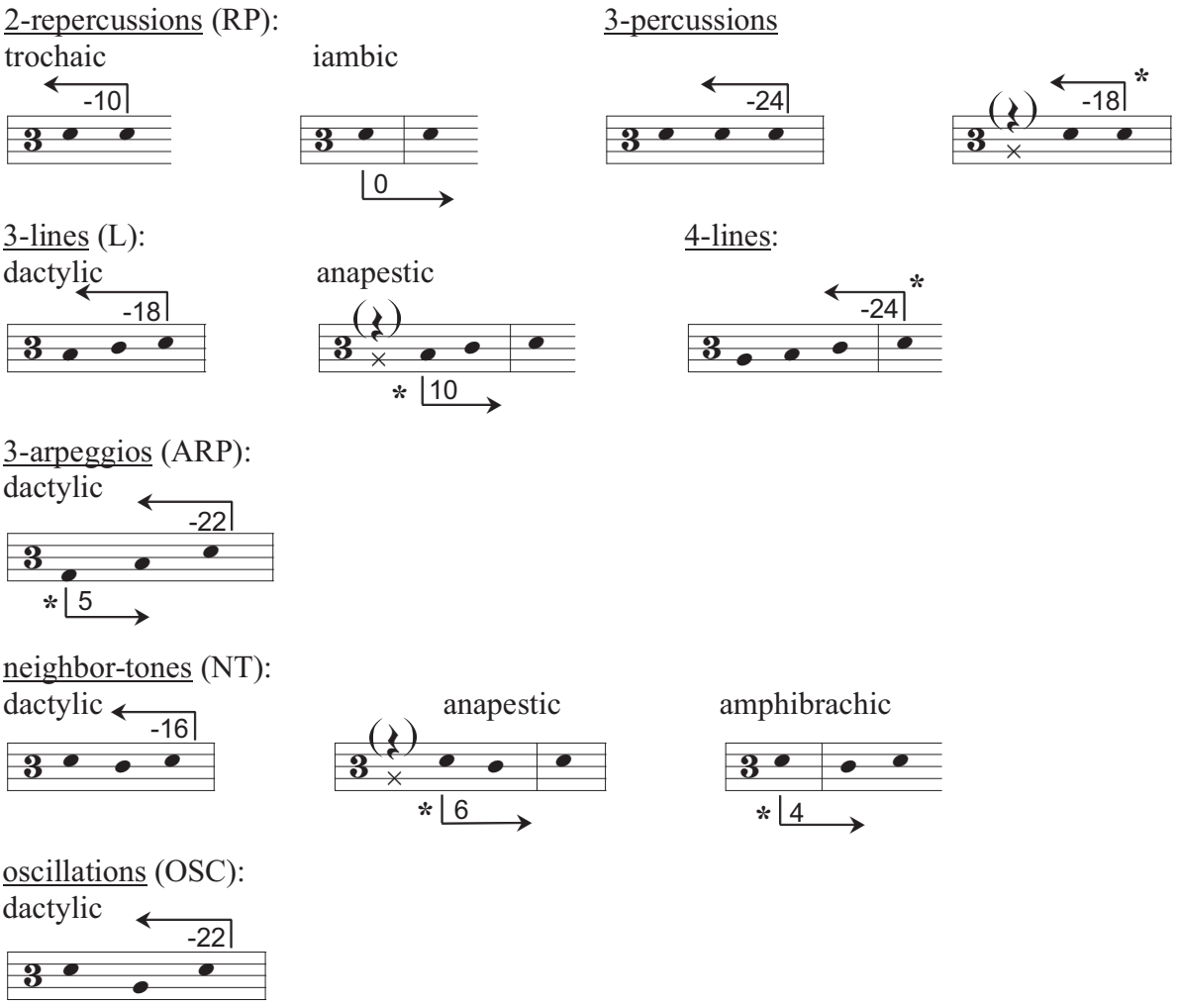
III: Delta-2 and Beta-1 incipits

[25] We will now ask: what happens to the arguments above if we change the meter from duple to triple? Using the same contour categories as before, let us investigate those incipits using (dotted) Δ2 () and (undotted) B1 () rhythms, to see whether the same principles apply.

The grouping angle values for triple-meter contour-figures should be similar, but not necessarily identical, to those for their duple-meter analogs; these seem to fit the data best:

Fig 25.1

Grouping Angle Values: Triple (for delta-2 and beta-1 rhythms)

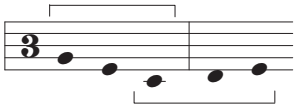


As before, only values that are actually required for the computations ahead are given, and singleton values are marked with an asterisk. The most noteworthy departures from the corresponding values for duple meter are that the values for the end of a (dactylic) 3-line and NT are reduced, but those of a dactylic ARP or OSC are not. Also, the value for the end of (dactylic) 3-percussion is surprising. But these values are all used in several calculations, yielding appropriate results.

Some general comments about the Δ2^B1 repertory may be in order. First, the proportion of dotted forms here is lower than that in the Z3^K population we just looked at (.121 for the former vs. .186 for the latter). The primary reason may simply be tempo – a high proportion of these incipits are from dances and dance-form movements, and a quicker tempo is less likely to be dotted.

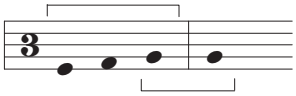
Another characteristic of this repertory is that fewer incipits represent concatenations of the figures we've been using ARP, RP, etc.), possibly because those that share note 3 would tend to mask the barline;

Fig 25.2



and to the extent that duple metric organization is the default in much of the Western classical repertory (Huron 2006, 195-6), it may be more important in triple meter than in duple to make at least the first barline readily perceptible. This is, however, less the case with concatenations ending with {--R|R}, 3L+RR, for example,

Fig 25.3



where a complete NT, ARP, OSC, or line can play out within the measure, and because the R|R repercussion across the barline is a fairly separative event, which apparently does not mask the barline (cf. **[38]** below).

We will take up the various contour-defined subgroups of the Δ2^B1 population in the same order as with the Z3^K incipits in Part One. The discussions of each type in this section will be in most cases a little more cursory, in some considerably so: these incipits raise few issues that we haven't already encountered.

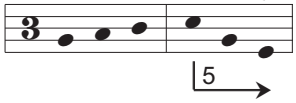
[26] Δ2^B1, miscellaneous contours

This can serve as a baseline for the distribution within the Δ2^B1 corpus in the absence of any contour complications; the very few dotted Δ2s that occur, only about 3% of the total (Δ2/[Δ2+B1] = 8/241 = .033), don't really suggest the presence of any systematic procedure or criteria: **EX 26**.

[27] Δ2^B1, 4-linear

There is in this group of incipits (**EX 27**; Δ2/[Δ2+B1] = 10/109 = .092) one combination of figures numerous enough to justify our grouping-angle calculus: there are 5 instances of 4L+ARP. The calculation result

<GAC 21> triple: 4L+ARP -24 Q = -19; C = 7



is consistent with the proportion of deltas (Δ2/[Δ2+B1] = 1/5) in this small sample (**EX 27, p.11**) but only if one accepts the singleton value "+5" for the beginning of a strong-beat arpeggio, rather than "+6" as in its duple counterpart above. (There are no examples of 4L+OSC; just three of 4L+P, and as we have noted, L+NT is not well-defined.)

[28] Δ2^B1, ARP

Again the proportion of dotted versions is extremely low: Δ2/[Δ2+B1] = 5/139 = .036 (**EX 28**). This group includes only a very few instances of an ARP succeeded by one of our other contours (except for

3ARP+RP, which is taken up below in **[38]** below); so our grouping-angle calculations will not be undertaken.

[29] Δ2^B1, OSC

In these (**EX 29**), Δ2/[Δ2+B1] = 2/35 = .057. There are no examples of OSC+NT or OSC+L, the combination OSC+ARP is not well-defined, and OSC+RP will be discussed below in **[38]**.

[30] Δ2^B1, {RRS|S}

As one might expect, a contour-pattern so at cross-purposes to the meter is rare in this repertory; there are but three examples (Δ2/[Δ2+B1] = 0/3 = 0; **EX 30**).

.

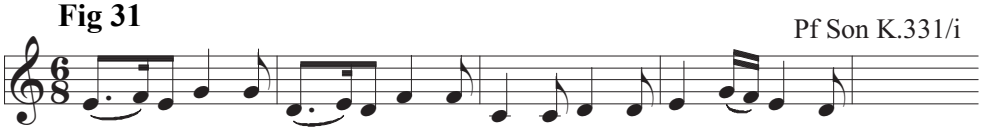
[31] Δ2^B1, NT

There are virtually no conjunctions here of NT+ anything, except for one NT+ARP incipit, and yet incipits beginning with an NT-figure include the largest proportion of dotted delta-2 rhythms in the whole Δ2/B1 repertory: Δ2/[Δ2+B1] = 39/103 = .379.

This is evidently because, as in the case of the Z3^K repertory, the major consideration in this case is direction: the upper whole-step NTs have the largest proportion of dotted instances (18/31 = .581) (**EX 31, pp 1-3**), presumably to break up the awkward NT; next come the upper half-step NTs (4/8 = .500, **EX 31, p 4**); then come the lower NTs, though oddly enough the lower half-step NTs (**EX 31, pp 5-9**) have a larger proportion of dotted deltas (16/54 = .296) than the lower whole-step instances (1/10 = .100; **EX 31, p 10**) even though one might expect the lower whole-step NTs to be a bit more awkward. (In fact, in the Z3^K repertory as well, the few zetas not in the upper-whole-step category are, somewhat surprisingly, mostly lower half-steps – **EX 16, pp 3-9** – rather than lower whole-steps.)

Notice that upper-half-step NTs in this group are successfully written as undotted beta-1 rhythms fully half the time (4 out of 8 instances, all at the 343° pitch-level) – and yet, re-writing Mozart's K.331/i theme

Fig 31



with undotted eighth-notes would be a terrible idea, and a useful reminder, should any be needed, of just how limited is our understanding of melody at this local level. It's not difficult to propose *ad-hoc* reasons why Mozart's theme is far better left just as it is, but generalizing these reasons into principles susceptible to test across a substantial repertory is more of a challenge.

[32] Δ2^B1, {RRR|R}

Again, there are very few incipits in this contour (**EX 32**; Δ2/[Δ2+B1] = 5/143 = .035) that use the dotted delta-rhythm, and simultaneously too few incipits that combine the contour-figures we've been using, to make the calculation of grouping-angles useful.

[33] Δ2^B1, {-RR|-}

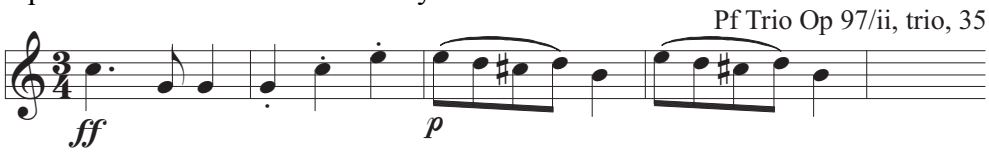
The proportion of dotted incipits here (Δ2/[Δ2+B1] = 8/34 = .235; **EX 33**) is above the background level for the Δ2^B1 population, but it's difficult to say why, particularly since the quite similar {-RR|R}

pattern (taken up next) shows no such surprising distribution. Again, there too few concatenations ({-RR|}+L, for example) to inform our grouping-angle calculations.

[34] Δ2^B1, {-RR|R}

Here the proportion of dotted rhythms falls back to the (quite low) background level for the Δ2^B1 group as a whole (Δ2/[Δ2+B1] = 3/71 = .042; **EX 34**). There are once again too few concatenations to evaluate using grouping-angle calculations. The few delta-rhythm incipits are not readily explicable, but, as in the case of K.331/i above, it's more than clear that the Archduke theme, for example (Pf Trio Op 97/ii, trio, 35) would, for reasons perhaps others will discover, lose most of its characteristic force were it to be recomposed in an undotted beta-1 rhythm:

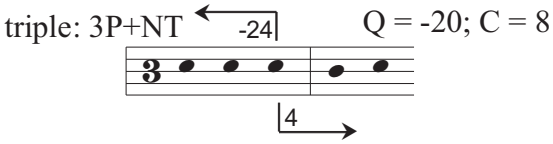
Fig 34



[35] Δ2^B1, {RRR|-}

There are just four examples of {RRR-}+ARP in this group (**EX 35**; Δ2/[Δ2+B1] = 10/102 = .098) , one of {RRR-}+line, and four of {RRR-}+OSC. But there are six instances (including one Δ2) of the combination {RRR-}+NT, (**EX 35 p 10**) and the grouping-angle calculation:

<GAC 22>



produces a C-value consistent with the distribution of dotted forms (Δ2/[Δ2+B1] = 1/6 = .167) in this small population.

[36] Δ2^B1, 3-linear

There are two instances here (**EX 36**; Δ2/[Δ2+B1] = 14/55 = .255) of the 3L+ARP combination, but otherwise there are no 3L+ concatenations in this group. The proportion of delta-2 versions here rises once again slightly above the background level for the Δ2^B1 population, but the reasons for this are obscure.

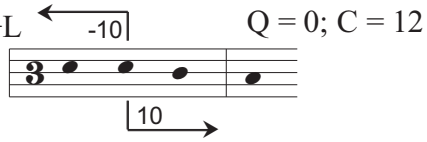
[37] Δ2^B1, {RR-|-}

Unlike in the Z3^K group of similar incipits **[22]**, the proportion of these that are dotted (**EX 37**) is quite low (Δ2/[Δ2+B1] = 2/48= .042) – it falls back again to background levels for the Δ2^B1 population as a whole.

Two contour-combinations are numerous enough here to deploy our grouping-angle apparatus, which give results in both cases compatible with the quite small frequency of dotted incipits:

2P+L: Δ2/[Δ2+B1] = 0/12 = 0
EX 37, pp 6-7

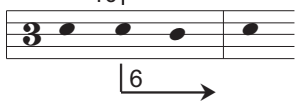
<GAC 23>



2P+NT: Δ2/[Δ2+B1] = 2/11 = .182
EX 37, p 8

triple: 2P+NT -10 Q = -4; C = 8

<GAC 24>



There are too few instances of 2P+ARP or 2P+OSC to require similar calculations.

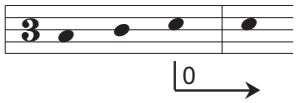
[38] **Δ2^B1, {--R|R}**

Because repeating a pitch over the second barline is quite common in triple meter – it separates groups effectively, and seems to obscure the meter not at all – we find here (**EX 38**; Δ2/[Δ2+B1] = 39/143 = .273) enough examples to use our grouping-angle values, and a fairly significant use of the dotted delta-2 rhythms, all of which involve concatenated figures. These figures, the dotted/undotted ratios, and the calculations are:

3L+RP: Δ2/[Δ2+B1] = 13/32 = .406
EX 38, pp 1-3

triple: 3L+RP -18 Q = -18; C = 6

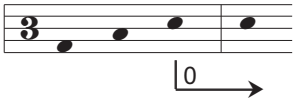
<GAC 25>



ARP+RP: Δ2/[Δ2+B1] = 1/45 = .022
EX 38, pp 4-7

triple: ARP+RP -22 Q = -22; C = 10

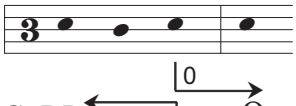
<GAC 26>



NT+RP: Δ2/[Δ2+B1] = 25/33 = .758
EX 38, pp 8-10

triple: NT+RP -16 Q = -16; C = 4

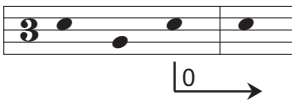
<GAC 27>



OSC+RP: Δ2/[Δ2+B1] = 0/9 = 0
EX 38, p 11

triple: OSC+RP -22 Q = -22; C = 10

<GAC 28>

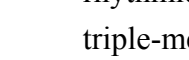


All of these C-values are appropriate to the Δ2/[Δ2+B1] ratio in the repertories in question.

Here are the remaining incipits in the {--RR}configuration, all in the undotted B1 pattern:
EX 38, p 12-14.

[39] A tabulation of the grouping-angle calculations we've been able to make for the Δ2^B1 repertory can be examined here: **EX 39, Δ2^B1 dotted-ratio table**.

IV: Zeta-5 and Alpha-3 incipits

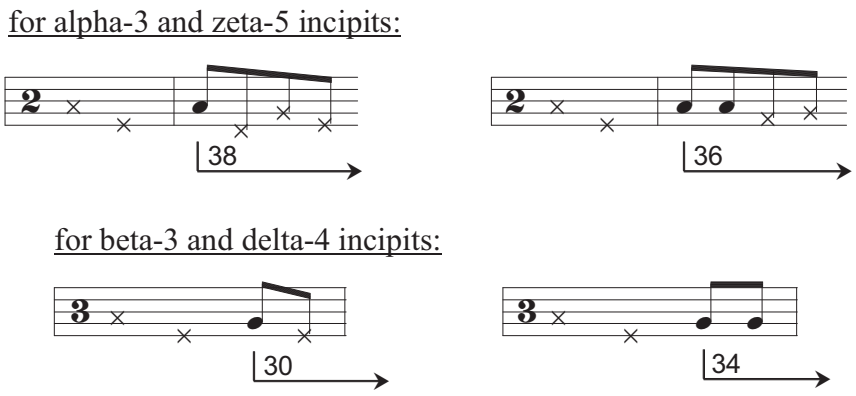
[40] What happens if we try to extend our inquiry, and our methods, to incipits with more mixed rhythmic values? For example, we might ask, what influences the choice between an incipit with an alpha-3 rhythmic pattern () and a similar contour with a zeta-5 pattern ()? Or in their triple-meter analogs, between a beta-3 () and a delta-4 ()?

It appears that in cases like these, dotted rhythms are again often used as a means of avoiding contour-induced grouping ambiguity, but rather than bind the first three notes together via "iambic reflex", the dotted rhythm instead separates the first note from the group of quick notes which follow, and they in turn typically group back as a whole with db^0 as a subgroup.

The difficulty is that we are not in possession of a satisfactory way to quantify the difference between alternative groupings of various metric/durational patterns, let alone a means to combine this with the rudimentary contour grouping-angle values we've been devising. What we will resort to instead is the conceptually-questionable expedient of assigning values greater than 24 to the first of the quick notes, clearly a makeshift arrangement that makes little sense in terms of our original geometric grouping-angle notion, but which will at least help us achieve some basic consistency in evaluating the grouping-tendencies of various contours in these rhythms. Here are the additional values we'll need:

Fig 40

Additional Grouping Angle Values
for alpha-3, beta-3, zeta-5, and delta-4 incipits:



The first of the quick notes, then, is to be given a forward value depending on whether the first two pitches are repercussions or not. The quicker notes frequently form within themselves a scale or a turn-figure, but we will ignore the internal structure of this part of the incipit, and speak instead of contours such as NT+, L+, ARP+, 3P+, etc. – not NT+ARP, for example. None of the values above are singleton values; all are used in multiple grouping-angle calculations.

[41] **Z5^A3, miscellaneous**

We begin by noting that the undotted A3 rhythm has a built-in grouping ambiguity: the second note is equidistant from its neighbors, so by preference it should "pivot" – that is, be interpreted as an internal group member, rather than as a group boundary. The third note, however, is closer to its successor note 4, and so tends to group away from note 2. Thus the A3 rhythm is by its nature potentially ambiguous at

the note 2/3 joint, and so in this Z5^A3 population the dotted zeta-forms (which sidestep this ambiguity by attaching note 2 by proximity to the succeeding quick notes) in general predominate, in most contours forming ½ - ¾ of the total, as they do in this group of incipits with "miscellaneous", otherwise unspecified, contours: **EX 41**; in which Z5/[Z5+A3] = 75/123 = .610

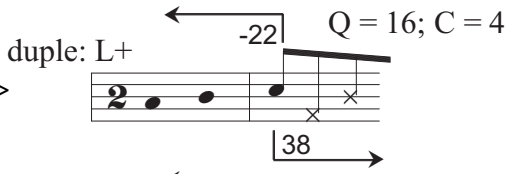
In contrast to the Z3^K and Δ2^B1 repertories discussed in the previous two sections, tempo has little bearing, seemingly, on the choice of undotted vs. dotted versions in these themes; if anything, a quick tempo may slightly favor the dotted choice.

[42] Z5^A3, linear incipits

In the group of incipits opening with a line (**EX 42**), the dotted proportion is Z5/[Z5+A3] = 40/64 = .625; those incipits in which the opening line continues for four or more notes are given first, then incipits in which the line is exactly three notes long (the proportion of dotted instances is slightly higher in the former, .654 vs .531).

The grouping angle calculation for this contour:

<GAC 29>



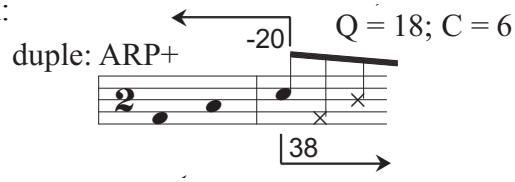
gives a reasonable value for this distribution.

(This section does not include themes which begin with a line, but whose quick notes [from note 3] display initial repercussion; those are discussed in **[52]** below.)

[43] Z5^A3, ARP

For incipits in the Z5^A3 repertory beginning with an arpeggio (**EX 43**), the grouping-angle calculation again gives an appropriate C-value for the dotted-value distribution Z5/[Z5+A3] = 15/34 = .441, which is rather low compared to the rest of the Z5^A3 population:

<GAC 30>

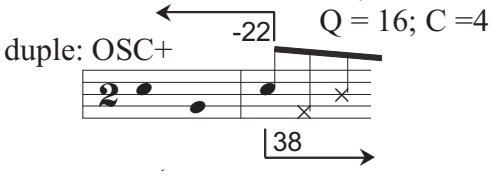


In other words, the third note of the arpeggio groups back weakly enough to permit quite a number of A3 incipits in which the quicker notes group forward relatively unambiguously, especially when note 3 is a turning-point.

[44] Z5^A3, OSC

Incipits opening with an OSC, other than those followed by repercussion, are given here: **EX 44**. The grouping-angle calculation:

<GAC 31>



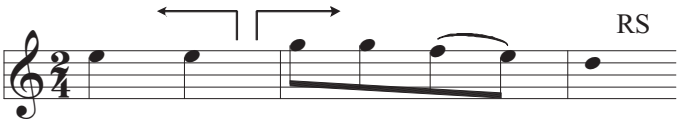
gives a C-value reasonable in light of the distribution (Z5/[Z5+A3] = 10/15 = .667) of dotted Z5 forms here.

[45] Z5^A3, {SS'RR}

The behavior of this pattern, {SS'RR}, is interesting: **EX 45**. There are no undotted A3 (or in triple meter, B3; see below **[57]**) rhythms with this contour, and musically it's difficult to imagine one.

It might seem at first that in an A3 rhythm in this contour, note 2 would be pulled left by the repercussion, and note 3 pulled right by its repercussion on a different pitch and by durational differences as well, thereby permitting a sufficiently clean articulation into two parts:

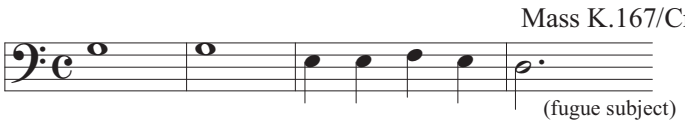
Fig 45.1



All one can conclude is that the inherent ambiguity of this rhythmic pattern at the note 2/3 boundary is (as in the {RR'RR} pattern discussed below, **[47]**), insufficiently overcome here in an A3 rhythm.

If we tie note 3 yet more closely to its neighbor on the right, is an undotted rhythm more satisfactory? There are no examples of this contour out of 48 incipits in the repertory using an A4 rhythm (𝅗𝅥. 𝅗𝅥. ♩♩♩), but indeed there is one – a *stile ecclesiastico* fugue subject – among the 73 incipits in the A5 (♩♩𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯) rhythmic pattern:

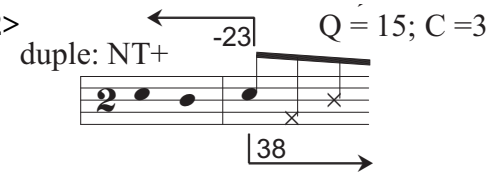
Fig 45.2



[46] Z5^A3, NT

There aren't many A3 and Z5 incipits with NT openings; here are all of them: **EX 46**. The quick notes are most often disposed in a scale-fragment. The grouping-angle calculation agrees reasonably well with the dotted/undotted ratio (Z5/[Z5+A3] = 21/27 = .778) here, though a value of C = 4 would be more gratifying:

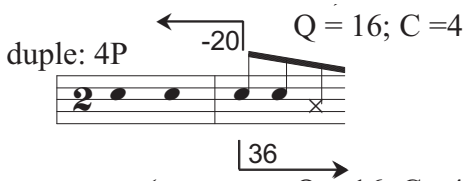
<GAC 32>



[47] Z5^A3, {RR'RR}

The relative distribution of dotted rhythms in this category (**EX 47**) is Z5/[Z5+A3] = 5/8 = .625. It's possible that, in spite of the fact that the grouping-angle machinery is intended to evaluate the concatenation of different figures (rather than, say, two conjoined lines), one can consider the quick repercussion from note 3ff here a distinct event, overlapping with the initial 3-percussion, and so produce the following grouping-angle calculation:

<GAC 33>

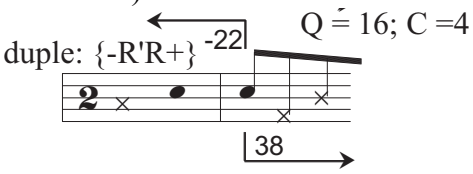


which does, in fact, produce a C-value in keeping with the distribution of dotted zeta-5 forms in this small group: Z5/[Z5+A3] = 5/8 = .625.

[48] Z5^A3, {-R'R-}

The grouping-angle calculation for this contour (**EX 48**) gives a C-value consonant with the Z5/[Z5+A3] distribution (Z5/[Z5+A3] = 49/62 = .790):

<GAC 34>



[49] Z5^A3, {-R'RR}

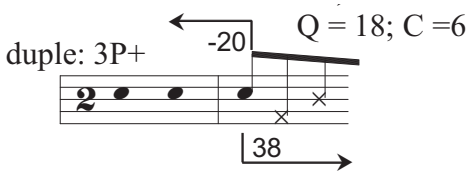
There are just four instances of this contour, all dotted (Z5/[Z5+A3] = 4/4 = 1.000): **EX 49**

[50] Z5^A3, {RR'R--}

This section and the next (**[51]**,{RR'-}) discuss those contours in this repertory with the lowest proportion of dotted rhythms – that is, those in which the undotted A3 rhythm is apparently the least ambiguous, and the most acceptable. In the {RR'R--} or "3-percussion" pattern (**EX 50**) the quick notes frequently form a turn-figure, a line, an arpeggio, or some other well-organized and coherent unit.

The grouping-angle calculation gives a value of C = 6, consistent with the relatively small proportion (Z5/[Z5+A3] = 17/43 = .395) of dotted Z5 incipits here:

<GAC 35>

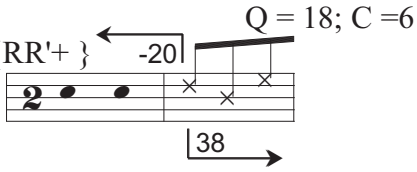


[51] Z5^A3, {RR'--}:

This contour **(EX 51)** – incipits in the Z5^A3 repertory beginning with a "2-percussion" – are, along with the {RR'R}-form openings we just discussed in **[50]**, those most likely to be written in the undotted A3 rhythmic version (Z5/[Z5+A3] = 32/73 = .438). This is one of the signal features of this part of the corpus, and it's unfortunate that it can't be readily evaluated with our grouping-angle apparatus: the figures don't overlap on a single note, due to the rhythmic discontinuity at note three. It seems clear that what's happening here is that the initial 2-percussion tends to form its own little group, leaving the succeeding quicker notes – frequently disposed in some internally-coherent contour like a line, a turn-figure, or a "quasi-turn" (4 notes, two of them non-adjacently on the same pitch) – free to separate cleanly.

It may be worth mentioning that if we tried, nevertheless, to adopt our grouping-angle calculus to this situation, we could produce satisfactory arithmetic by assigning a grouping value to the third note in the contour, the one that overlaps with the quick notes, of -20. The calculation would then be:

<GAC 36>

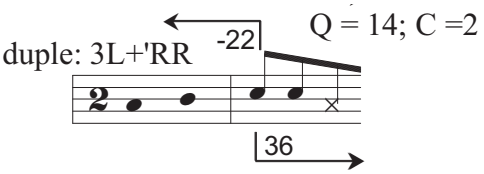


which is in reasonable agreement with the dotted/undotted ratio here of .438. But the idea that the third note in this contour groups back as strongly as the third note of an arpeggio, or a trochaic 3-percussion, seems absurd, and our difficulty is a consequence of assigning values greater than 24 to the first of the quick notes. The true backwards value of the third note should surely be much lower, but we have no way of interpreting the resulting C-value greater than 12.

[52] Z5^A3, {--'RR}

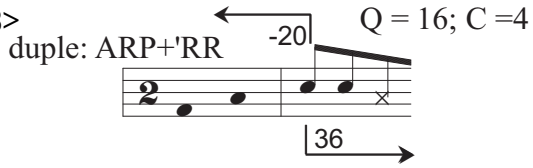
Consider first the case here in which notes 1-3 form a line (**EX 52.1 p 1**): a line is the strongest connection, and in this case, it's unclear whether note three groups back directly with notes 1-2, or forward to form a subgroup with notes 3ff, and so there is just one A3 example (the Offertory, D.963, 24, in which the quicker notes after note 3 seem to encourage note 3 to group back to the left: evidently coherent enough for the *stile ecclesiastico*). Otherwise, all the examples of this contour are in the Z5 rhythm (3L+RR: Z5/[Z5+A3] = 8/9 = .889), in agreement with the grouping-angle calculus:

<GAC 37> duple: 3L+'RR



If, however, notes 1-3 form an ARP, it becomes more acceptable to write the A3 rhythm: note 3 is held loosely-enough left that it can more easily form a subgroup to its right: **EX 52.1 p 2**: ARP+RR: Z5/[Z5+A3] = 3/8 = .375. However, the grouping-angle calculation here give an anomalous result; more appropriate would be C = 6:

<GAC 38> duple: ARP+'RR



Just two of the incipits here begin with an NT, and there are 3 in the OSC+RR pattern: **EX 52.1 p 3**

The remainder of the incipits in the {--'RR} contour can be seen here: **EX 52.1 p 4-5**. Somewhat mysteriously, the proportion of dotted versions rises dramatically in these (Z5/[Z5+A3] = 18/20 = .900) even though one would suspect that the third note would be bound back even more weakly in this case, producing then a larger Q-value and so a larger C-value, which should mean instead a larger proportion of the undotted A3 rhythm, and a smaller number of the dotted Z3 versions. Again, this may be an artifact of the somewhat simple-minded way we have tried to combine contour and durational grouping in a single dimension, so to speak, rather than devising a more sophisticated model of their interaction.

A tabulation of the grouping-angle calculations we've been able to make for the Δ2^B1 repertory can be examined here: **EX 52.2, Z5^A3 dotted-ratio table**

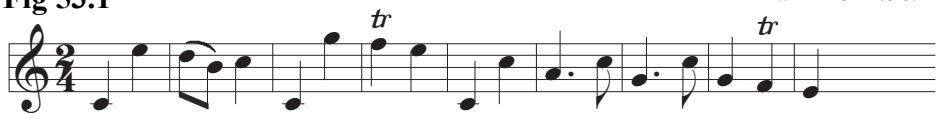
V: Delta-4 and Beta-3 incipits

Finally, then, let's turn to the triple-meter analogs of the rhythms we've just been discussing – that is, to delta-4 (3/4 ♩. ♪♫ \|) and beta-3 (3/4 ♩ ♩ ♫ \|) rhythms, and see to what extent the methods we've been developing are useful. This group of incipits has the highest proportion of dotted rhythms – in this case Δ4s – so far.

[53] Δ4^B3, miscellaneous contours

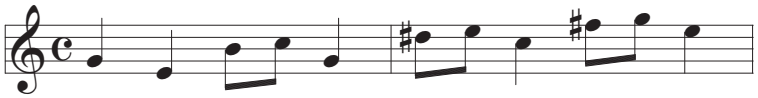
As for many of the contours in the Δ4^B3 population, the proportion of dotted versions with unspecified opening contours (**EX 53**; Δ4/[Δ4+B3] = 59/76 = .776) is yet higher than it is in the corresponding Z5^A3 repertory (**[41]**), for reasons which are not completely clear. All I have to suggest is a consideration of metric stability, as in **[26]** above: that if duple meter is the basic default metric organization in this music, triple meters must do more to establish themselves, and that the B3 rhythm suffers from not only potentially ambiguous grouping, but also from insufficient metric clarity – does the second downbeat arrive on note 3 with the quick notes? That is, just as in the example below, where the change of note-values may (along with a default duple presumption) help to mark the second downbeat:

Fig 53.1 Bar Trio H.58/iii



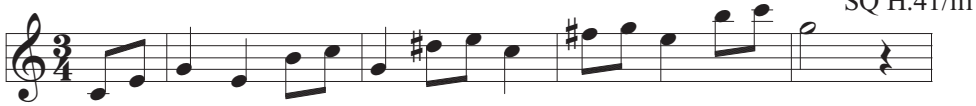
so a passage like this would be easy to hear in duple:

Fig 53.2



had not Haydn added an establishing upbeat:

Fig 53.3 SQ H.41/iii

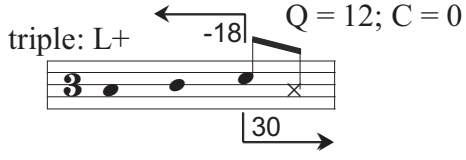


Haydn's quartet theme is still, of course, deliberately metrically disorienting at first, and many other factors help establish the meter[4]; it's not clear that metric stability alone accounts for high Δ4/[Δ4+B3] ratio in this repertory.

[54] Δ4^B3, LINE+

Almost all the incipits beginning with a line in the Δ4/B3 repertory (**EX 54**) are in the dotted Δ4 rhythm (Δ4/[Δ4+B3] = 29/30 = .967), consistent with the grouping-angle calculation:

<GAC 39>

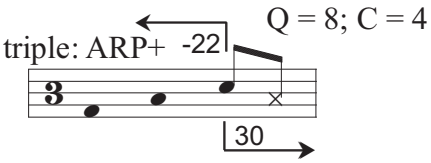


4 Among recent discussions see especially Temperley 2001, Chapter 2, Temperley 2007, Chapter 3, and London 2004, Chapter 2

[55] Δ4^B3, ARP+

As in most Δ4^B3 contours, here (**EX 55**) the dotted Δ4 form predominates (Δ4/[Δ4+B3] = 12/14 = .857), here consistent with the grouping-angle calculation:

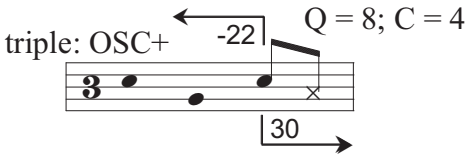
<GAC 40>



[56] Δ4^B3, OSC+

Incipits in the repertory beginning with the OSC figure (**EX 56**) present a picture similar to that of the ARP instances we just discussed: the grouping-angle calculation is again consistent with the distribution of dotted incipits: Δ4/[Δ4+B3] = 12/15 = .800.

<GAC 41>



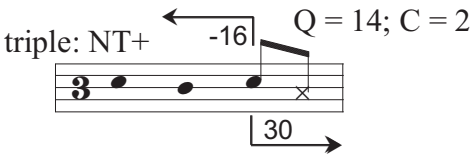
[57] Δ4^B3, {RR'SS}

There are just two examples of this in our repertory: **EX 57**

[58] Δ4^B3, NT+

Once again, we find a contour in this repertory with no undotted B3 examples; they're all dotted Δ4s (**EX 58**) with a dotted distribution then of Δ4/[Δ4+B3] = 16/16 = 1.000. The grouping-angle calculus here provides a C-value that is not exactly ideal, but is still relatively close to appropriate for this distribution:

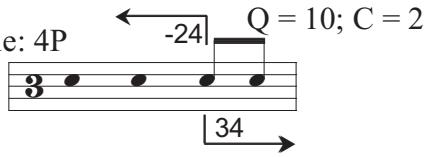
<GAC 42>



[59] Δ4^B3, {RR'RR}

In this contour too (**EX 59**), all the instances are dotted deltas (Δ4/[Δ4+B3] = 8/8 = 1.000); no B3 versions exist, and the grouping-angle calculation:

<GAC 43>



is relatively consistent with this distribution.

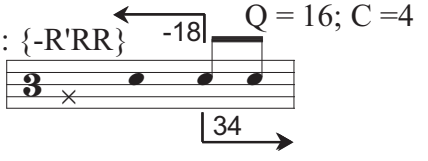
[60] Δ4^B3, {-R'R-}

There are just four examples of this contour **(EX 60)** in our repertory, three of them in the dotted Δ4 rhythm.

[61] Δ4^B3, {-R'RR}

There are not many instances of this contour (**EX 61**) either, but since they cross the 5-instance threshold, we give the grouping-angle calculation (with a result appropriate for the distribution Δ4/[Δ4+B3] = 3/5 = .600):

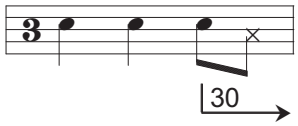
<GAC 44>



[62] **Δ4^B3, {RR'R-}**

Again there are just enough incipits in this contour (**EX 62**) to tabulate, and again the dotted ratio (Δ4/[Δ4+B3] = 2/5 = .400) is consistent with the grouping-angle calculation:

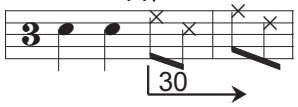
<GAC 45> triple: RR'R -24 Q = 6; C = 6



[63] **Δ4^B3, {RR'--}**

As in **[51]** above, this contour (**EX 63**) cannot really be evaluated with our grouping-angle apparatus, since, due to the rhythmic discontinuity at note 3, the figures don't overlap. As we mentioned there, we could in fact produce a calculation by arbitrarily assigning a high negative value to note three, as in the following grouping-angle calculation:

<GAC 46> triple: RR'+ -14 Q = 16; C = 4



which gives a value of C = 4, appropriate for the distribution of dotted D4 incipits here (Δ4/[Δ4+B3] = 23/47 = .489), but at the cost of accepting an unlikely value for the third note.

[64] **Δ4^B3, {--R'R}**

There are very few examples of this particular contour (**EX 64**) in the Δ4^B3 repertory, and not enough instances of concatenations (ARP+RP, for example) to deploy our grouping-angle apparatus.

[65] Here, finally, is a tabulation of all the incipits in this study for which we have made grouping-angle calculations, in order of the C-value obtained, and within that in order of the dotted ratio. The width of each particular bar is in proportion to the number of incipits in that group: **EX 65, dotted-ratio table, complete.**

VI: Concluding

[66] So after all this, what exactly can we claim to have explained about the "little notes" in the incipit of a Classic theme?

It seems fair to say that for incipits whose contour grouping-angle calculation falls within the C = 0-2 range, any particular instance uses a dotted version of its contour rather than the analogous undotted one because almost all such contours do: the undotted rhythm would present us with a incipit in which the grouping is simply too unclear; it feels ambiguous, "sticky" somehow. With those incipits whose grouping-angle calculation falls in the C = 10-12 range, however, we need another assumption: that if it's not necessary to use the dotted rhythm, it's better not to do so. This assumption is not at all obvious, but it certainly does seem that when one examines collections of undotted incipits where the C-value falls in this range – the 4L+ARP themes in **EX 8**, for example, or the 3ARP+RP instances in **EX 38** – and re-imagines them in a dotted rhythm, even the slower ones are noticeably more convincing left just as they were written in the first place.

What the grouping-angle calculation implies for an opening contour for which the C-value is intermediate is a little harder to say: it doesn't tell you much about an individual melody to know that about half the time such a contour is dotted, and half the time it's not. One should expect, then, other features of the incipit to favor one version over another, and/or to help clarify the grouping. In **EX 21.1**, for example, dealing with 3L+ARP contour, speed seems to decide for most of the kappa versions, and the mid-tempo zeta-3s use an upbeat to help keep db^0 grouped backwards, away from the quick note. But Sym D.200/ii is not fast, and yet it's a kappa (and clearly preferable that way), for reasons unknown. Or consider **EX 22.2, p 4-6**, in the 2P+NT contour: four of the kappa incipits are in gavotte-meter, which, by giving (or encouraging the performer to give, or encouraging the listener to hear) an extra kick to db^0, something like a back-beat, urges its interpretation as the beginning of a new group and so effectively splits the NT, greatly diminishing the contour ambiguity: you don't really hear the NT-figure as a three-note unit. In the Divertimento K.334/i the NT-figure is neutralized by the 16^{th}-notes which detach the end of it, and something similar occurs with the *La fedeltà premiata* incipit.

[67] But even if we could give a detailed explanation, deriving from well-confirmed principles, for why each of these incipits with intermediate C-values is dotted or not, we have still dealt with but a fraction of the repertory we set out to examine. What about all those "miscellaneous" contours?

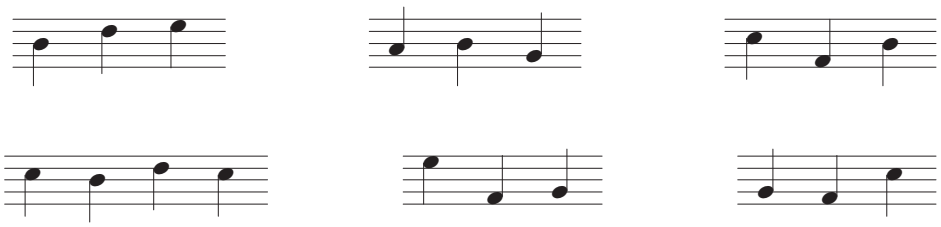
If we perform a grouping-angle calculation on those incipits beginning with a contour other than a line, an NT, an ARP, an OSC, or a RP in the Z3^K repertory (**EX 7.1**), but then concatenating this opening contour with a line or another figure (as in misc+NT, misc+ARP, etc) at the third or fourth note, we can in most cases come up with a C-value close to appropriate for the distribution of dotted incipits by assigning a value of -17 to the last note of the "miscellaneous" part of the concatenation. But this still leaves out of consideration those we might label "misc+misc" contours – those in which nowhere within the first 5-7 notes is to be found a line, an ARP, etc; and in the Z3^K repertory there are 417 of these. Further, in the Z5^A3 collection of incipits with "miscellaneous" contours (**EX 41**), this value (-17) does <u>not</u> succeed in producing an appropriate C-value.

A reasonably satisfactory result can similarly be obtained for the "misc+" contours in the triple-meter Δ2^B1 repertory (**EX 26**) by assigning a value of -14 to the third or fourth note of a "miscellaneous" contour, but again this leaves out 165 "misc+misc" incipits. In the Δ4^B3 repertory as well, assigning the same (-14) value to the third note of a "miscellaneous contour" (**EX 53**) gives an appropriate C-value.

We have moreover encountered many examples in which an incipit beginning with one of our named contour categories has a "miscellaneous" continuation: "NT+misc", for example, or "3L+misc", and for those in the Z3^K population we can get fairly appropriate C-values in most cases by assigning a value of +2 to the first note of the concatenated "miscellaneous" contour within the Z3^K repertory, and within the Δ2^B1 by giving this note a value of 0.

But the fact is that many of the other common contour shapes in our experience of this music could just as well be (or have been) identified and named, such as "half-line" or "half-arpeggio", "near-NT", "near-OSC, "changing-notes", and the like, shapes such as:

Fig 67



There's every reason to think that shapes such as these carry their own "grouping-angle values" and their own consequences for grouping. The figures we've been identifying may be somewhat perceptually privileged, as a perfect circle or a straight line in the visual field may be more salient than an irregular polygon or a blurry boundary; but they are not special signs participating in a syntax of some sort. The integrity (or lack of it) we respond to in a design, visual or auditory, is a matter of degree: not the either/or decisions of a grammar or a code, but an evaluation of fluctuating degrees of coherence and articulation by powerful perceptual and interpretive faculties operating in a confined but complex space.

[68] I'd be delighted to have convince the reader that the presence or absence of dotted rhythms in the first few notes of a Classic theme can be explained, up to a point, by appeal to contour-induced (and in the case of the Z5^A3 and Δ4^B3 repertories, duration-induced) grouping ambiguity. But the more important information here may be simply the shape of the repertory, however we account for it: that by examining virtually the entire corpus of thematic material in the works of Haydn, Mozart, Beethoven, and Schubert, we have found that, within the incipits of major-mode themes:

among Z3^K rhythms the Z3 (dotted) instances are less than 1/5 of the total;
in the Δ2^B1 population this proportion is even smaller, a little more than 1/9;
but in the Z5^A3 and Δ4^B3 collections, in contrast, dotted versions constitute 3/5 and 3/4 of the total, respectively.
In both the Z3^K and Δ2^B1 repertories the generally low proportion of dotted incipits rises noticeably if the opening includes a trochaic 2-percussion of some kind (**[22], [23], [33], [38]**);
whereas in the Z5^A3 and Δ4^B3 collections the normally high proportion of dotted incipits falls in the repercussive {RR'--} and {RR'R-} contours (**[50], [51], [62], [63]**).

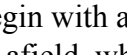
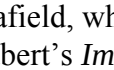
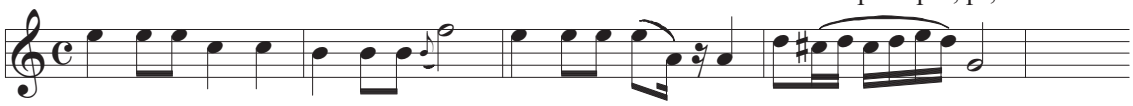
[69] We have asked here just one question about the incipits of themes in just four rhythmic genera. But the repertory could naturally be interrogated on many other matters as well. For example, what causes one theme to begin with an "alpha-2" rhythm (), and another with an alpha-3 ()? Or, further afield, what is the function of repercussions? Why repeat pitches at all? Is there a reason why in Schubert's *Impromptu* notes two and three repeat their pitch:

Fig 69.1

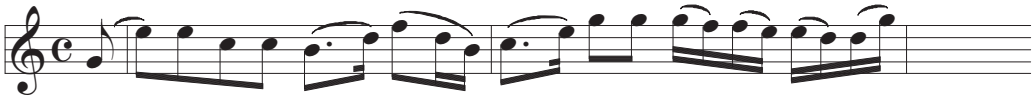
Impromptu, pf, D.935/#3



while here, simple pairs of repeated notes suffice:

Fig 69.2

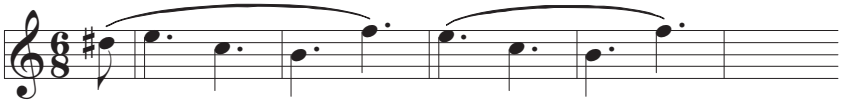
SQ H.66/i, 32



and this theme, a third instance with a very similar pitch-outline, uses no repeated pitches at all?[6]

Fig 69.3

Pf Son Op 81a/iii, 52



On a more abstract level, can a way be devised to evaluate various alternative rhythmic groupings quantitatively, so we know not only how the notes in various durational/metric patterns group, but how readily they do so; and could we then combine this with contour-grouping considerations in a manner more sophisticated than what we've managed here, to begin more comprehensively to explicate the coherence of the melodic incipit?

Even with the size of the corpus we've considered, it has been difficult to find enough examples of specific contours in specific rhythms (3ARP+NT in the Z3 or K rhythmic configuration, for example, in section **[13]**) to permit sufficiently reliable conclusions about late-eighteenth-century melody in general. It would be a good idea, then, to expand this kind of repertorial inquiry at least to the works of some of the major contemporaries of the four composers considered here, such as Boccherini, Pleyel, the Bach sons, maybe also the earlier Weber and Rossini, perhaps even emulating the impressive array of composers assembled (for different purposes) in Gjerdingen 1988. And something like these questions, and possibly these methods, might be addressed to music beyond the limits of an art music composed for an aristocratic audience in a single European city, within a 70-year span two centuries and more ago.

Finally, while this study has been primarily about contour and grouping in the incipit, no one could suppose that the coherence of the incipit alone is the whole story when it comes to Classic melody. The exceptionally orderly formal schemes with which these composers worked out their themes; the overall shape and plan of the melody, the obligatory range-defining and space-filling behavior of nearly all tunes, and the happy surprises that may unpredictably occur in the middle or toward the end of a theme: all these features and no doubt others contribute to our perpetual fascination with these auditory objects.

6 Those wishing to take up any of these questions, or others about this repertory, are invited to inspect the thematic incipit database assembled at http://www.rsolie.com/Solie_music_theory.html, containing nearly 10,000 major-mode incipits from the works of Haydn, Mozart, Beethoven, and Schubert.

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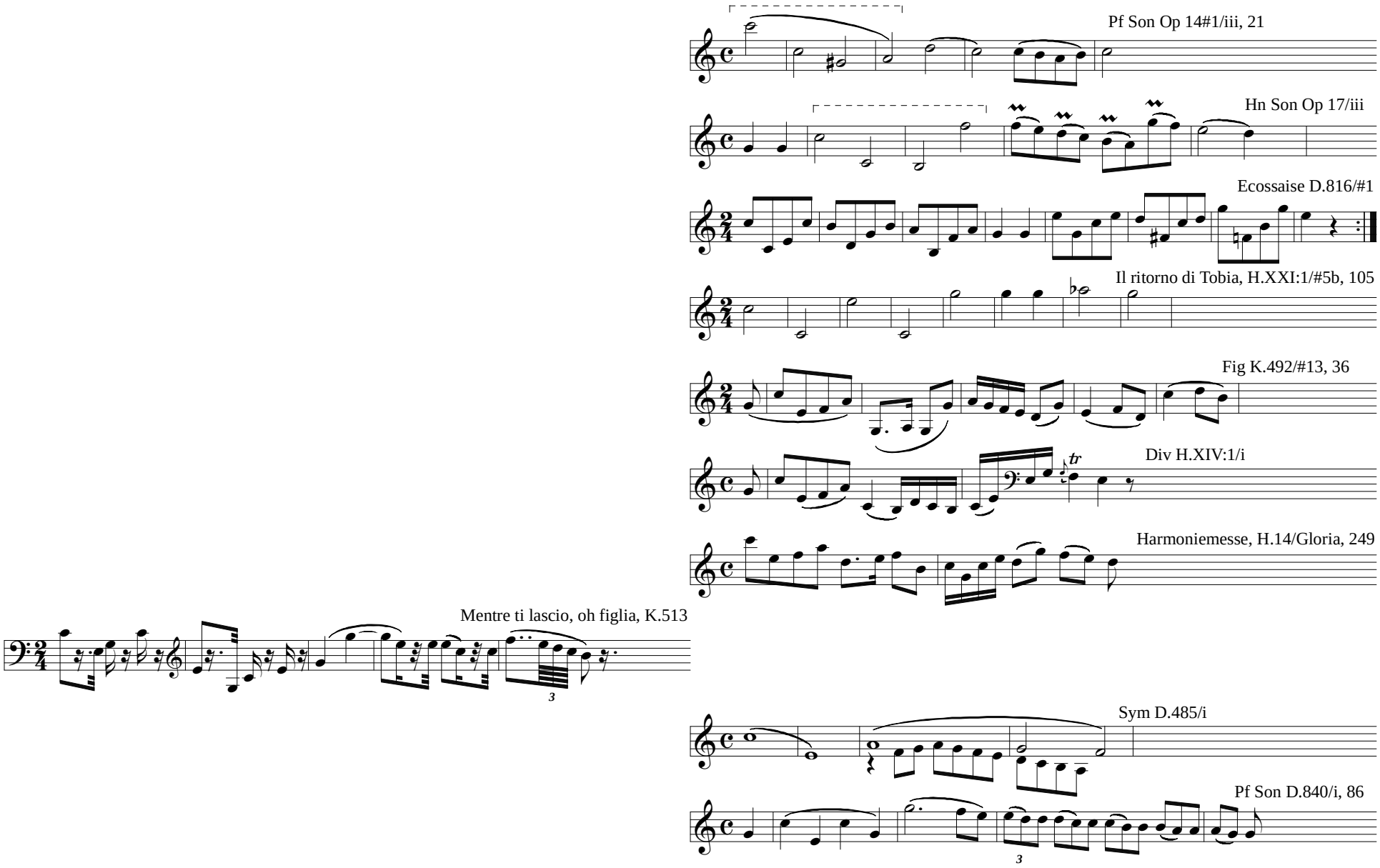
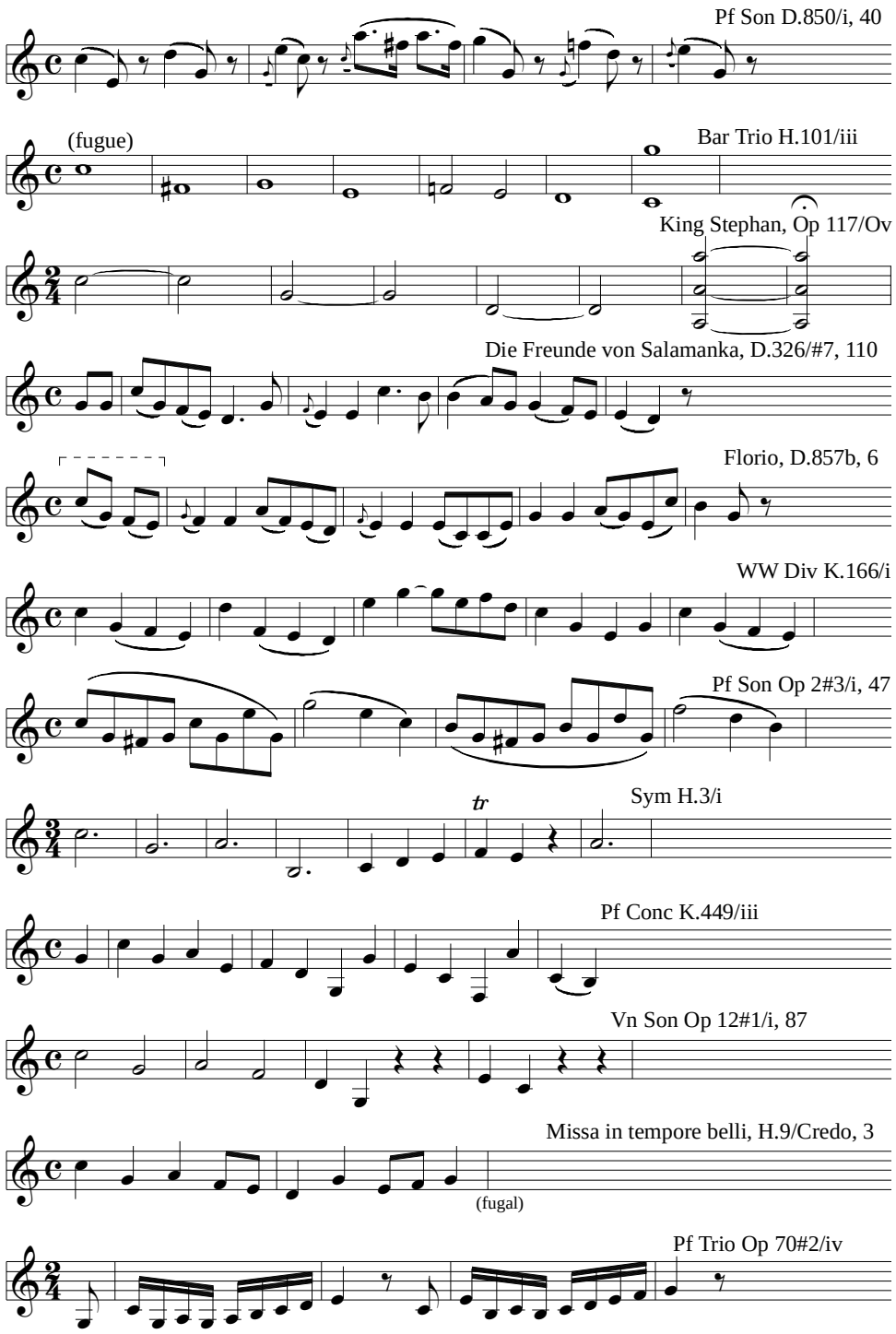
abbreviations in the musical examples:

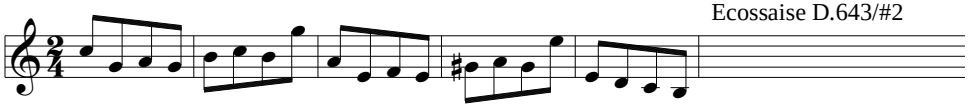
4-hd	four hands	4t	quartet	Cosi	*Così fan tutte*
Bar	baryton	5t	quintet	Don G	*Don Giovanni*
Bn	bassoon	Conc	concerto	Entf	*Die Entführung aus dem Serail*
Cl	clarinet	Deutsch	*Deutscher Tanz*	Fig	*Le nozze di Figaro*
Fl	flute	Div	divertimento	Finta	*La finta giardiniera*
Hn	horn	frag	fragment	Idom	*Idomeneo, re di Creta*
Ob	oboe	Min	minuet	Il Re	*Il re pastore*
Orch	orchestra	MM	*Moment Musicale*	Schspl	*Der Schauspieldirektor*
Pf	piano	Ov	overture	Tito	*La clemenza di Tito*
Str	string	Ser	serenade	Zbfl	*Die Zauberflöte*
Trp	trumpet	Sinf Conc	sinfonia concertante	Zbhfe	*Die Zauberharfe*
Va	viola	Son	sonata	Augenblick	*Der glorreiche Augenblick*
Vcl	cello	SQ	string quartet	Cons House	*Die Weihe des Hauses*
Vn	violin	Sym	symphony	Ruins	*Die Ruinen von Athen*
WW	woodwind			Stephan	*König Stephan*

EX 7.1:
Z3^K, miscellaneous contours

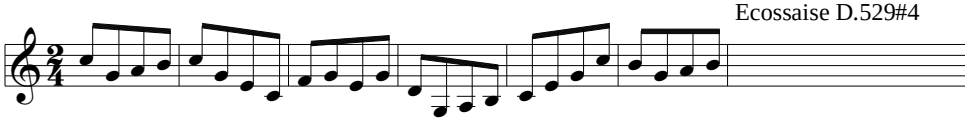



Pf Son D.850/i, 40
(fugue)
Bar Trio H.101/iii
King Stephan, Op 117/Ov
Die Freunde von Salamanka, D.326/#7, 110
Florio, D.857b, 6
WW Div K.166/i
Pf Son Op 2#3/i, 47
tr
Sym H.3/i
Pf Conc K.449/iii
Vn Son Op 12#1/i, 87
Missa in tempore belli, H.9/Credo, 3
(fugal)
Pf Trio Op 70#2/iv

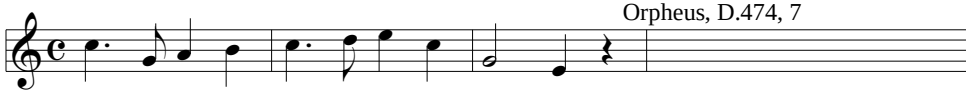
Ecossaise D.643/#2



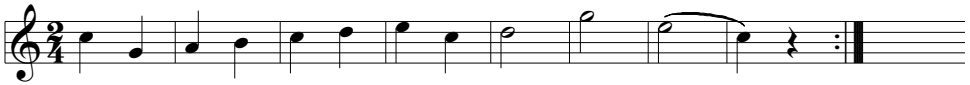
Ecossaise D.529#4



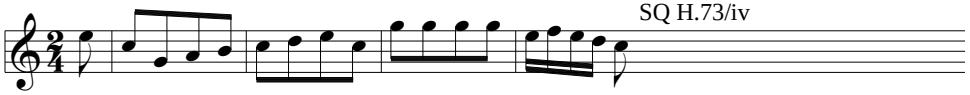
Orpheus, D.474, 7



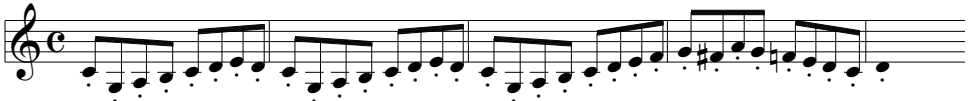
Ecossaise D.299/#5



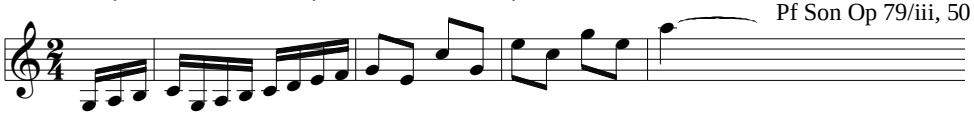
SQ H.73/iv



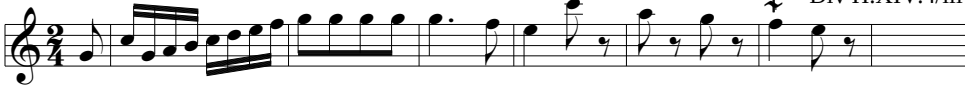
Prometheus Ov, Op 43, 17



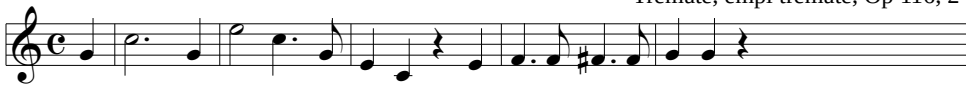
Pf Son Op 79/iii, 50



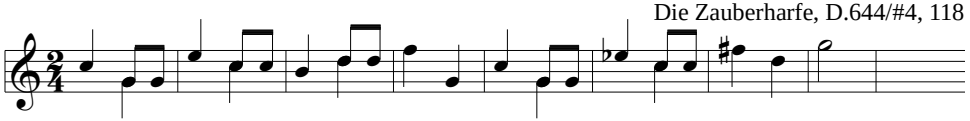
Div H.XIV:4/iii



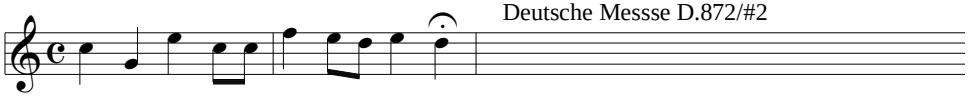
Tremate, empi tremate, Op 116, 2



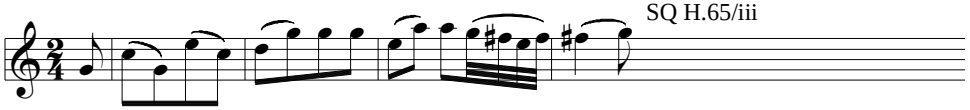
Die Zauberharfe, D.644/#4, 118



Deutsche Messse D.872/#2



SQ H.65/iii



SQ H.2/v

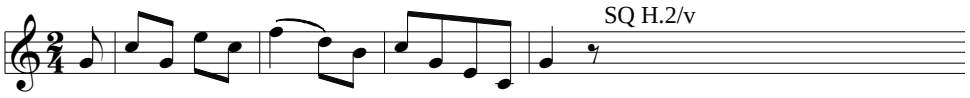
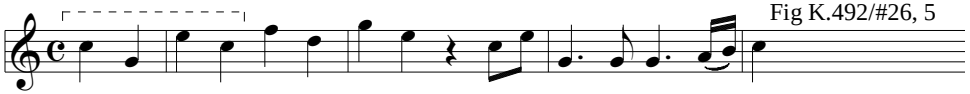
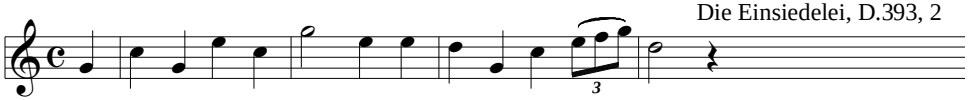


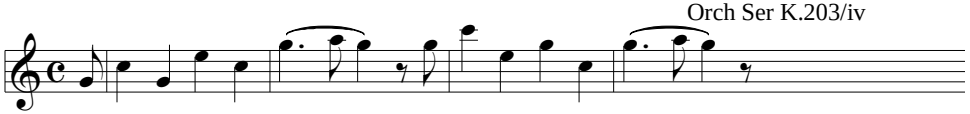
Fig K.492/#26, 5



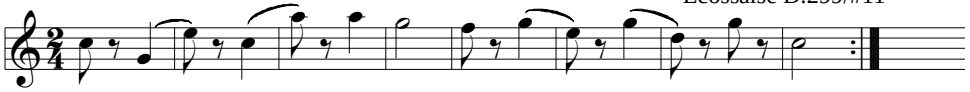
Die Einsiedelei, D.393, 2



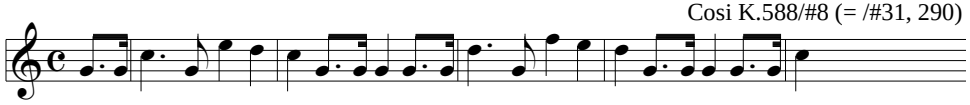
Orch Ser K.203/iv



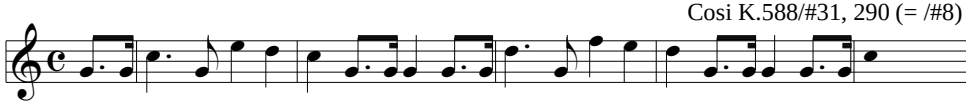
Ecossaise D.299/#11



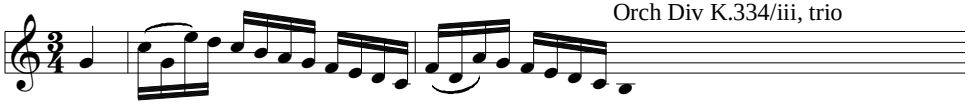
Cosi K.588/#8 (= /#31, 290)



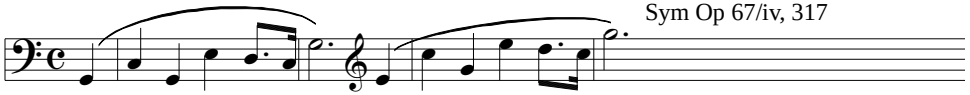
Cosi K.588/#31, 290 (= /#8)



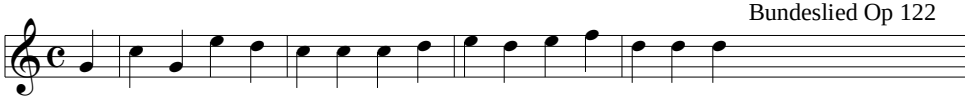
Orch Div K.334/iii, trio



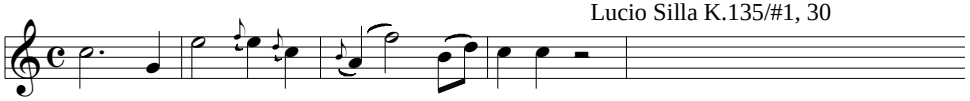
Sym Op 67/iv, 317



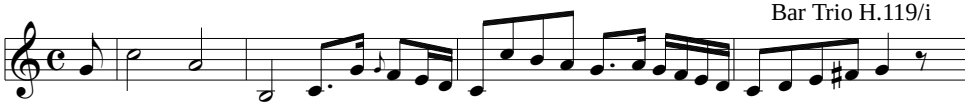
Bundeslied Op 122



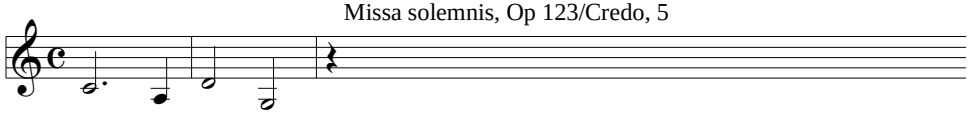
Lucio Silla K.135/#1, 30



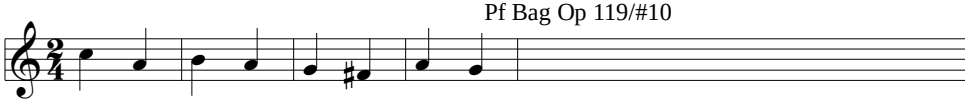
Bar Trio H.119/i



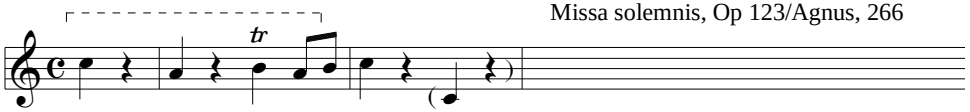
Missa solemnis, Op 123/Credo, 5



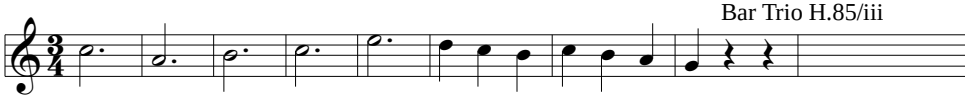
Pf Bag Op 119/#10



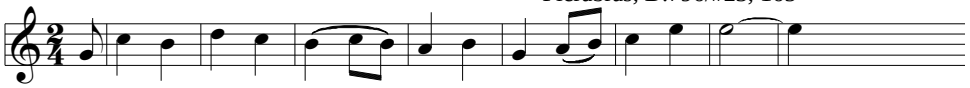
Missa solemnis, Op 123/Agnus, 266



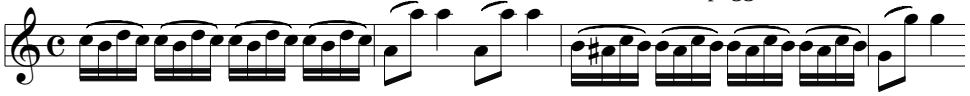
Bar Trio H.85/iii



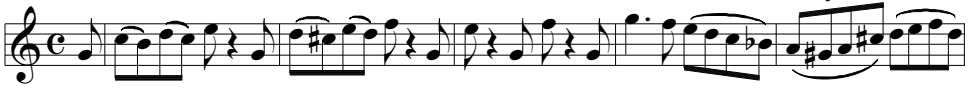
Fierabras, D.796/#23, 165



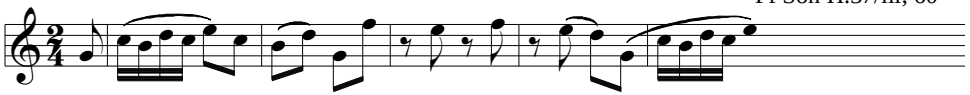
Arpeggione Son, D.821/i, 39



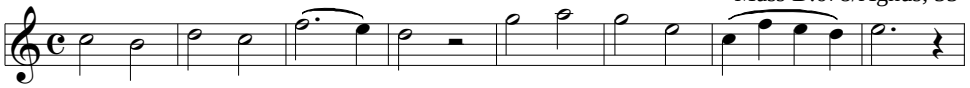
Sym H.48/i, 44



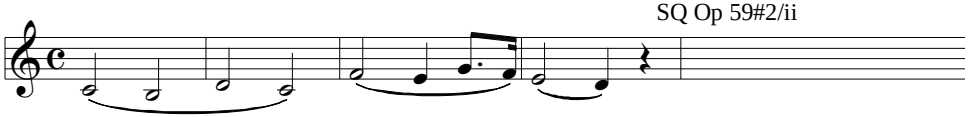
Pf Son H.37/iii, 60



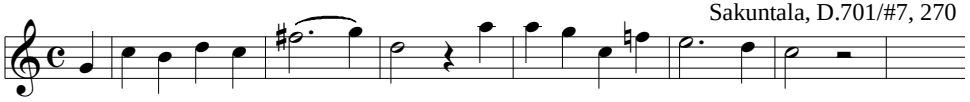
Mass D.678/Agnus, 55



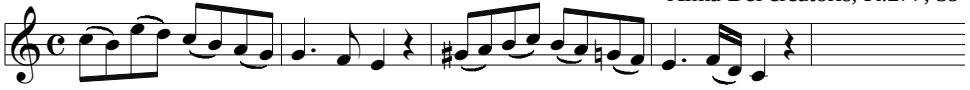
SQ Op 59#2/ii

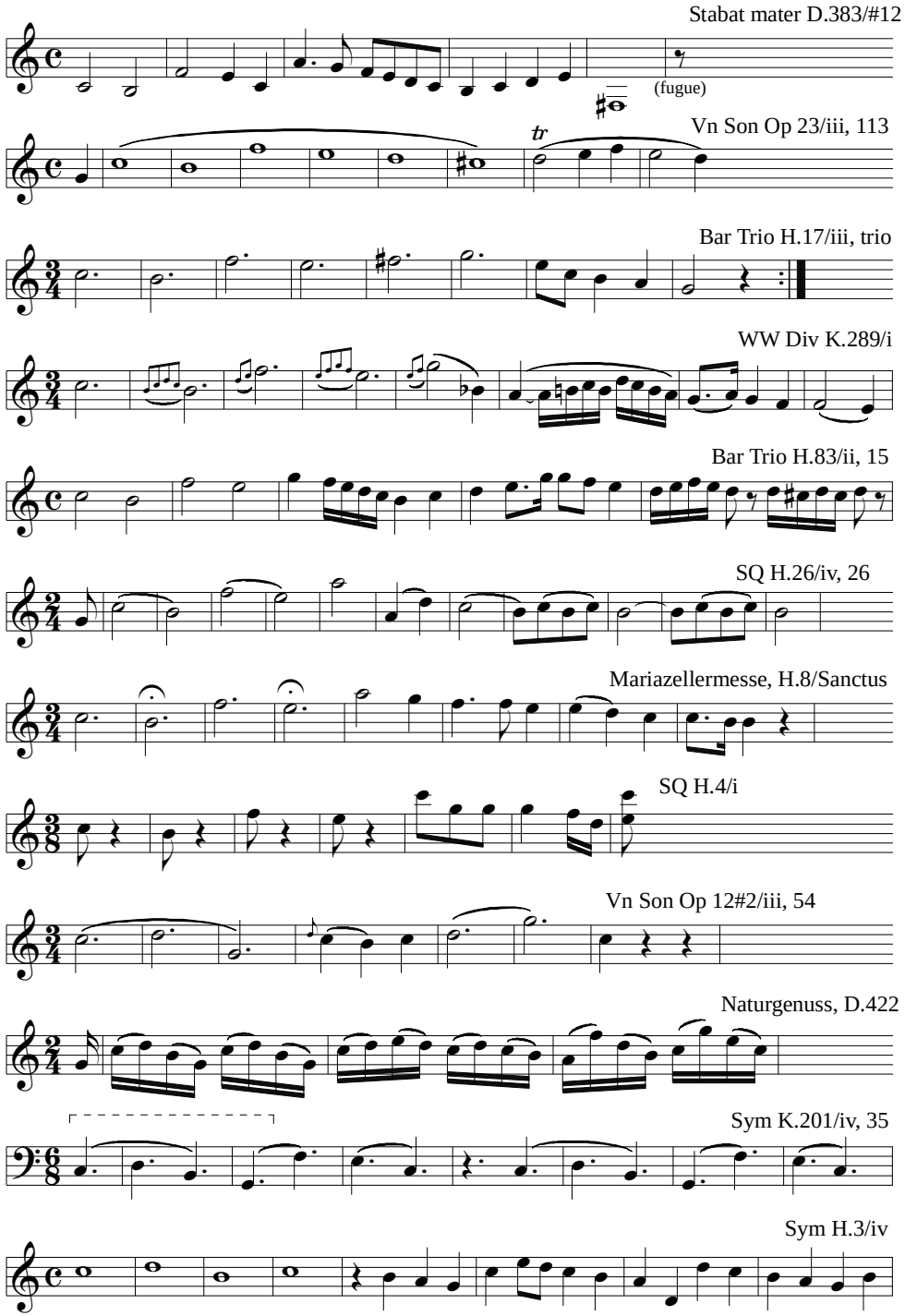


Sakuntala, D.701/#7, 270

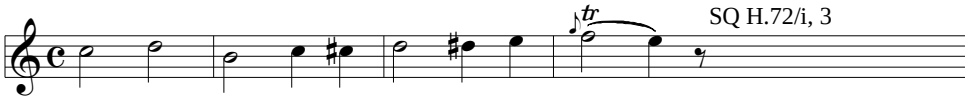


Alma Dei creatoris, K.277, 39

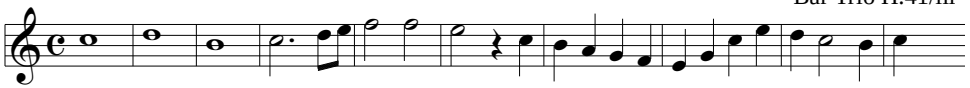



Stabat mater D.383/#12
(fugue)
Vn Son Op 23/iii, 113
tr
Bar Trio H.17/iii, trio
WW Div K.289/i
Bar Trio H.83/ii, 15
SQ H.26/iv, 26
Mariazellermesse, H.8/Sanctus
SQ H.4/i
Vn Son Op 12#2/iii, 54
Naturgenuss, D.422
Sym K.201/iv, 35
Sym H.3/iv

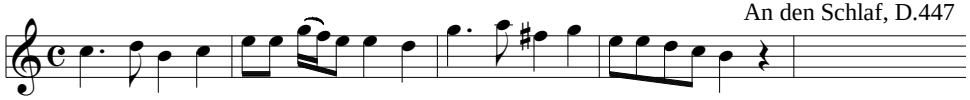
SQ H.72/i, 3



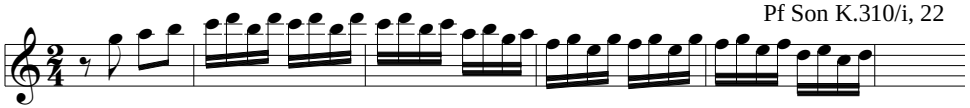
Bar Trio H.41/iii



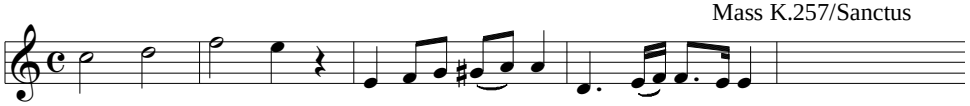
An den Schlaf, D.447



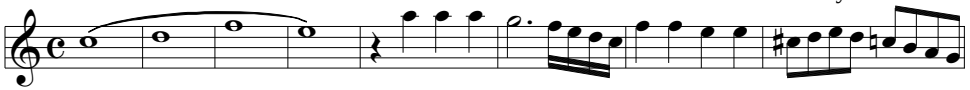
Pf Son K.310/i, 22



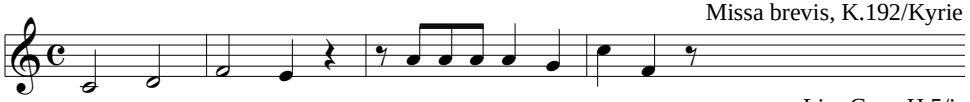
Mass K.257/Sanctus



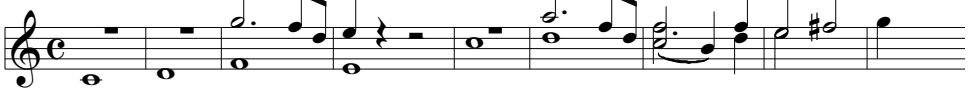
Sym K.551/iv



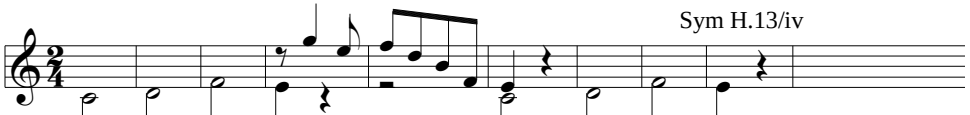
Missa brevis, K.192/Kyrie



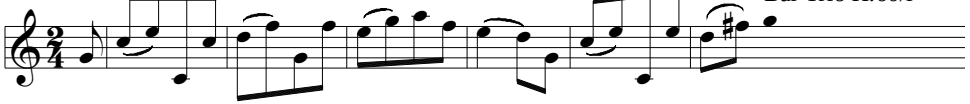
Lira Conc H.5/i



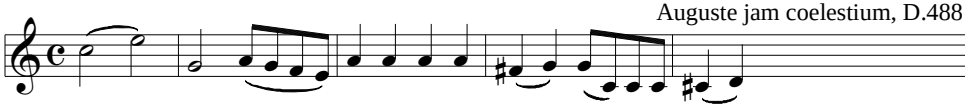
Sym H.13/iv



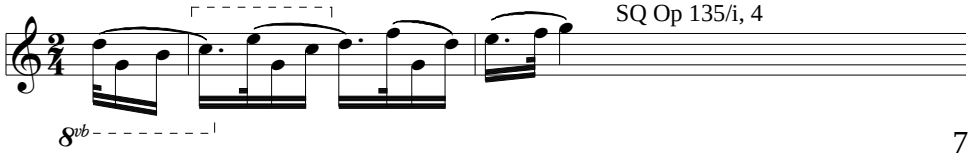
Bar Trio H.60/i



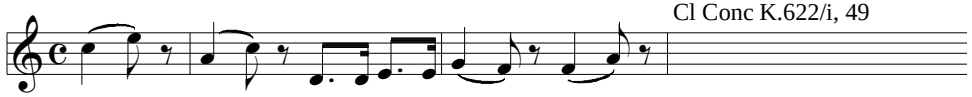
Auguste jam coelestium, D.488



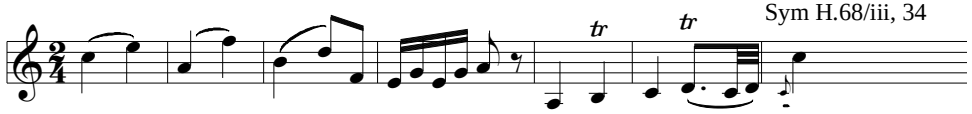
SQ Op 135/i, 4



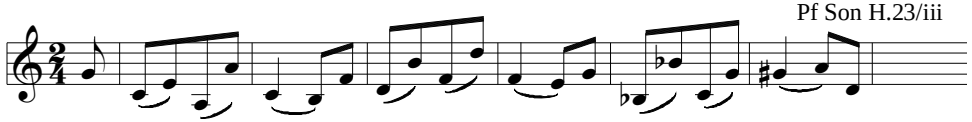
Cl Conc K.622/i, 49



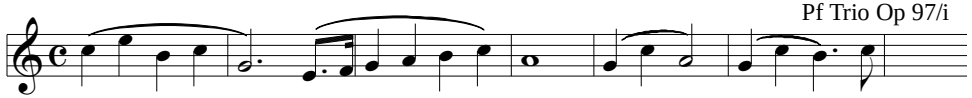
Sym H.68/iii, 34



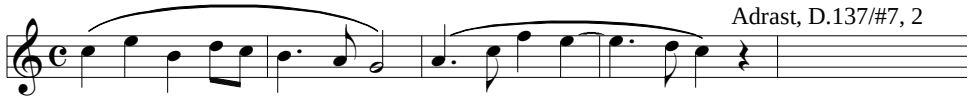
Pf Son H.23/iii



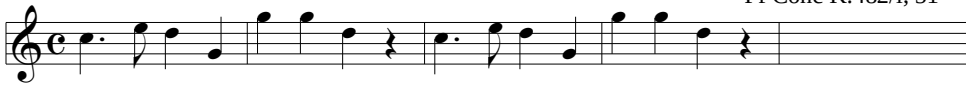
Pf Trio Op 97/i



Adrast, D.137/#7, 2



Pf Conc K.482/i, 51



Fierabras, D.796/#16, 15

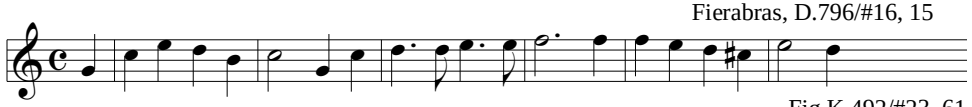
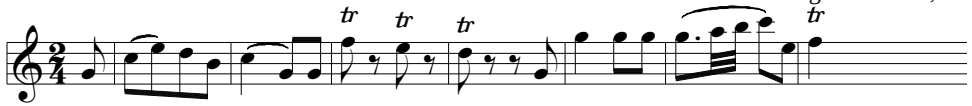
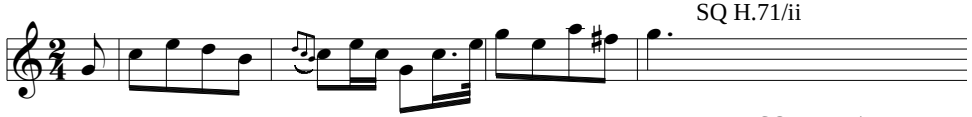


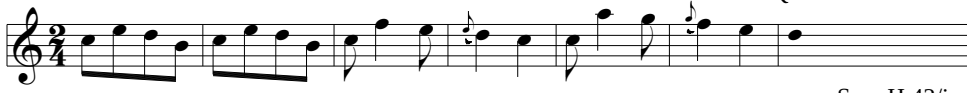
Fig K.492/#23, 61



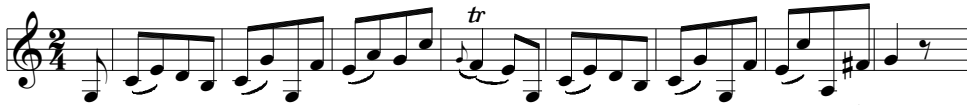
SQ H.71/ii



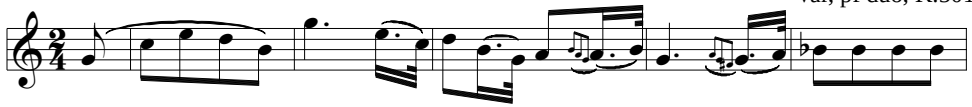
SQ K.157/iii

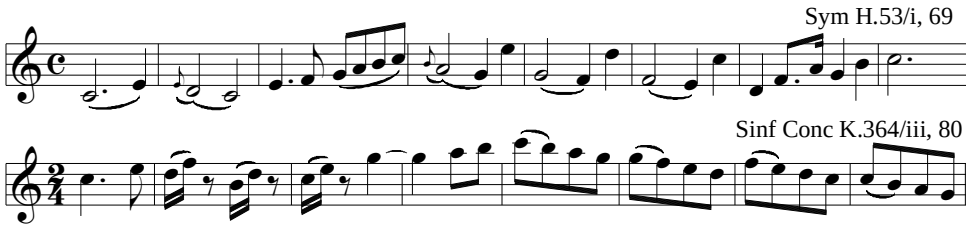


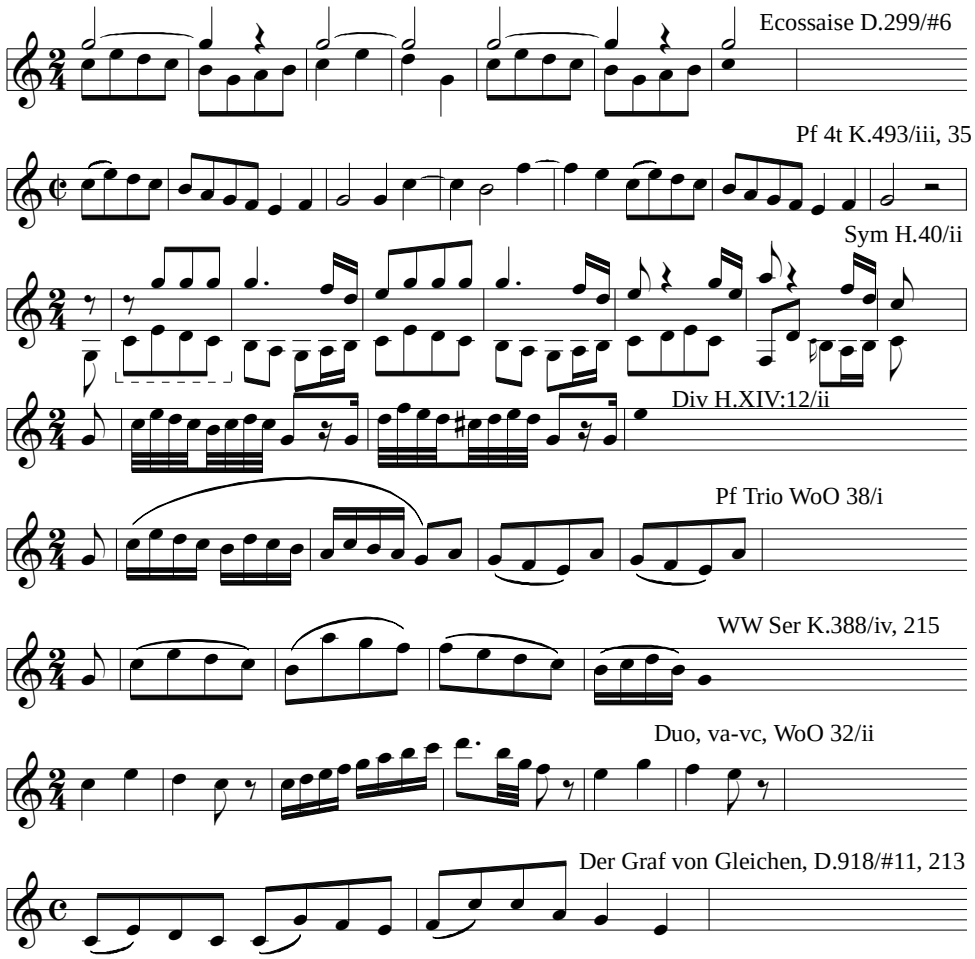
Sym H.42/iv

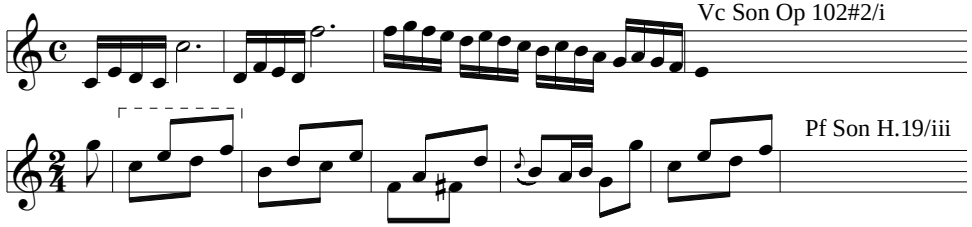


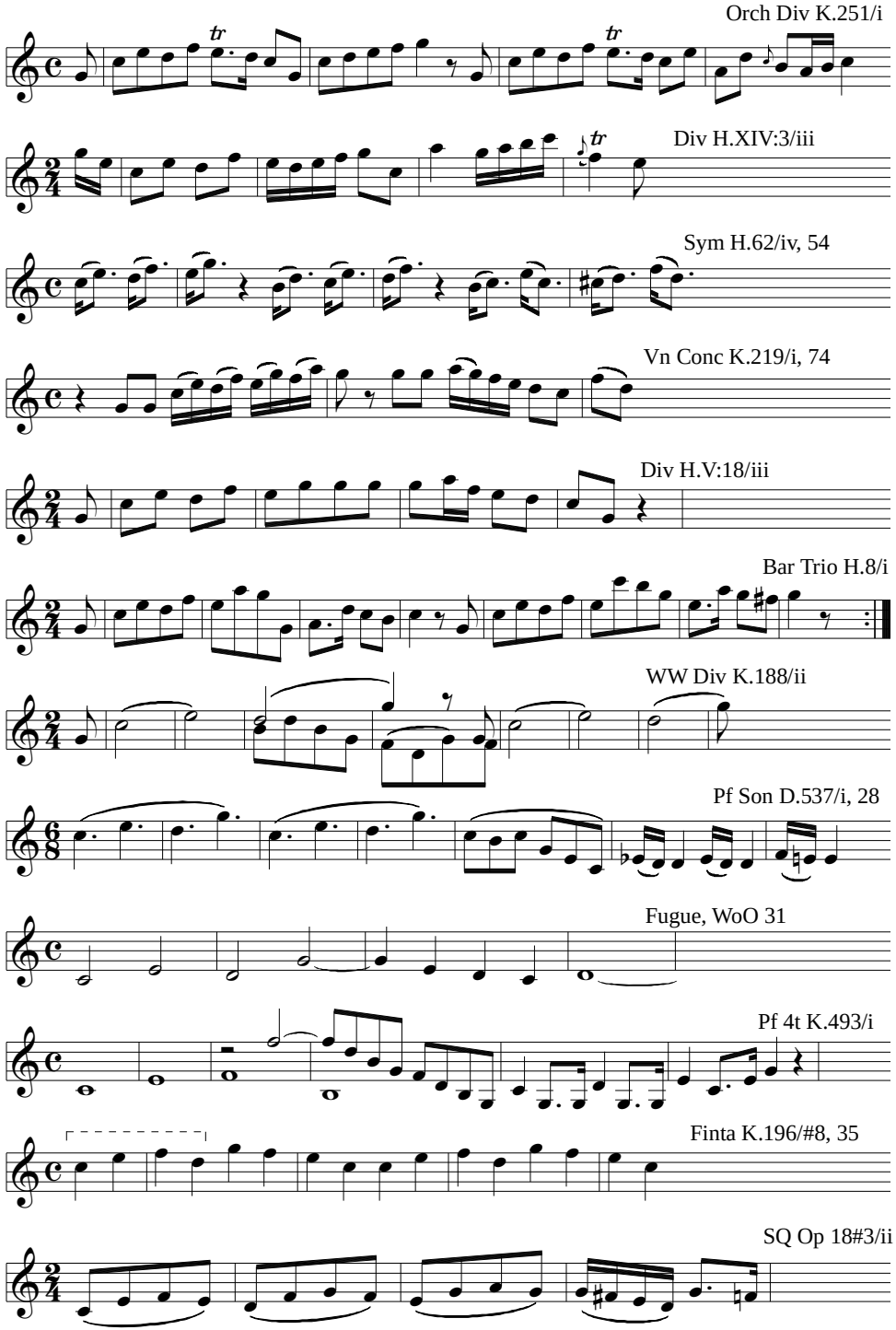
Var, pf duo, K.501

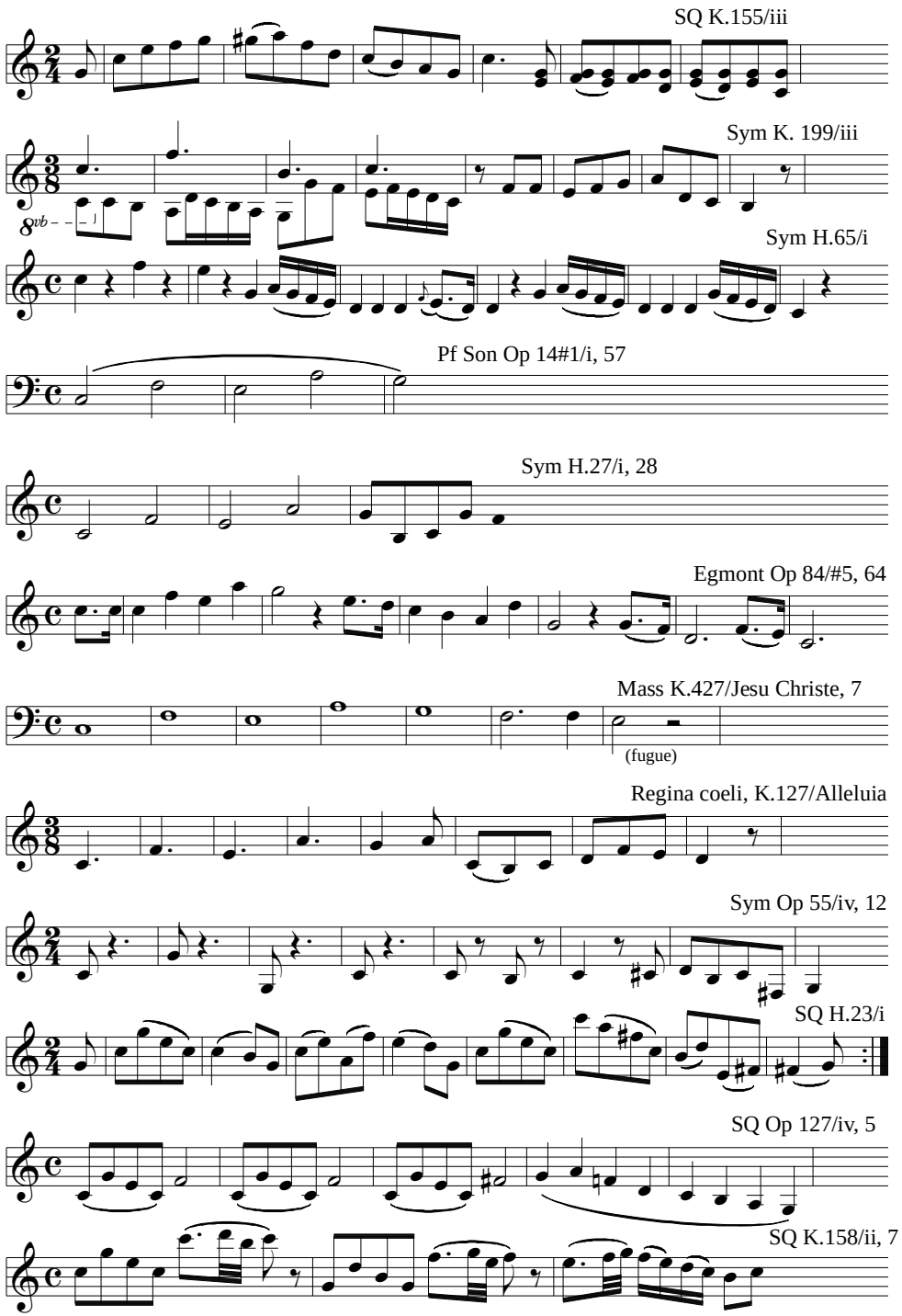


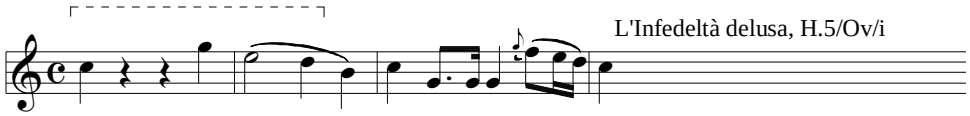

Sym H.53/i, 69
Sinf Conc K.364/iii, 80

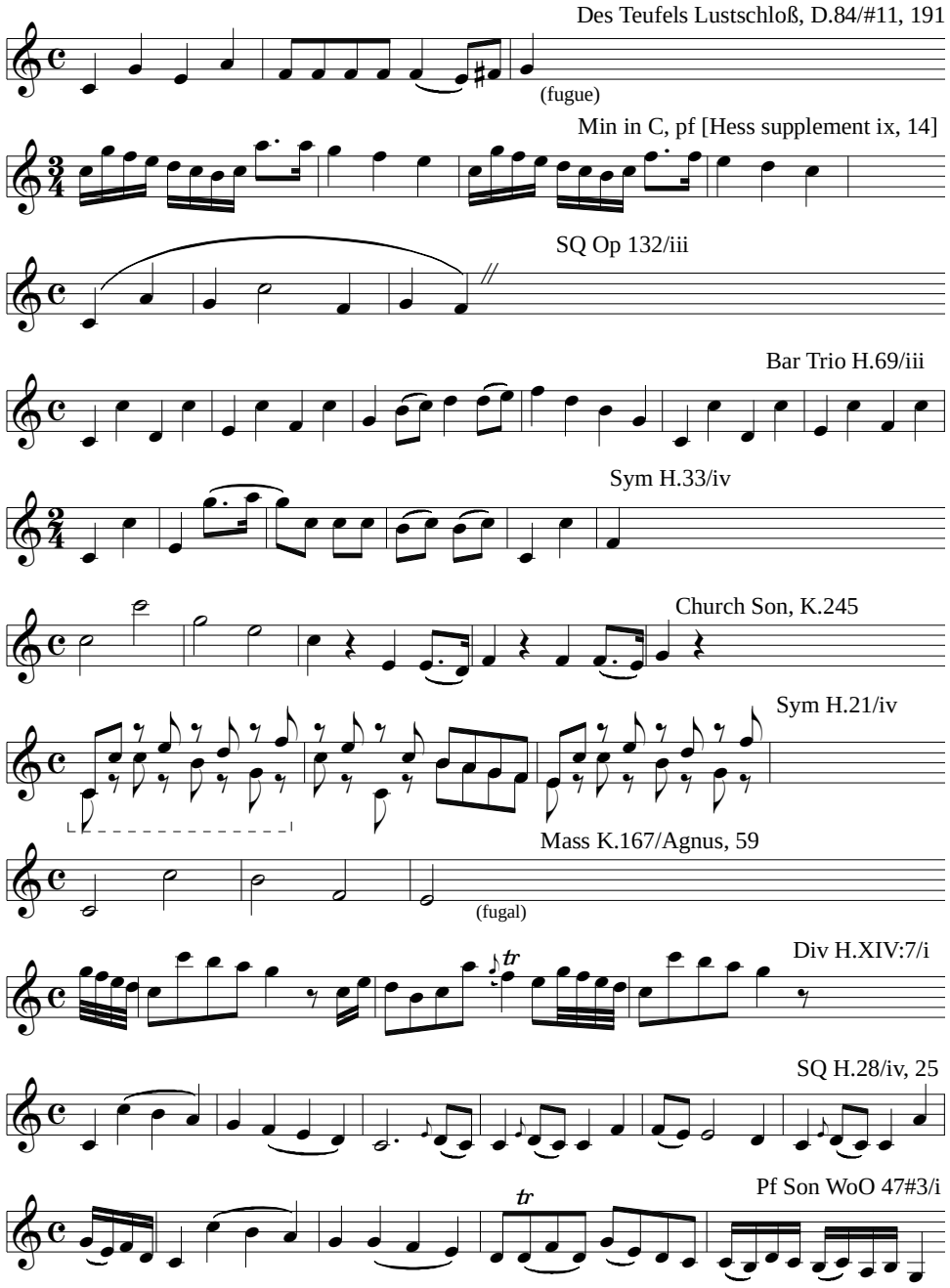

Ecossaise D.299/#6
Pf 4t K.493/iii, 35
Sym H.40/ii
Div H.XIV:12/ii
Pf Trio WoO 38/i
WW Ser K.388/iv, 215
Duo, va-vc, WoO 32/ii
Der Graf von Gleichen, D.918/#11, 213

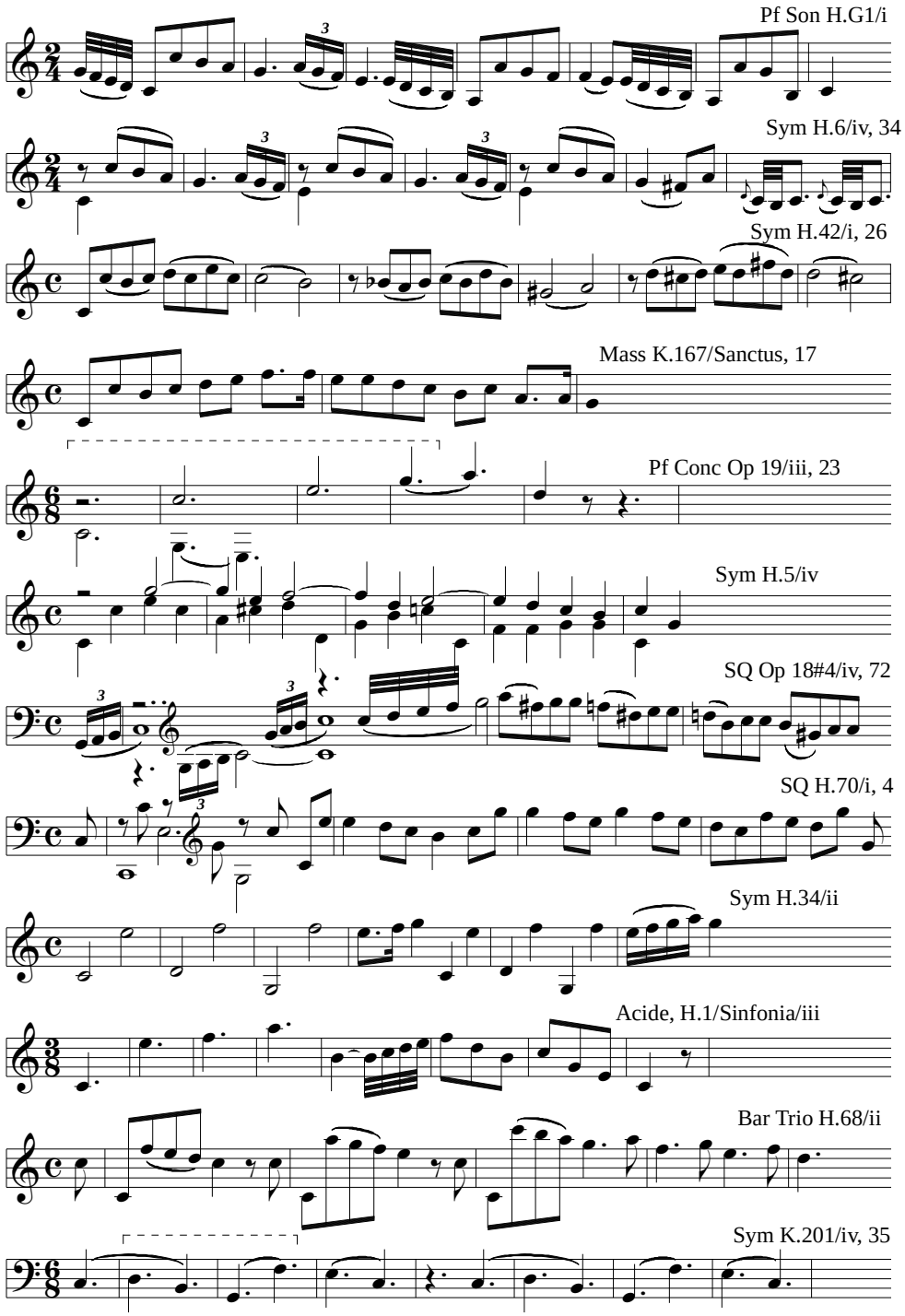

Vc Son Op 102#2/i
Pf Son H.19/iii


Orch Div K.251/i
Div H.XIV:3/iii
Sym H.62/iv, 54
Vn Conc K.219/i, 74
Div H.V:18/iii
Bar Trio H.8/i
WW Div K.188/ii
Pf Son D.537/i, 28
Fugue, WoO 31
Pf 4t K.493/i
Finta K.196/#8, 35
SQ Op 18#3/ii

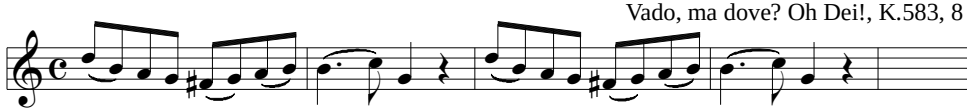

SQ K.155/iii
Sym K. 199/iii
8vb
Sym H.65/i
Pf Son Op 14#1/i, 57
Sym H.27/i, 28
Egmont Op 84/#5, 64
Mass K.427/Jesu Christe, 7
(fugue)
Regina coeli, K.127/Alleluia
Sym Op 55/iv, 12
SQ H.23/i
SQ Op 127/iv, 5
SQ K.158/ii, 7


L'Infedeltà delusa, H.5/Ov/i

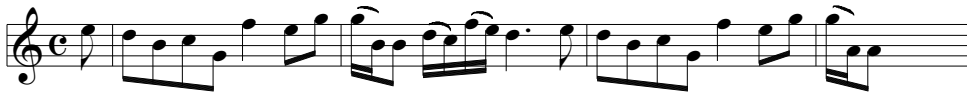

Des Teufels Lustschloß, D.84/#11, 191
(fugue)
Min in C, pf [Hess supplement ix, 14]
SQ Op 132/iii
Bar Trio H.69/iii
Sym H.33/iv
Church Son, K.245
Sym H.21/iv
Mass K.167/Agnus, 59
(fugal)
Div H.XIV:7/i
SQ H.28/iv, 25
Pf Son WoO 47#3/i


Pf Son H.G1/i
Sym H.6/iv, 34
Sym H.42/i, 26
Mass K.167/Sanctus, 17
Pf Conc Op 19/iii, 23
Sym H.5/iv
SQ Op 18#4/iv, 72
SQ H.70/i, 4
Sym H.34/ii
Acide, H.1/Sinfonia/iii
Bar Trio H.68/ii
Sym K.201/iv, 35

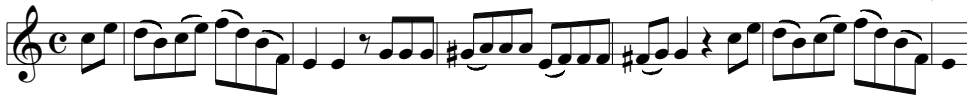
Vado, ma dove? Oh Dei!, K.583, 8



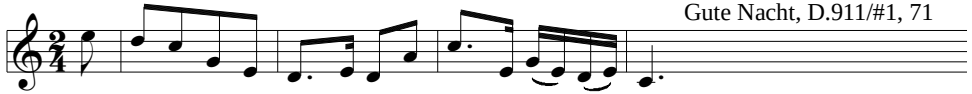
Alfonso und Estrella, D.732/#13, 20



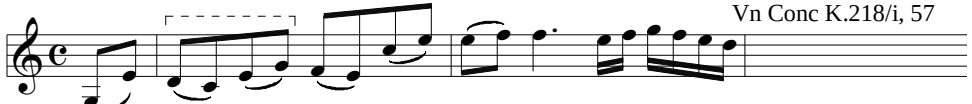
Il Re K.208/#9, 55



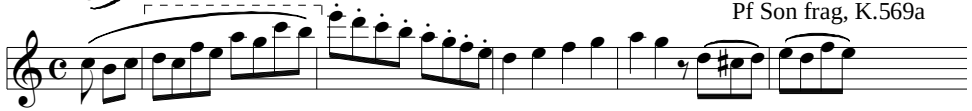
Gute Nacht, D.911/#1, 71



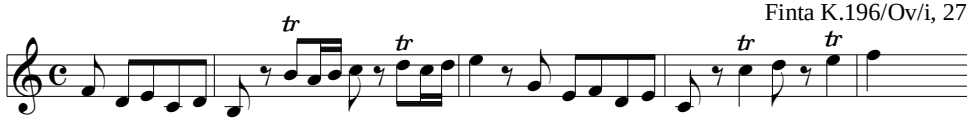
Vn Conc K.218/i, 57



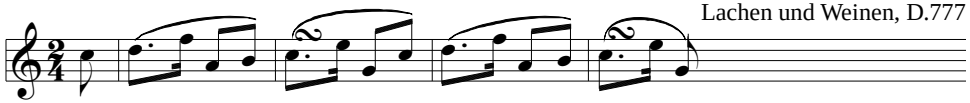
Pf Son frag, K.569a



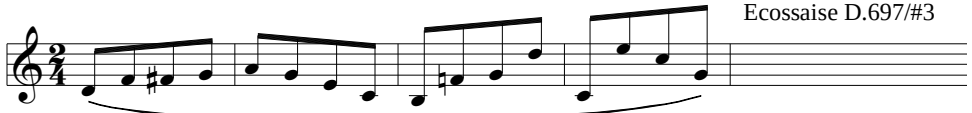
Finta K.196/Ov/i, 27



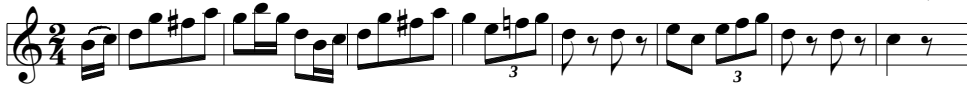
Lachen und Weinen, D.777



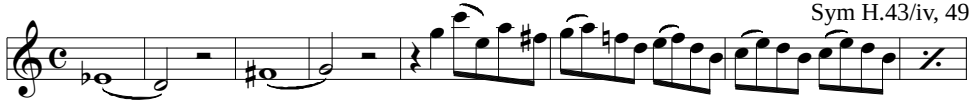
Ecossaise D.697/#3



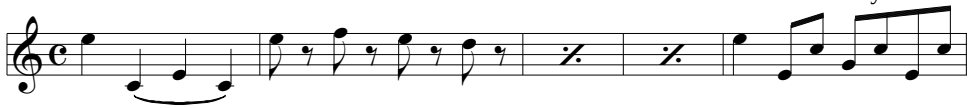
Contradance K.609/#5, 16

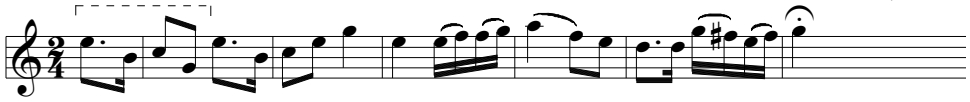


Sym H.43/iv, 49

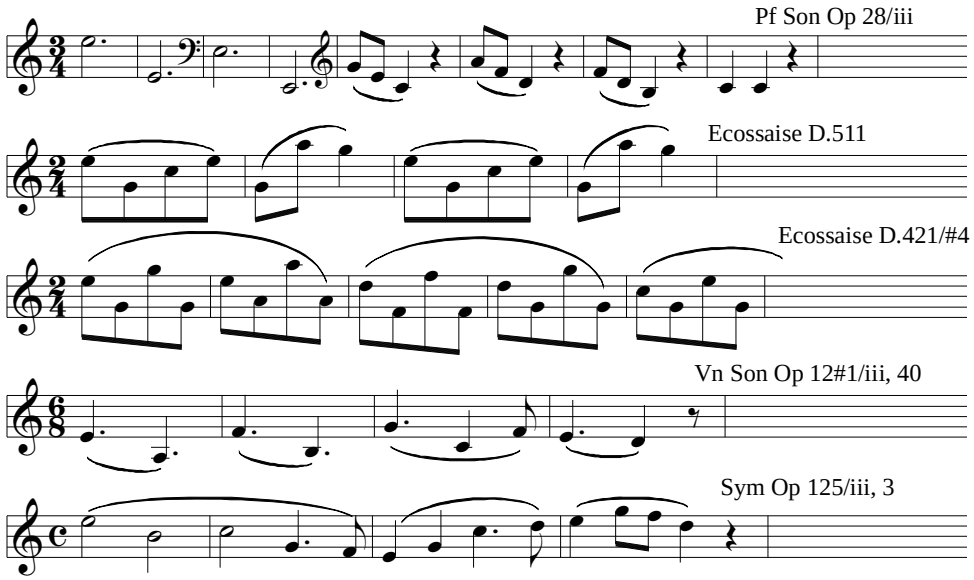


Sym H.10/i





Die Macht der Liebe, D.308



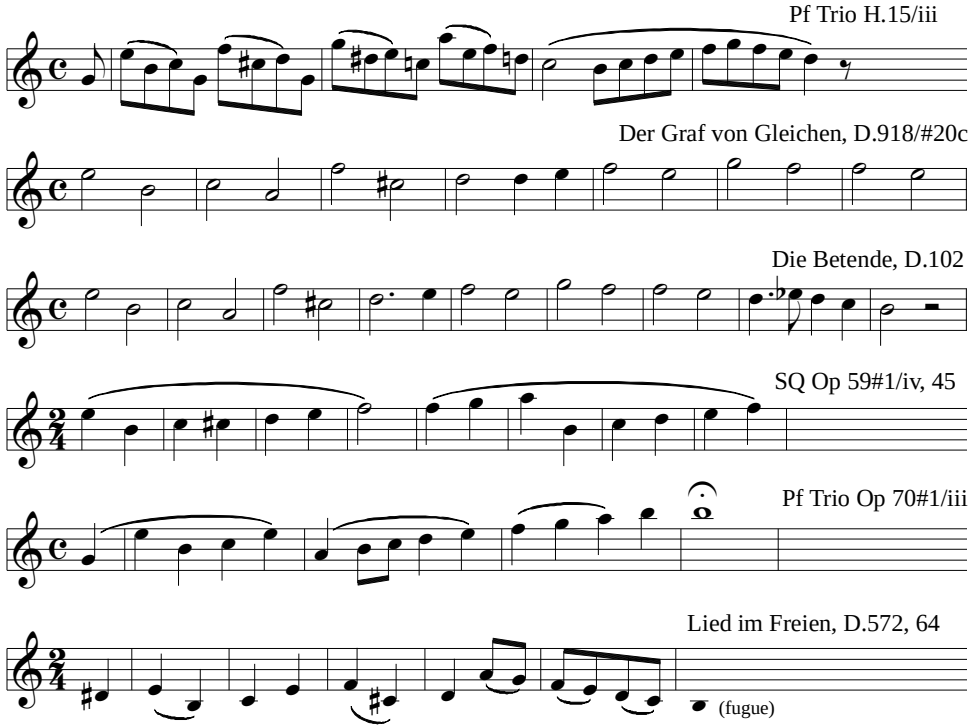
Pf Son Op 28/iii

Ecossaise D.511

Ecossaise D.421/#4

Vn Son Op 12#1/iii, 40

Sym Op 125/iii, 3



Pf Trio H.15/iii

Der Graf von Gleichen, D.918/#20c

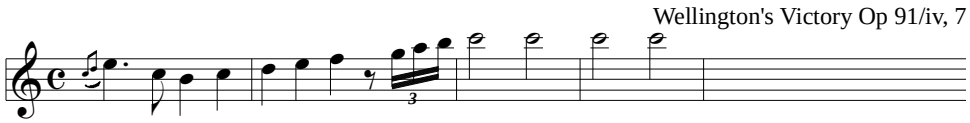
Die Betende, D.102

SQ Op 59#1/iv, 45

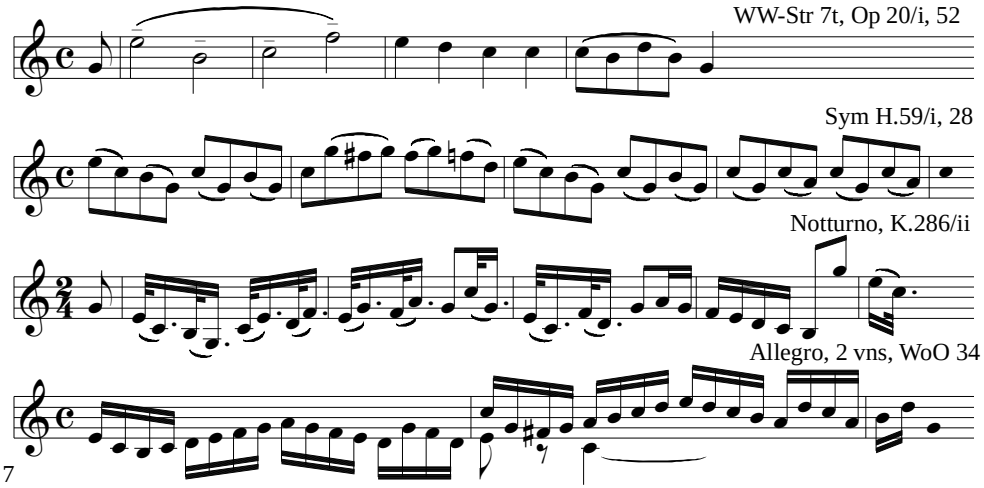
Pf Trio Op 70#1/iii

Lied im Freien, D.572, 64

(fugue)



Wellington's Victory Op 91/iv, 7

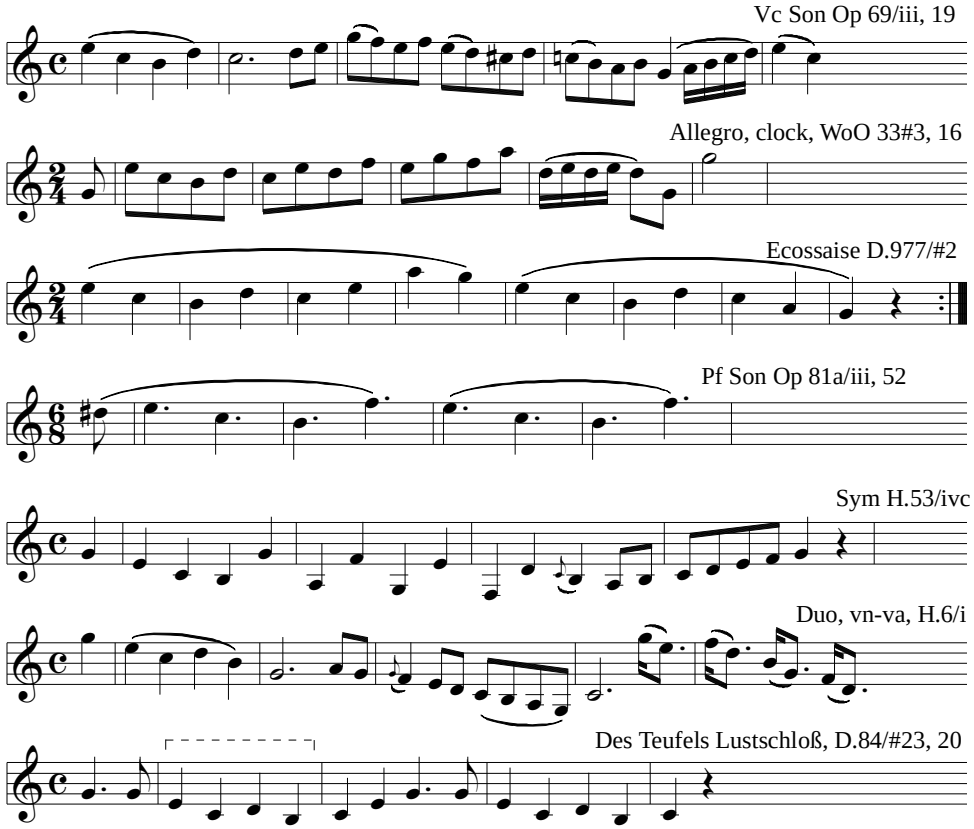


WW-Str 7t, Op 20/i, 52

Sym H.59/i, 28

Notturno, K.286/ii

Allegro, 2 vns, WoO 34



Vc Son Op 69/iii, 19

Allegro, clock, WoO 33#3, 16

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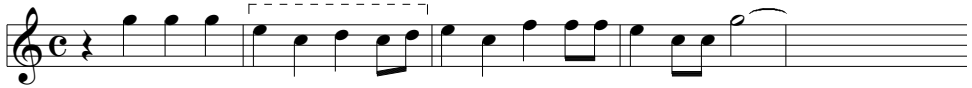
Pf Son Op 81a/iii, 52

Sym H.53/ivc

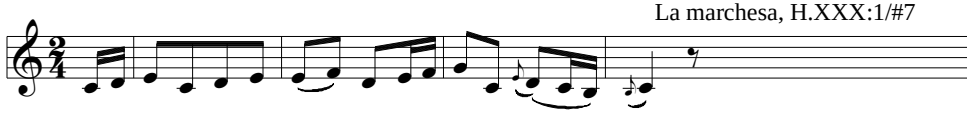
Duo, vn-va, H.6/i

Des Teufels Lustschloß, D.84/#23, 20

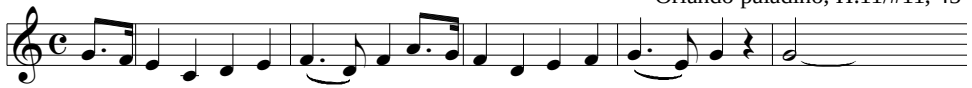
Mass K.262/Credo, 109



La marchesa, H.XXX:1/#7

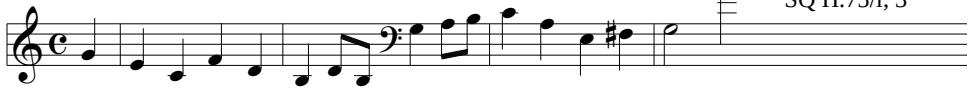


Orlando paladino, H.11/#11, 45

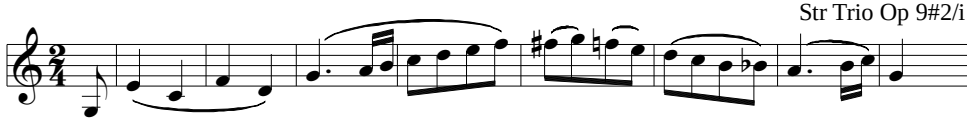


Vn Son Op 96/ii

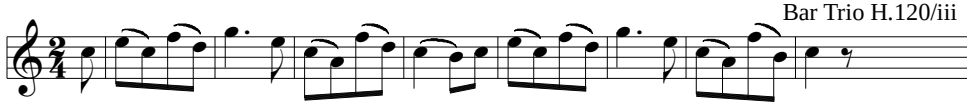
SQ H.75/i, 3



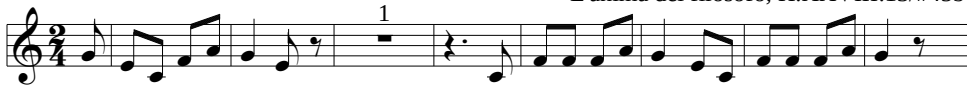
Str Trio Op 9#2/i



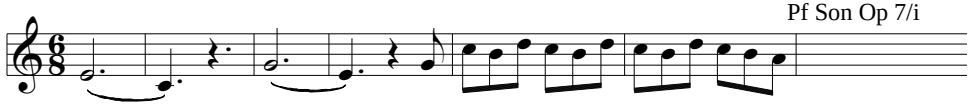
Bar Trio H.120/iii



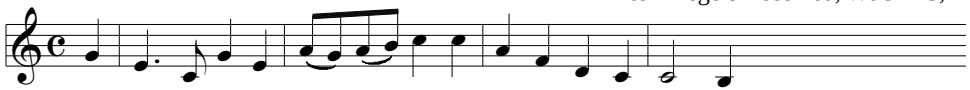
L'anima del filosofo, H.XXVIII:13/#45b



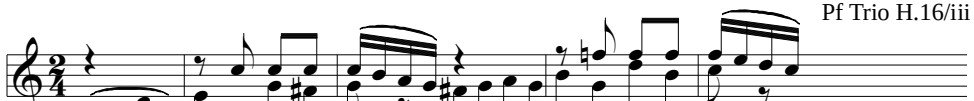
Pf Son Op 7/i



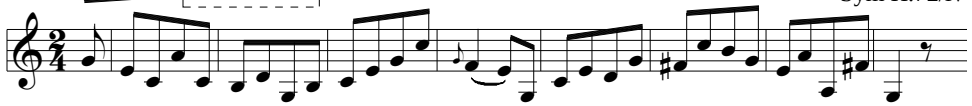
Des Kriegers Abschied, WoO 143, 2

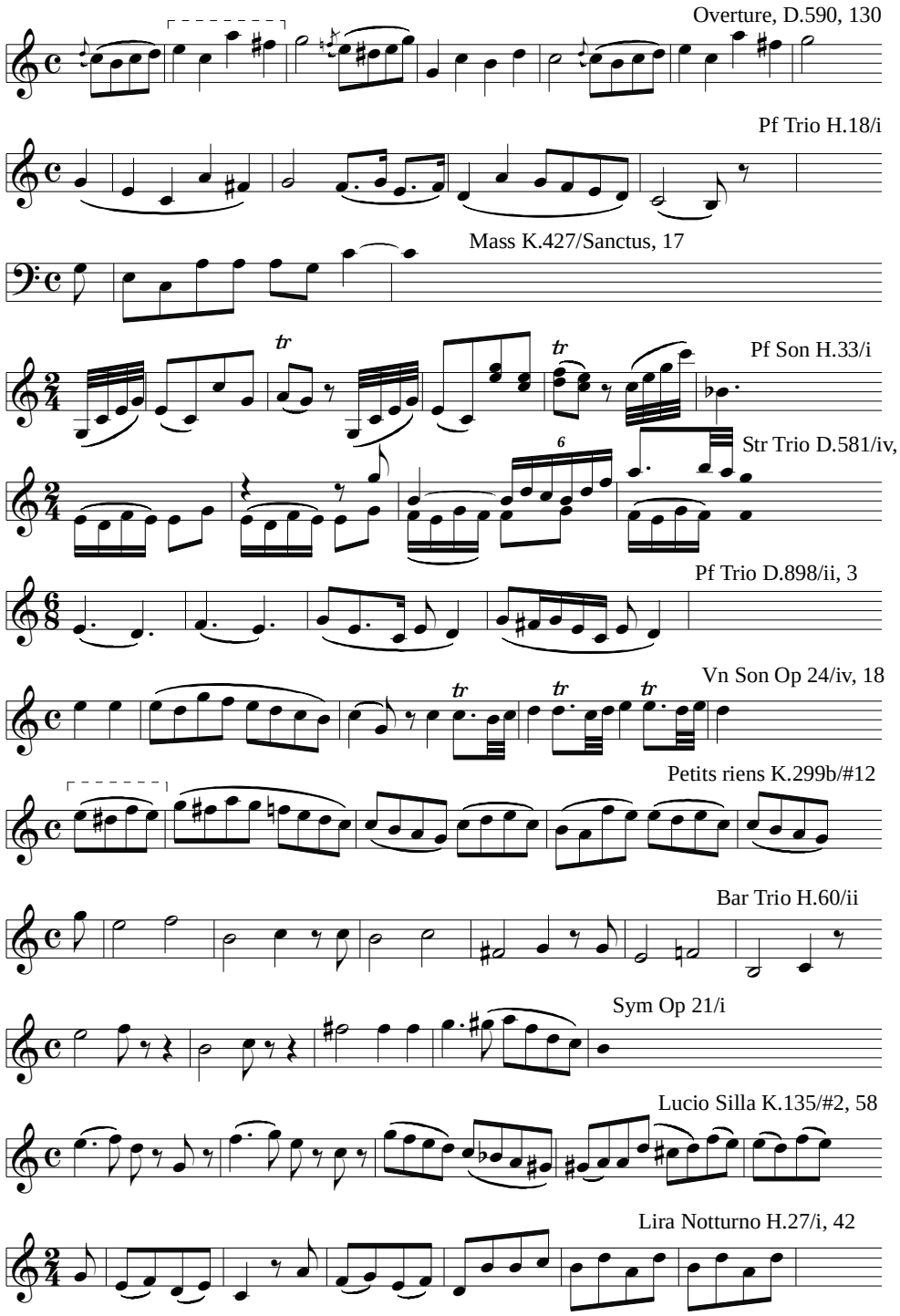


Pf Trio H.16/iii



Sym H.72/iv

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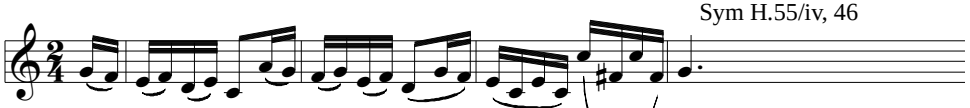
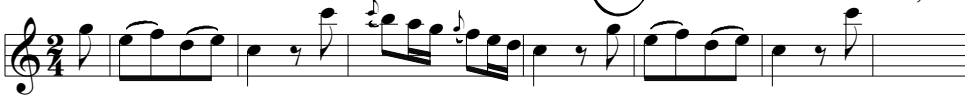
Bar Trio H.60/ii
Sym Op 21/i
Lucio Silla K.135/#2, 58
Lira Notturno H.27/i, 42

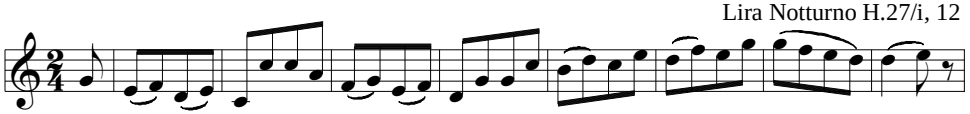
Sym H.55/iv, 46



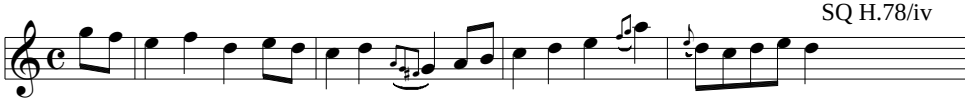
2-Lira Conc H.26/i, 12



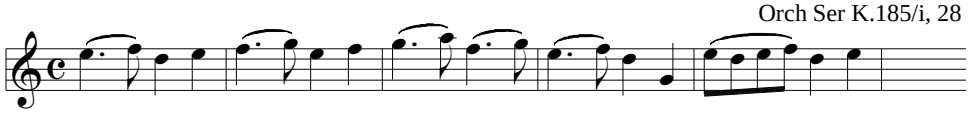
Lira Notturno H.27/i, 12



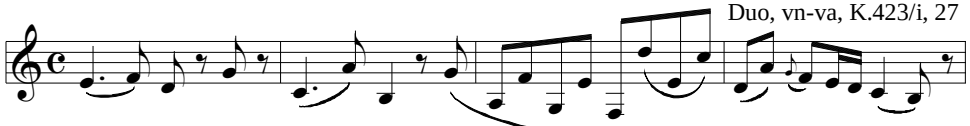
SQ H.78/iv



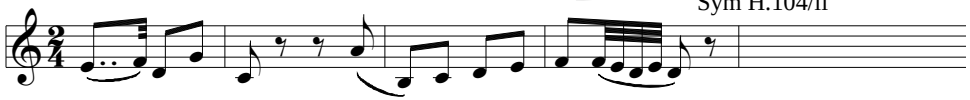
Orch Ser K.185/i, 28



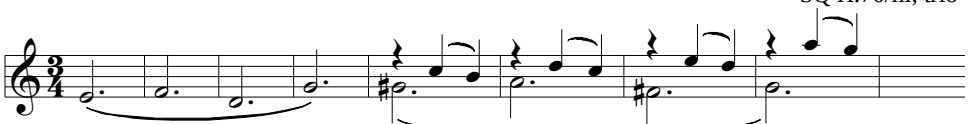
Duo, vn-va, K.423/i, 27



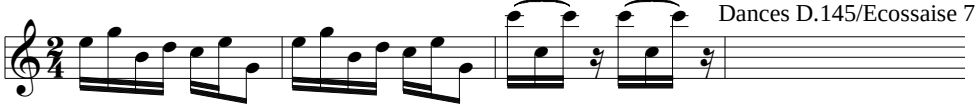
Sym H.104/ii



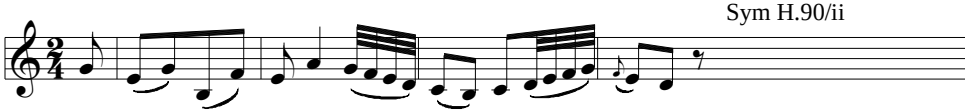
SQ H.70/iii, trio



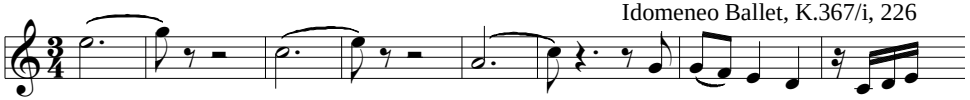
Dances D.145/Ecossaise 7



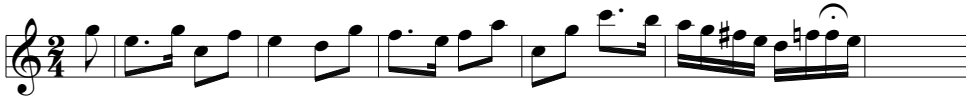
Sym H.90/ii



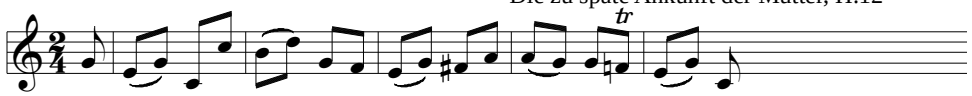
Idomeneo Ballet, K.367/i, 226



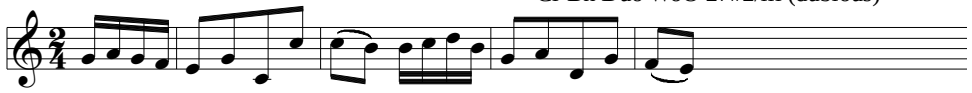
Abendständchen, D.265, 8



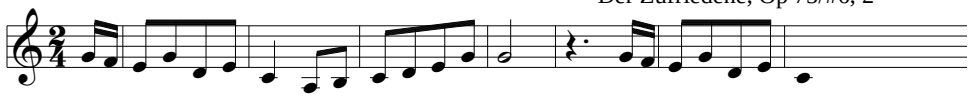
Die zu späte Ankunft der Mutter, H.12



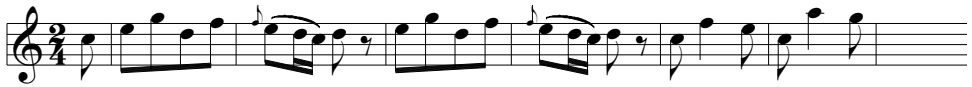
Cl-Bn Duo WoO 27#2/iii (dubious)



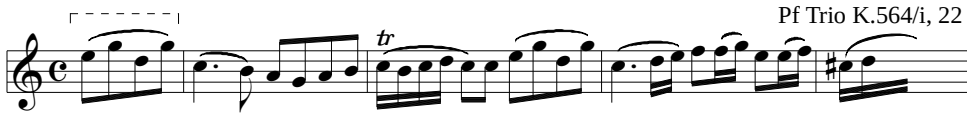
Der Zufriedene, Op 75/#6, 2



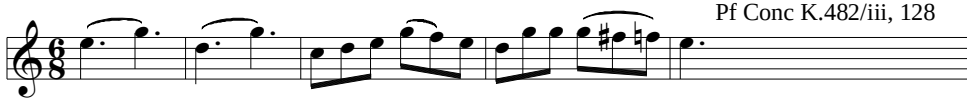
Bar Trio H.38/i



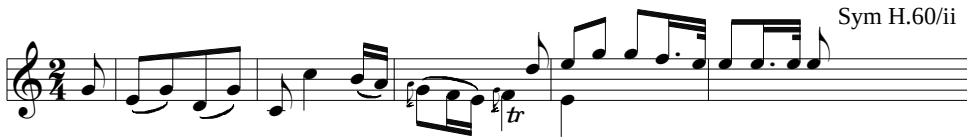
Pf Trio K.564/i, 22



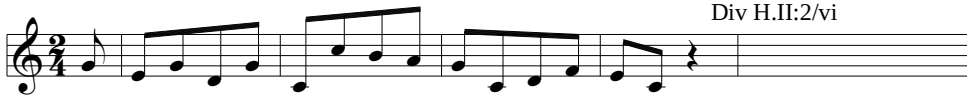
Pf Conc K.482/iii, 128



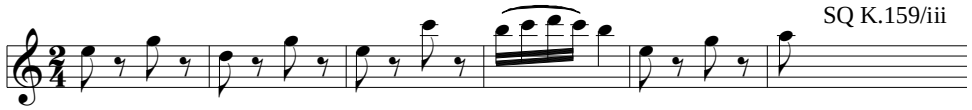
Sym H.60/ii



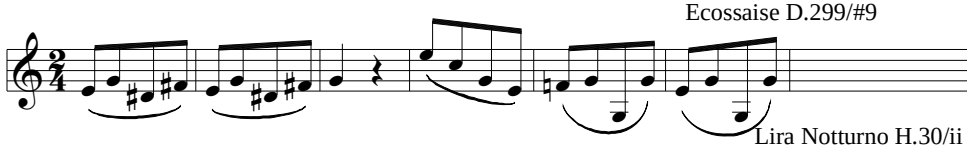
Div H.II:2/vi



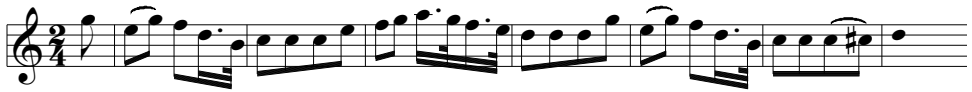
SQ K.159/iii



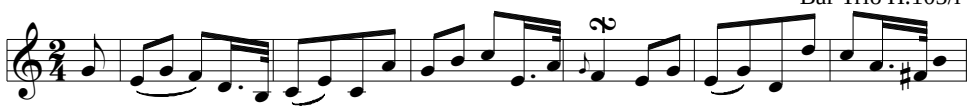
Ecossaise D.299/#9

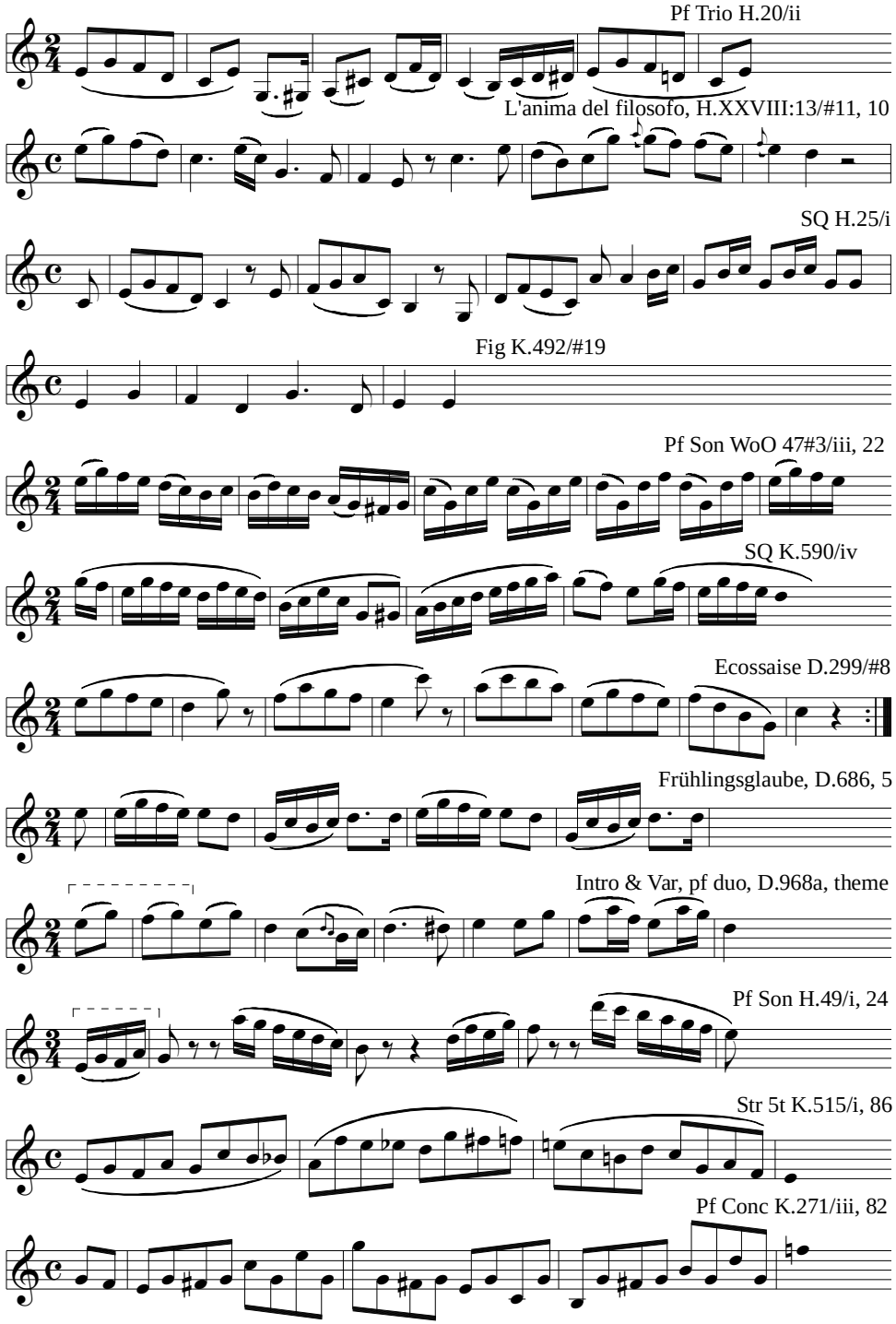


Lira Notturno H.30/ii



Bar Trio H.105/i




Pf Trio H.20/ii
L'anima del filosofo, H.XXVIII:13/#11, 10
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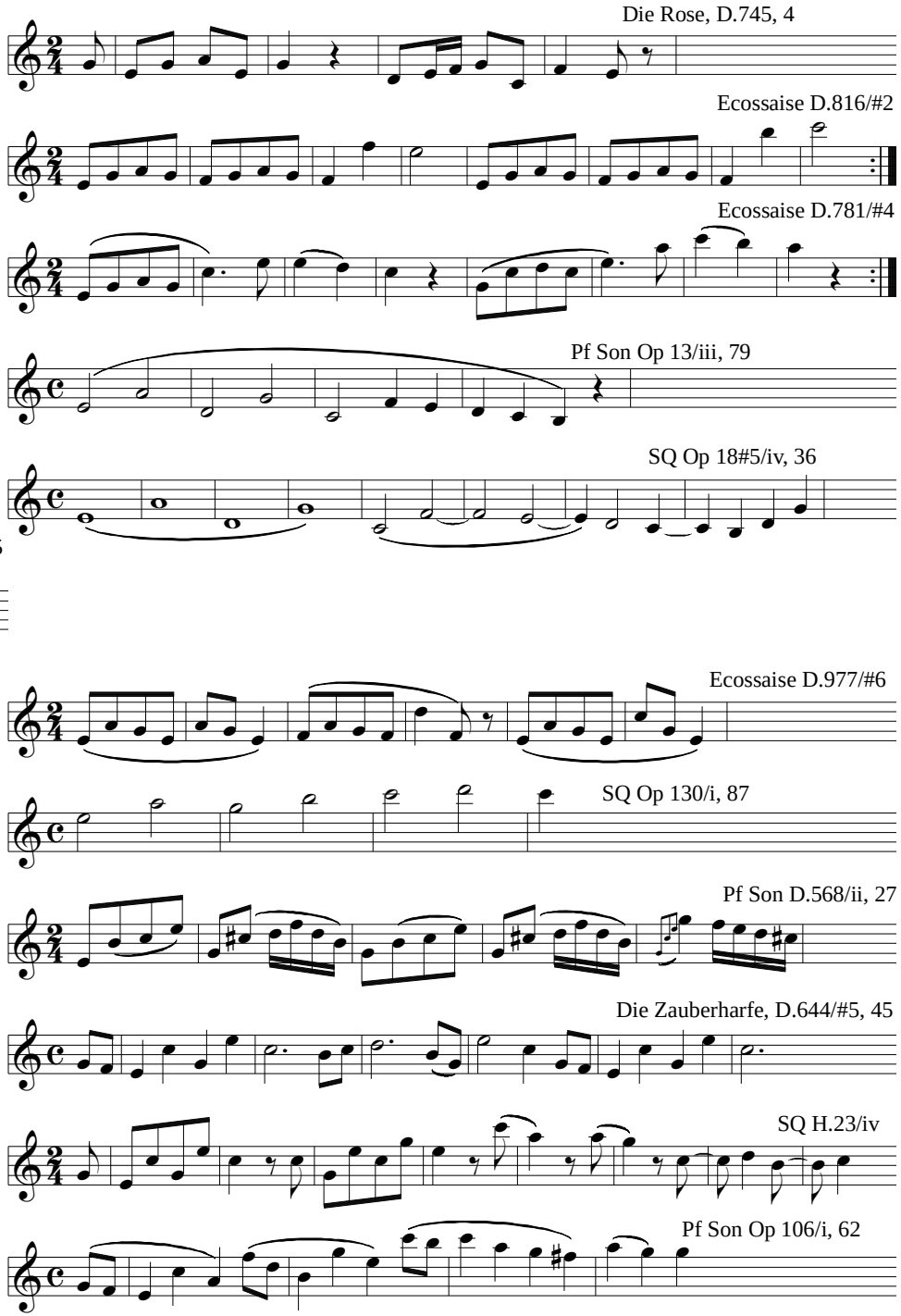
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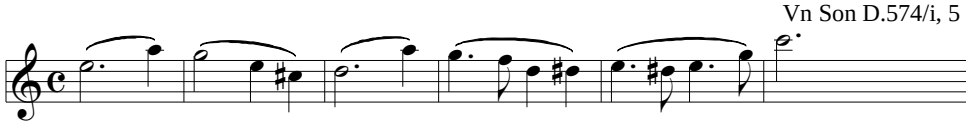
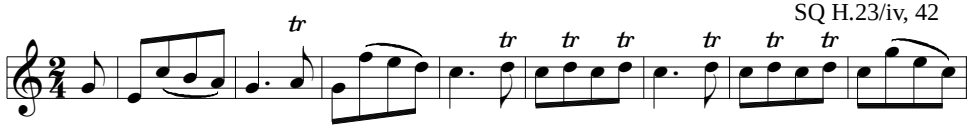
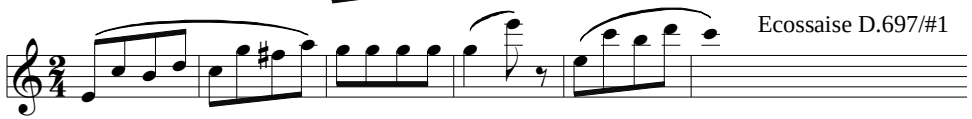

Vn Son D.574/i, 5

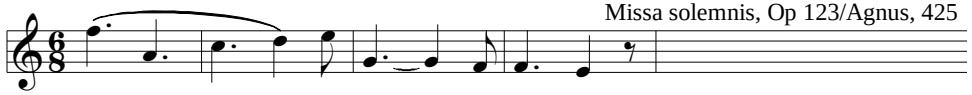
SQ H.23/iv, 42



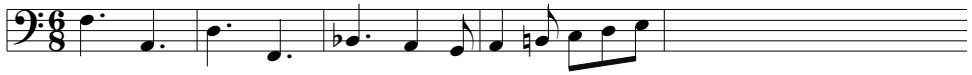
Ecossaise D.697/#1



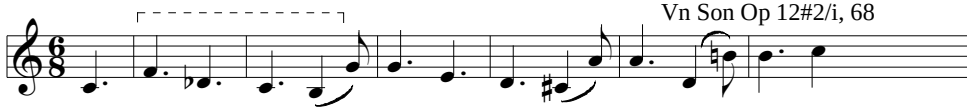
Missa solemnis, Op 123/Agnus, 425



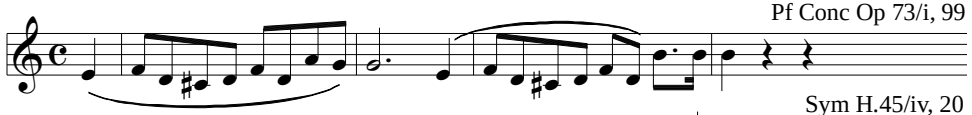
Missa solemnis, Op 123/Agnus, 216



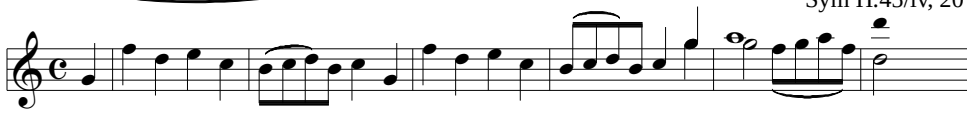
Vn Son Op 12#2/i, 68



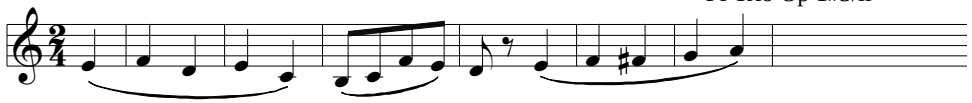
Pf Conc Op 73/i, 99



Sym H.45/iv, 20

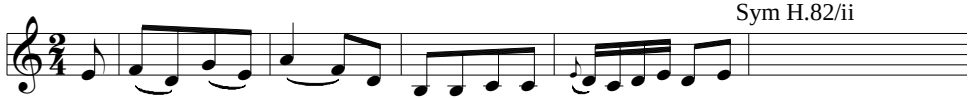


Pf Trio Op 1#3/ii

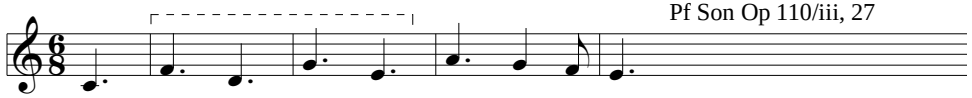


Pf Son H.42/ii

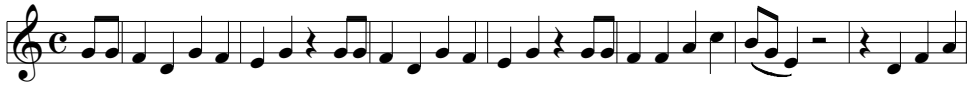
Sym H.82/ii



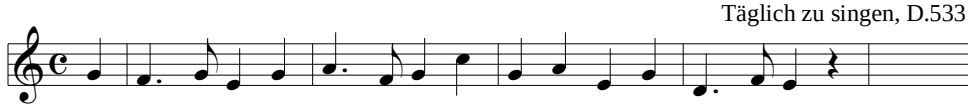
Pf Son Op 110/iii, 27



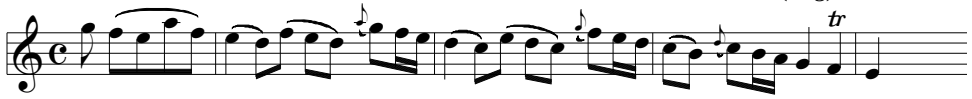
Finta K.196/#25, 21



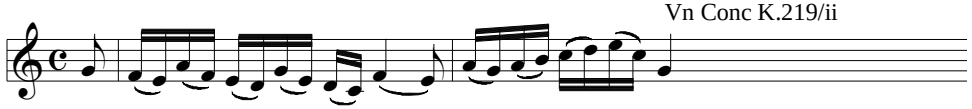
Täglich zu singen, D.533



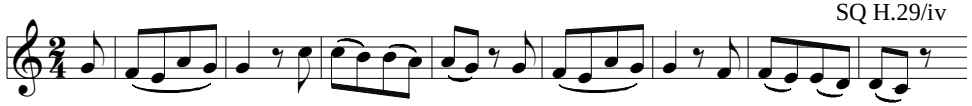
Sinf Conc, vn, va, vc (frag), K.320e, 127



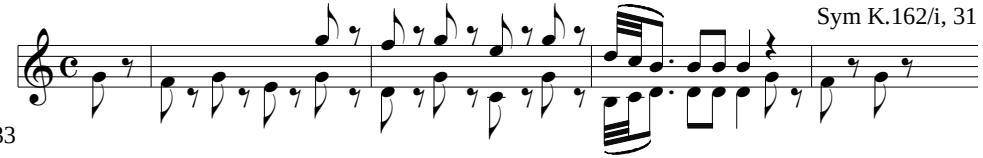
Vn Conc K.219/ii



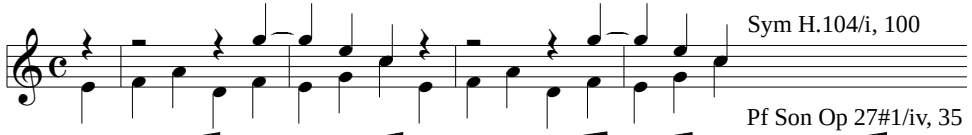
SQ H.29/iv



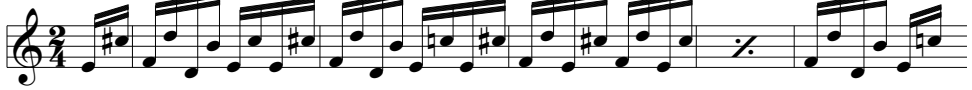
Sym K.162/i, 31



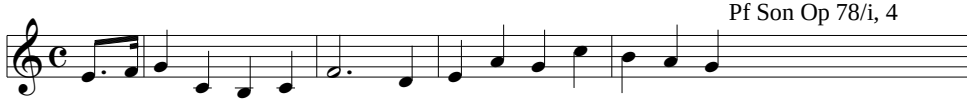
Sym H.104/i, 100



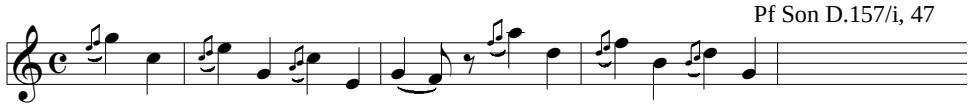
Pf Son Op 27#1/iv, 35



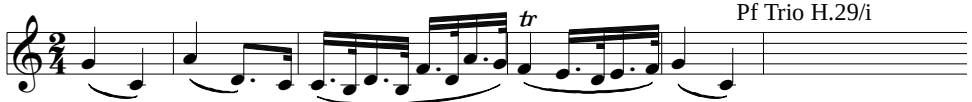
Pf Son Op 78/i, 4



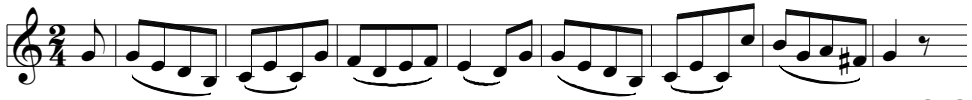
Pf Son D.157/i, 47



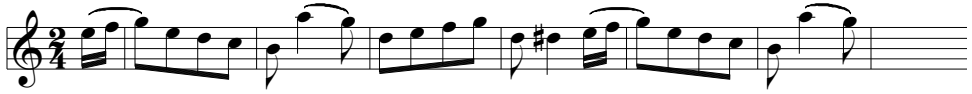
Pf Trio H.29/i



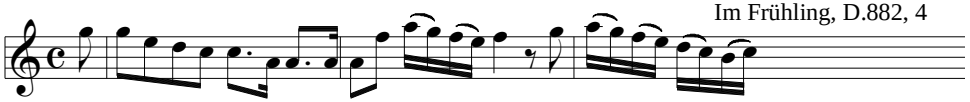
Bar Octet H.4/i



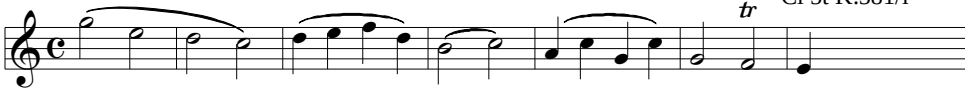
Ecossaise WoO 23



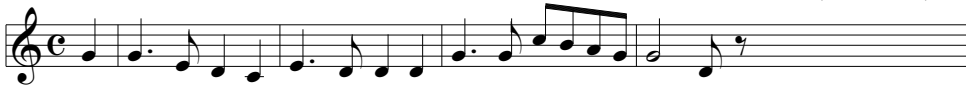
Im Frühling, D.882, 4



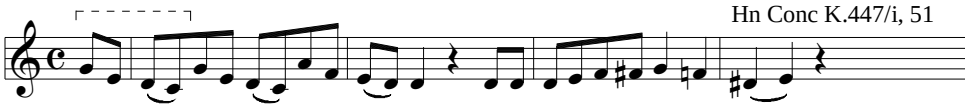
Cl 5t K.581/i



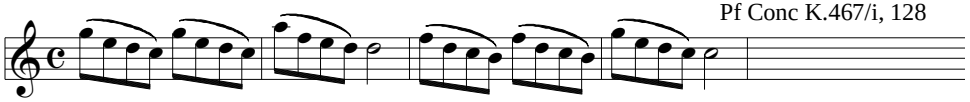
Des Teufels Lustschloß, D.84/#18, 71



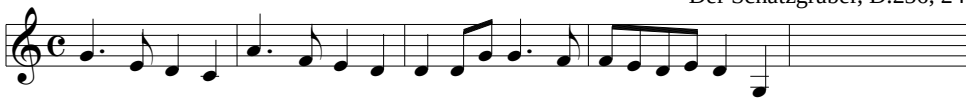
Hn Conc K.447/i, 51



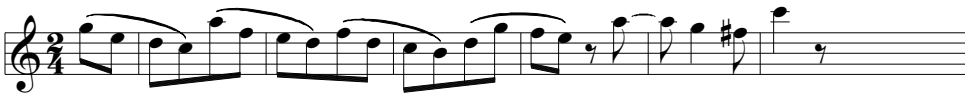
Pf Conc K.467/i, 128



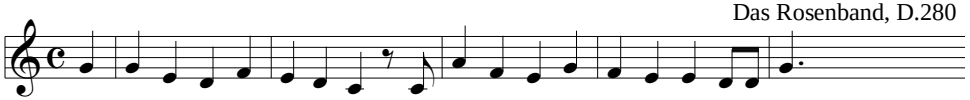
Der Schatzgräber, D.256, 24



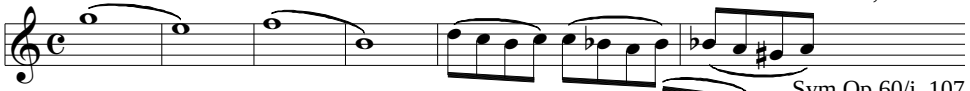
WW Div K.439b#2/v



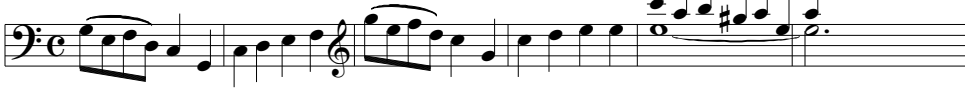
Das Rosenband, D.280



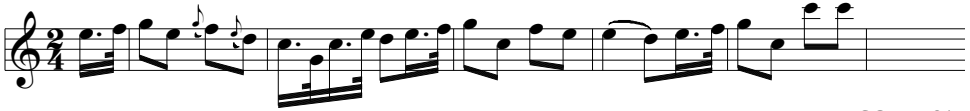
L'infedeltà delusa, H.5/#22



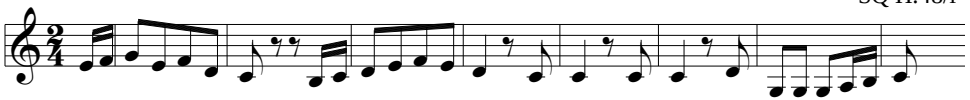
Sym Op 60/i, 107



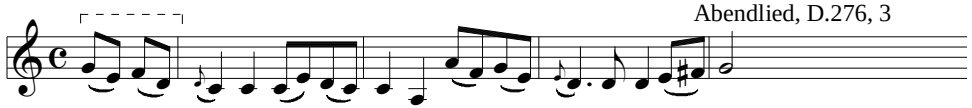
Bar Trio H.12/i



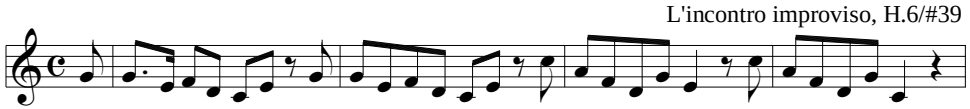
SQ H.48/i



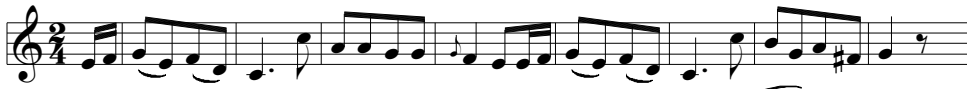
Abendlied, D.276, 3



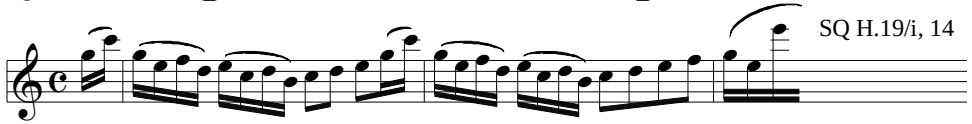
L'incontro improviso, H.6/#39



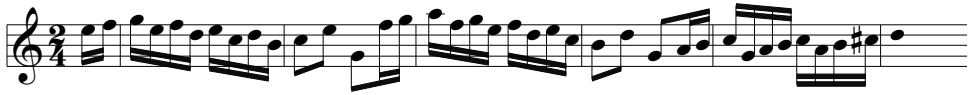
Bar Octet H.12/iii



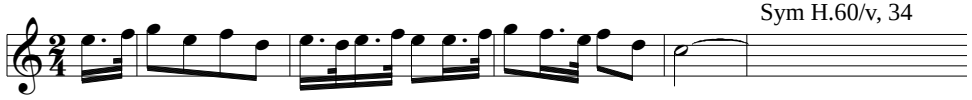
SQ H.19/i, 14



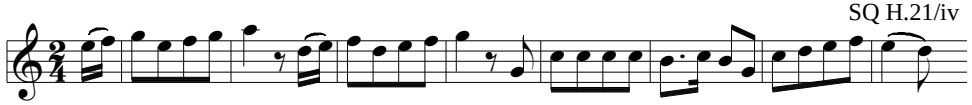
Pf Trio H.25/iii



Sym H.60/v, 34

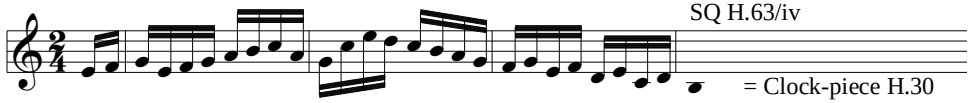


SQ H.21/iv



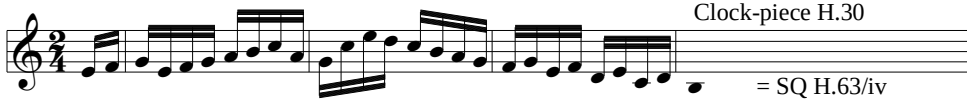
Cantata Op 136/iv, 29

SQ H.63/iv



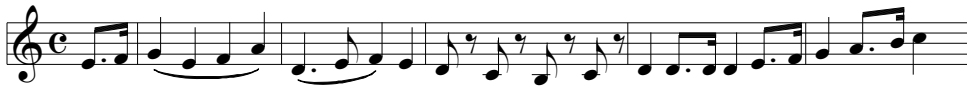
= Clock-piece H.30

Clock-piece H.30

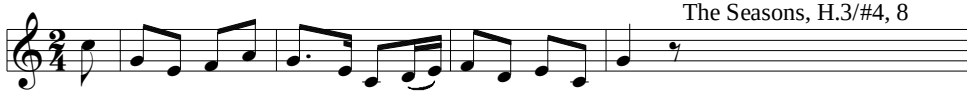


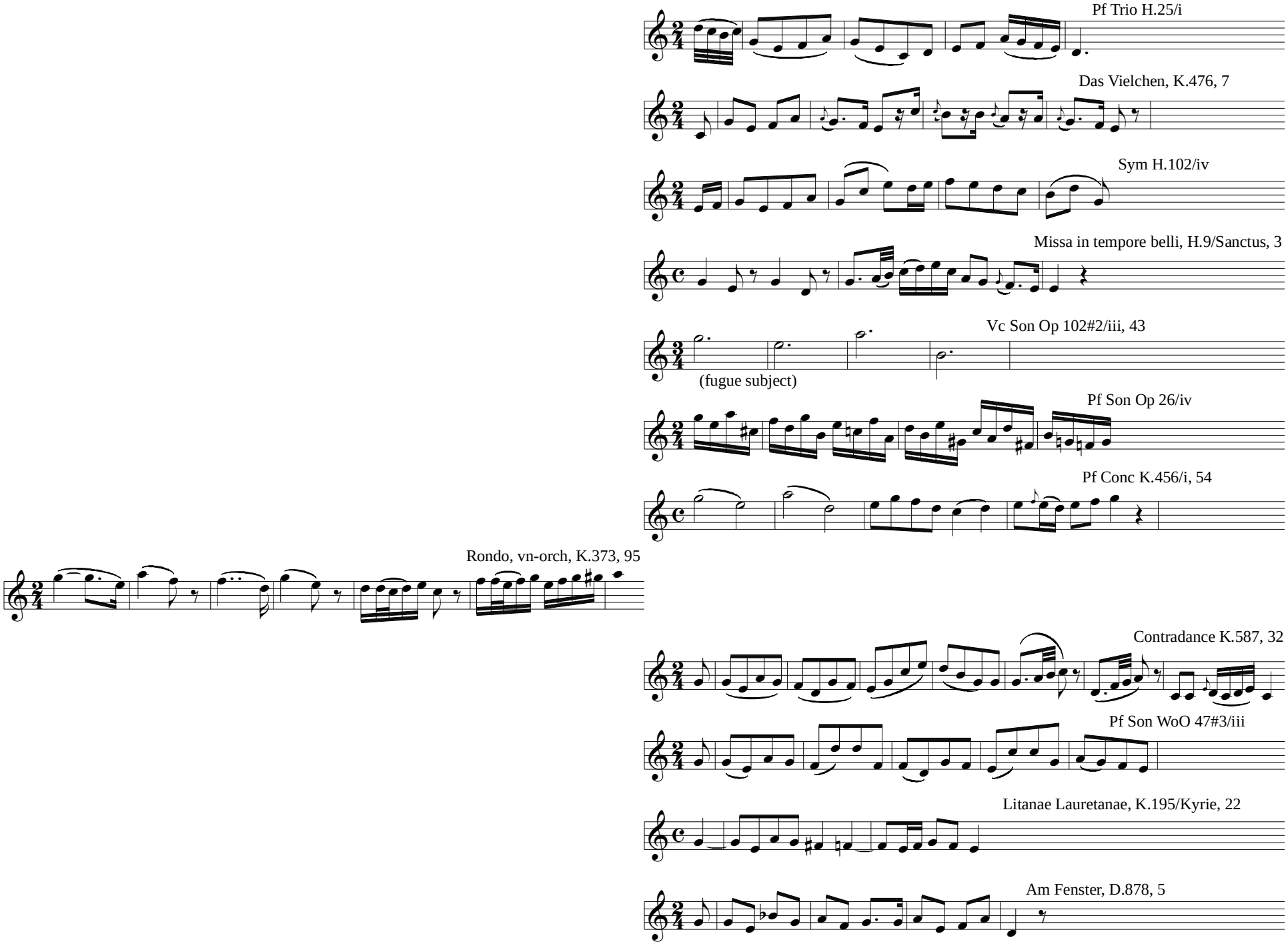
= SQ H.63/iv

2-Lira Notturno H.25/i



The Seasons, H.3/#4, 8




Pf Trio H.25/i
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Sym H.102/iv
Missa in tempore belli, H.9/Sanctus, 3
Vc Son Op 102#2/iii, 43
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Pf Son Op 26/iv
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Contradance K.587, 32
Pf Son WoO 47#3/iii
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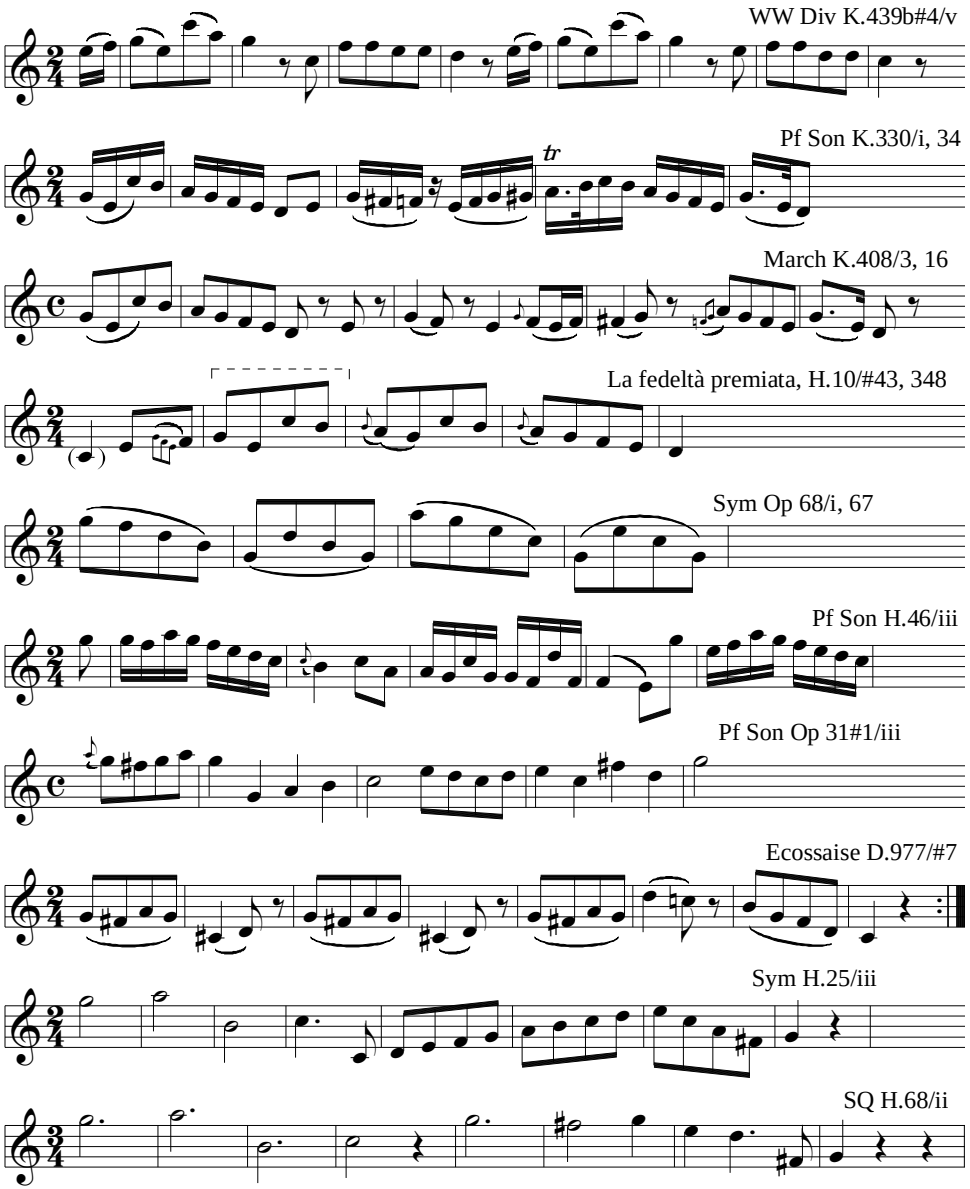
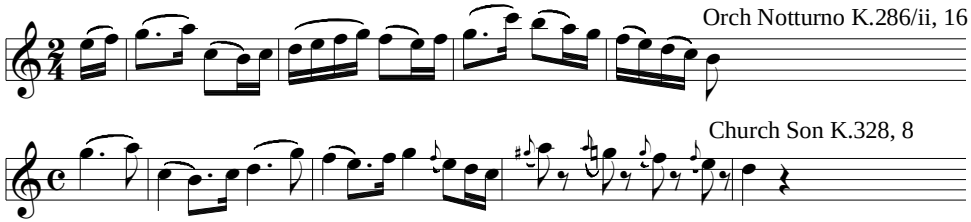
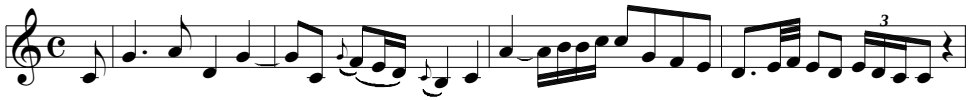
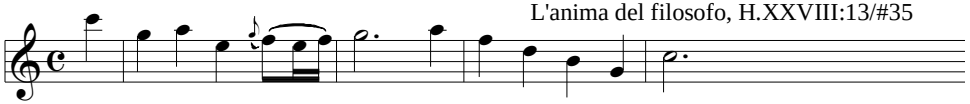

WW Div K.439b#4/v
Pf Son K.330/i, 34
March K.408/3, 16
La fedeltà premiata, H.10/#43, 348
Sym Op 68/i, 67
Pf Son H.46/iii
Pf Son Op 31#1/iii
Ecossaise D.977/#7
Sym H.25/iii
SQ H.68/ii


Orch Notturno K.286/ii, 16
Church Son K.328, 8

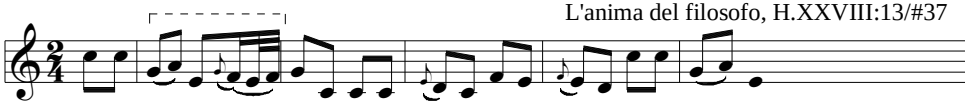
Bar Trio H.80/i



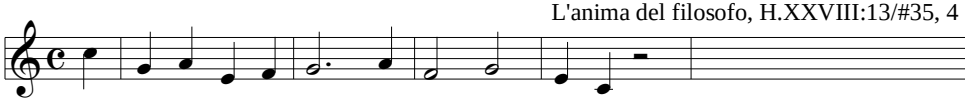
L'anima del filosofo, H.XXVIII:13/#35



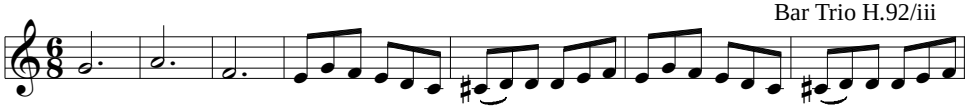
L'anima del filosofo, H.XXVIII:13/#37



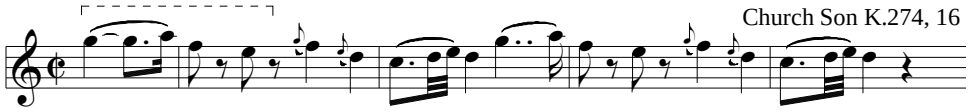
L'anima del filosofo, H.XXVIII:13/#35, 4



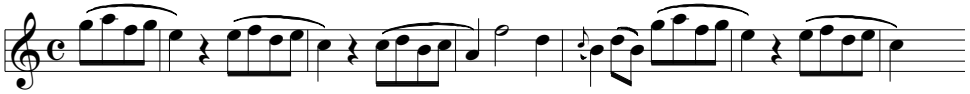
Bar Trio H.92/iii



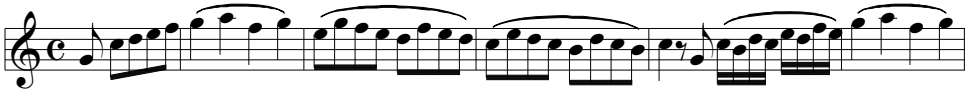
Church Son K.274, 16



Pf Conc K.238/iii



Vn-Pf Conc K.315f, 62



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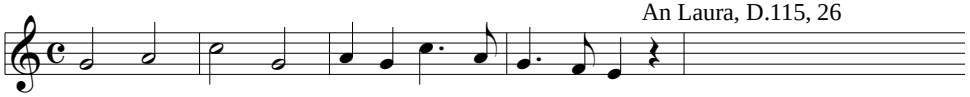
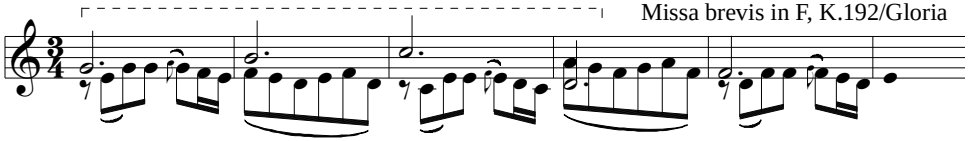
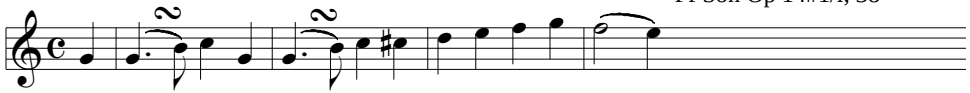


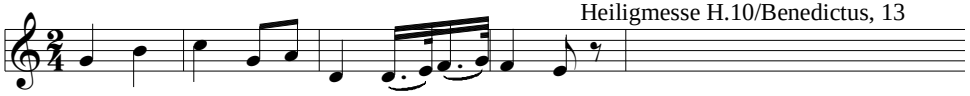
Missa brevis in F, K.192/Gloria

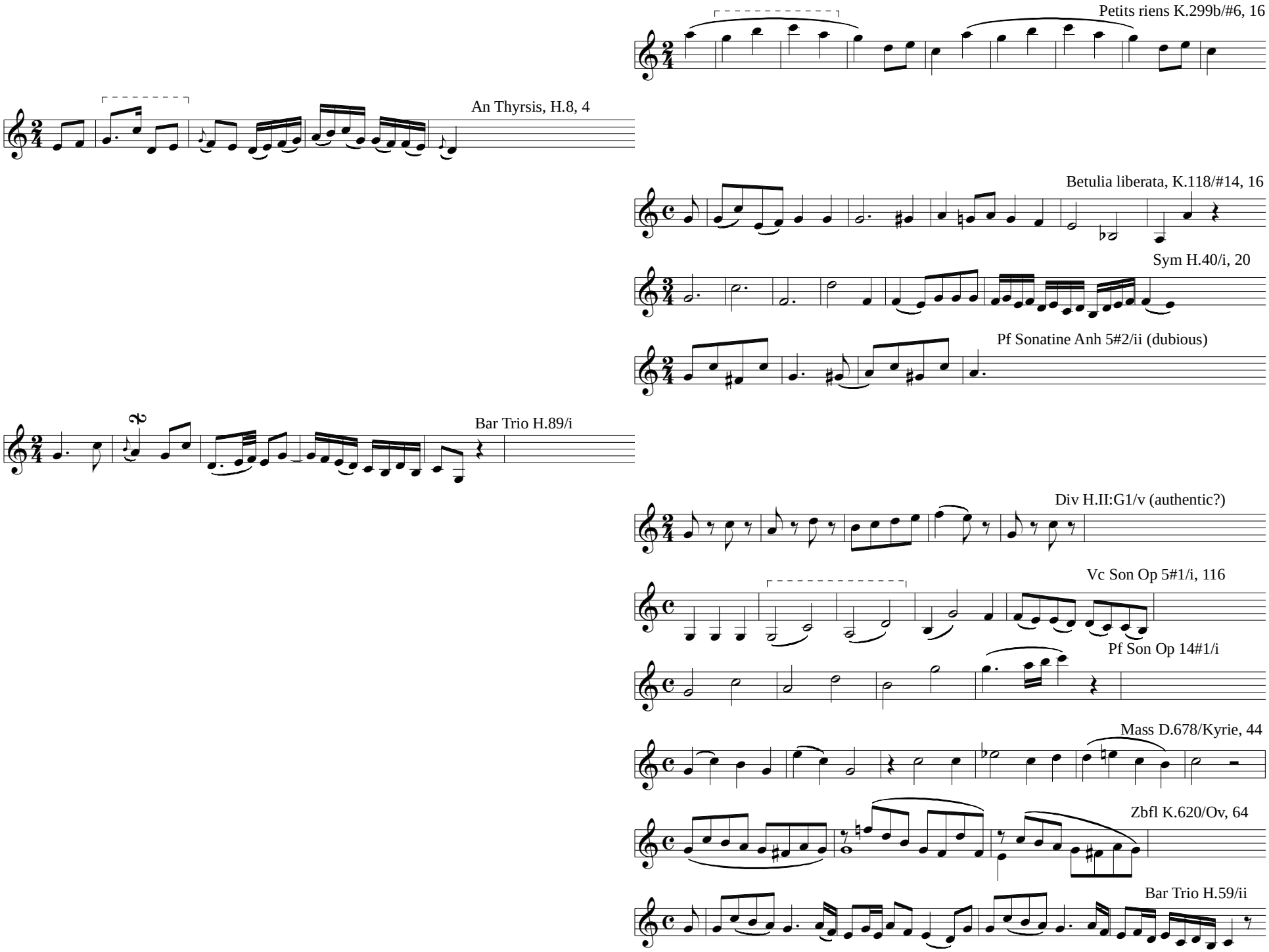


Pf Son Op 14#1/i, 38



Heiligmesse H.10/Benedictus, 13




Petits riens K.299b/#6, 16
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Pf Sonatine Anh 5#2/ii (dubious)
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Vc Son Op 5#1/i, 116
Pf Son Op 14#1/i
Mass D.678/Kyrie, 44
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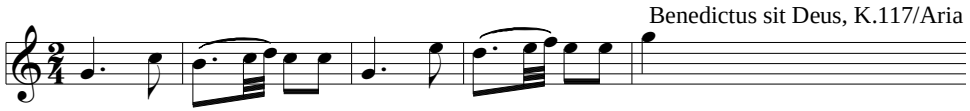
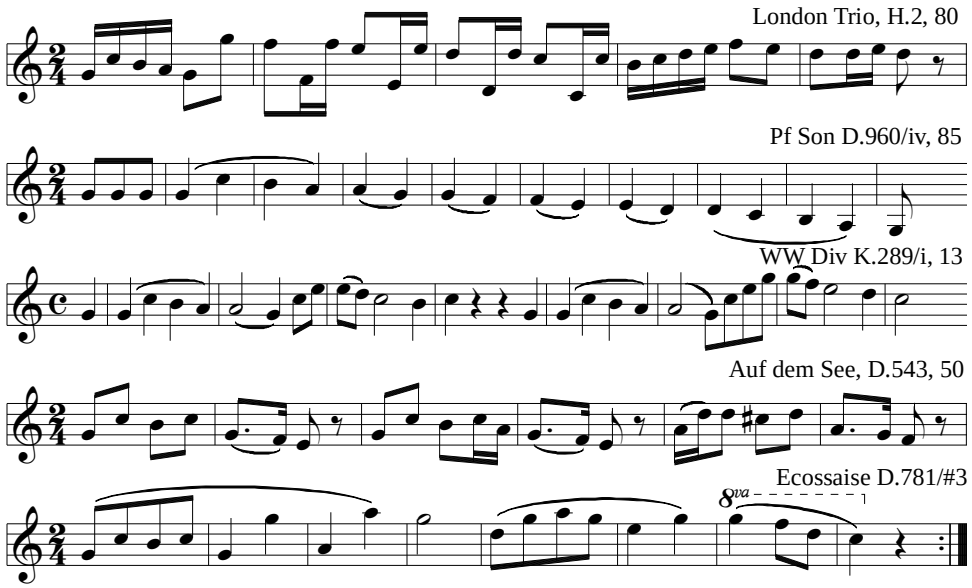
Bar Trio H.59/ii



Benedictus sit Deus, K.117/Aria



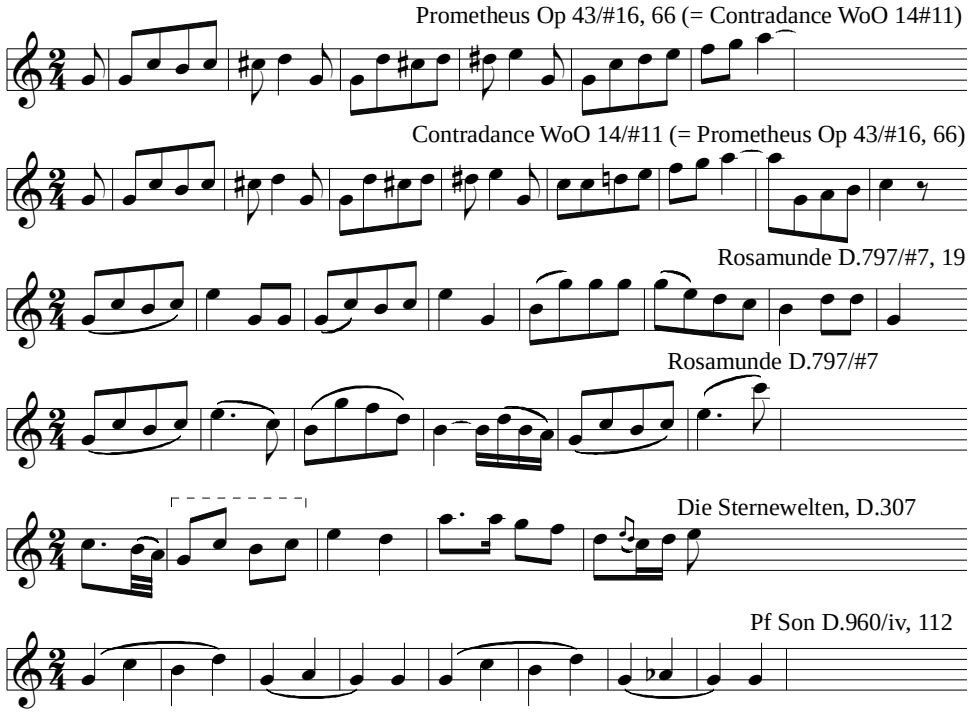
London Trio, H.2, 80

Pf Son D.960/iv, 85

WW Div K.289/i, 13

Auf dem See, D.543, 50

Ecossaise D.781/#3



Prometheus Op 43/#16, 66 (= Contradance WoO 14#11)

Contradance WoO 14/#11 (= Prometheus Op 43/#16, 66)

Rosamunde D.797/#7, 19

Rosamunde D.797/#7

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Pf Son D.960/iv, 112

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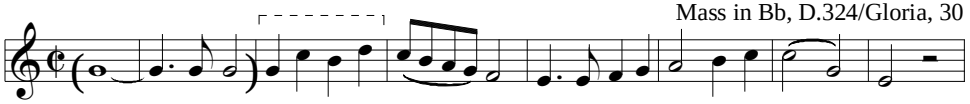
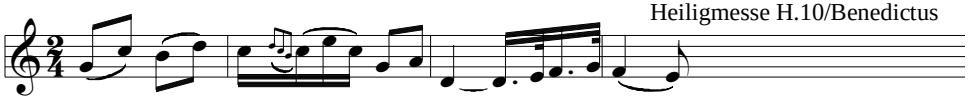
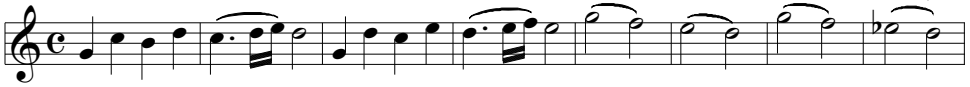


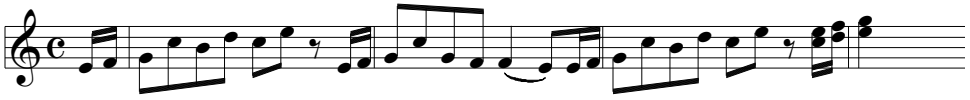
Heiligmesse H.10/Benedictus



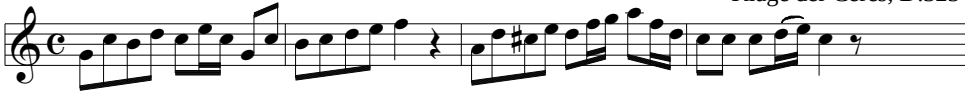
Bar Trio H.38/iii, 14



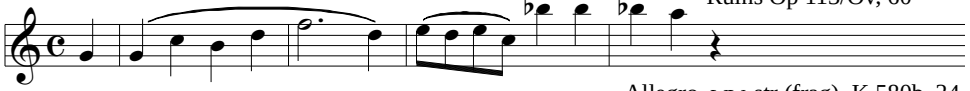
Bar Trio H.63/ii



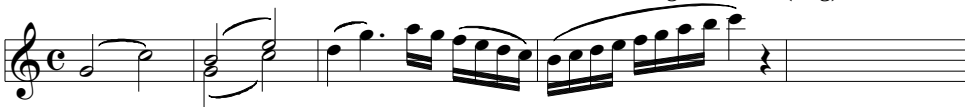
Klage der Ceres, D.323



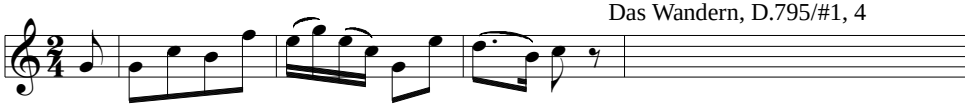
Ruins Op 113/Ov, 60



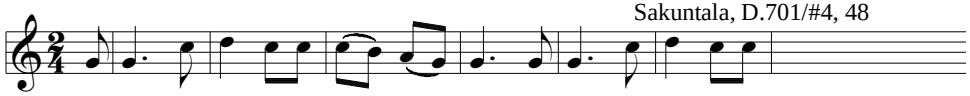
Allegro, ww-str (frag), K.580b, 34



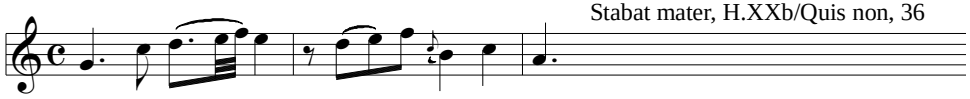
Das Wandern, D.795/#1, 4



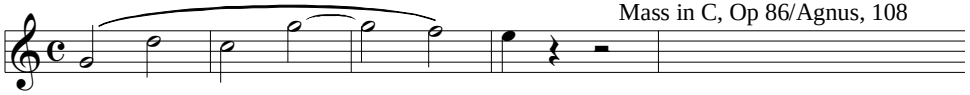
Sakuntala, D.701/#4, 48



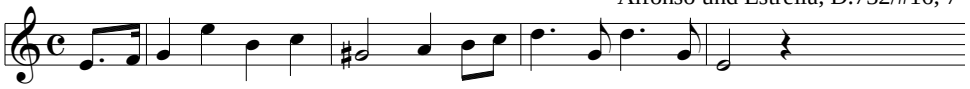
Stabat mater, H.XXb/Quis non, 36



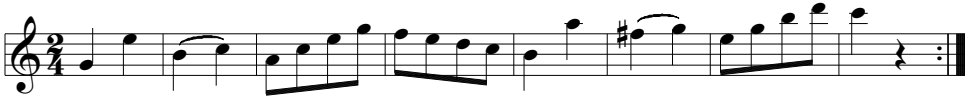
Mass in C, Op 86/Agnus, 108



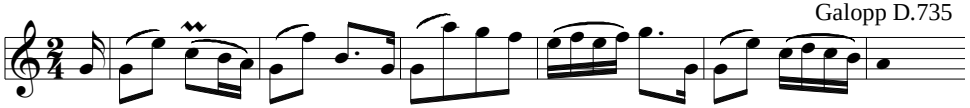
Alfonso und Estrella, D.732/#16, 7



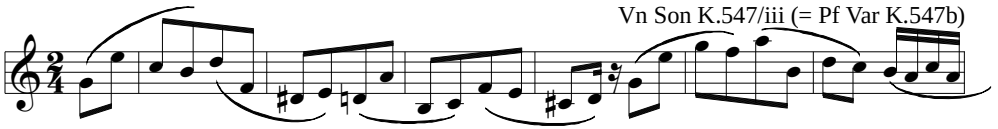
Ecossaise D.421/#5



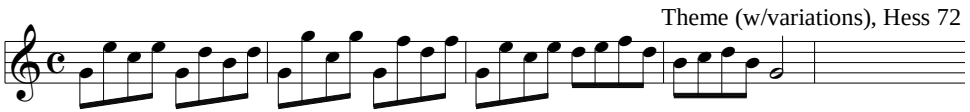
Galopp D.735



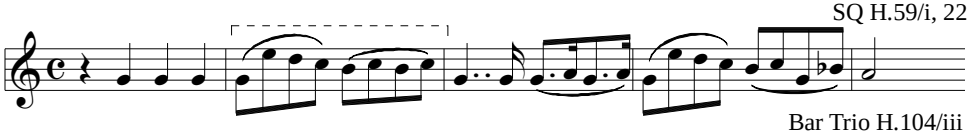
Vn Son K.547/iii (= Pf Var K.547b)



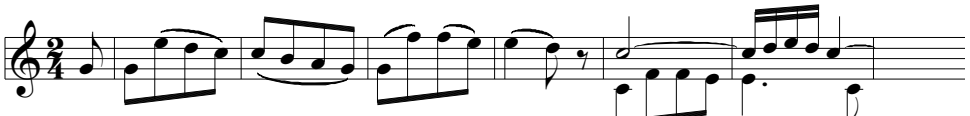
Theme (w/variations), Hess 72



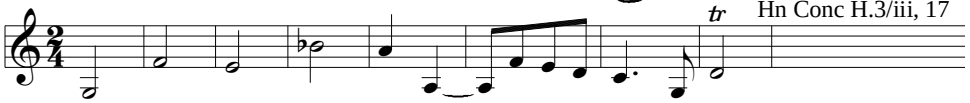
SQ H.59/i, 22



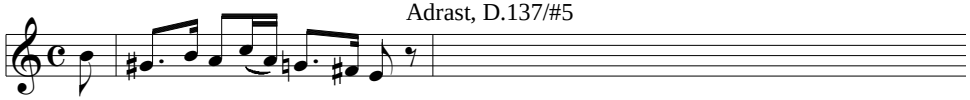
Bar Trio H.104/iii



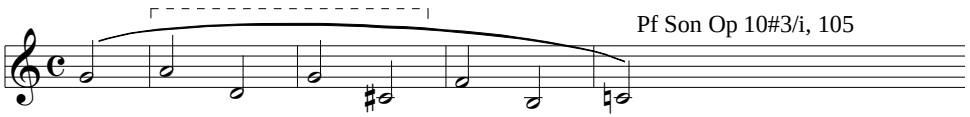
Hn Conc H.3/iii, 17



Adrast, D.137/#5



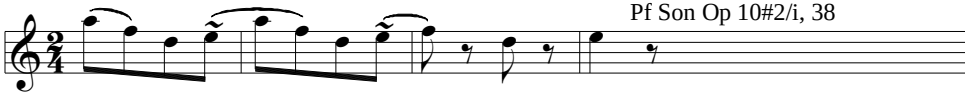
Pf Son Op 10#3/i, 105

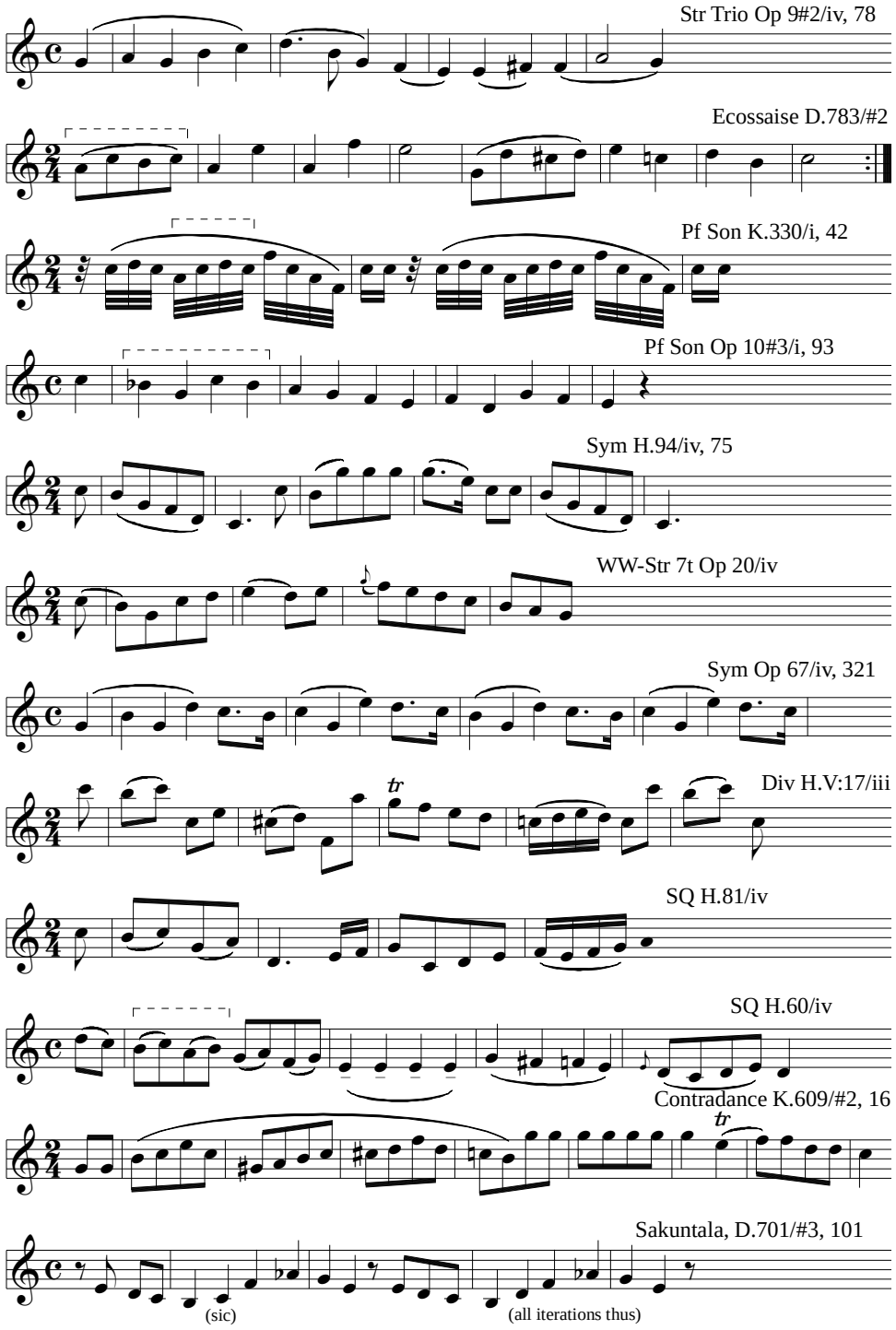


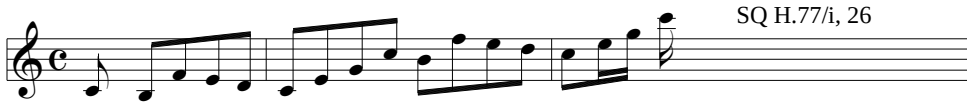
Pf Conc K.467/iii, 154

Bar Trio H.67/i

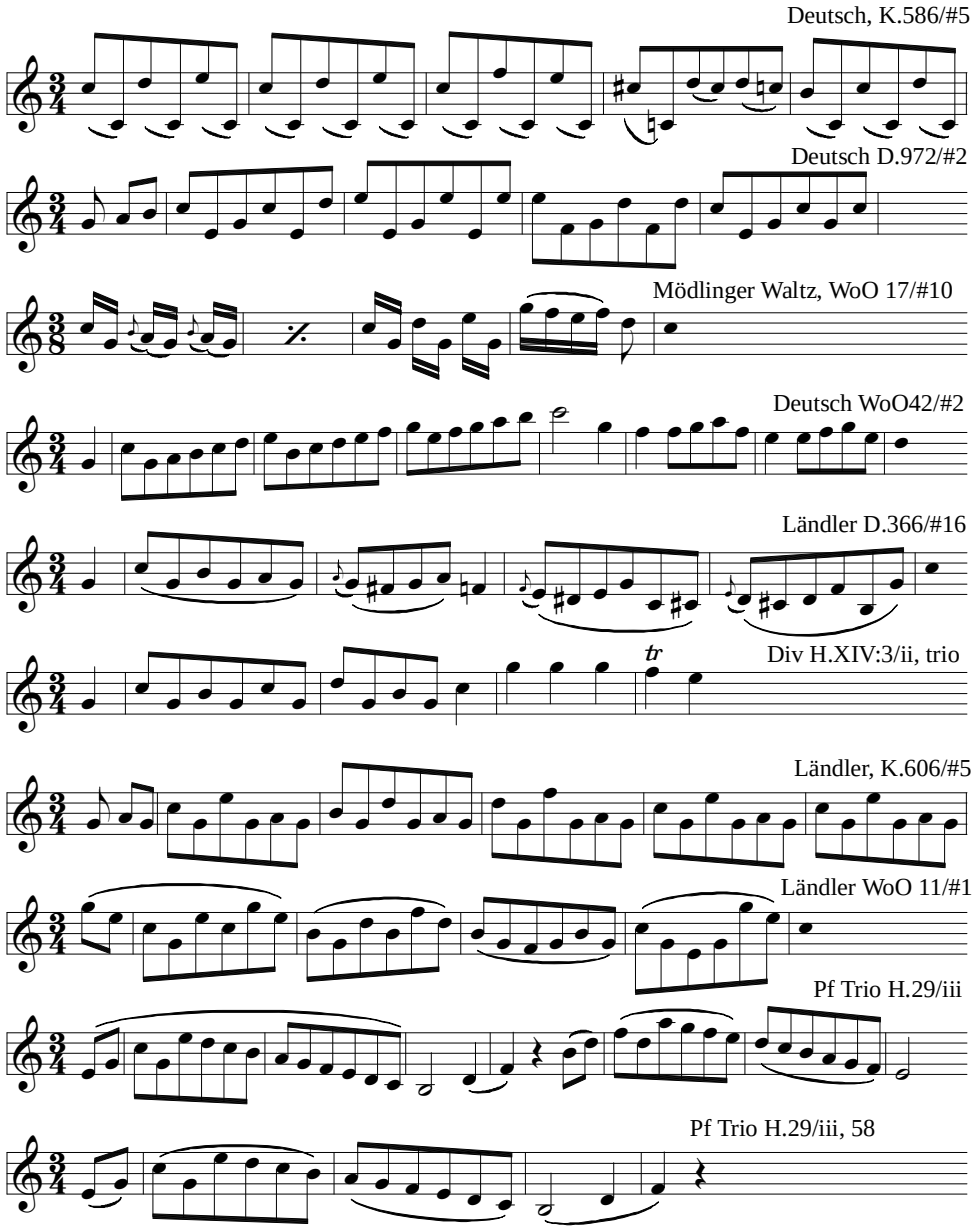
Pf Son Op 10#2/i, 38

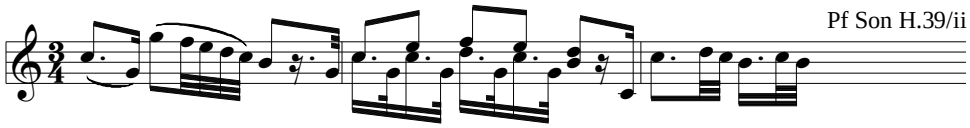



Str Trio Op 9#2/iv, 78
Ecossaise D.783/#2
Pf Son K.330/i, 42
Pf Son Op 10#3/i, 93
Sym H.94/iv, 75
WW-Str 7t Op 20/iv
Sym Op 67/iv, 321
Div H.V:17/iii
SQ H.81/iv
SQ H.60/iv
Contradance K.609/#2, 16
Sakuntala, D.701/#3, 101
(sic)
(all iterations thus)

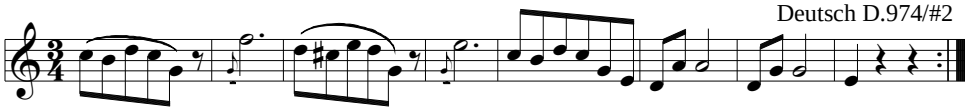

SQ H.77/i, 26

EX 7.2:
Z3^K, miscellaneous contours
(triple-meter)

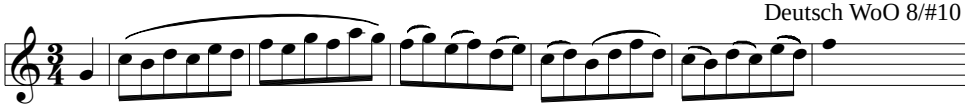




Pf Son H.39/ii

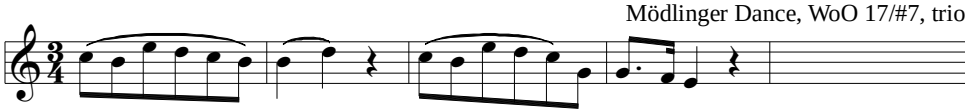


Deutsch D.974/#2

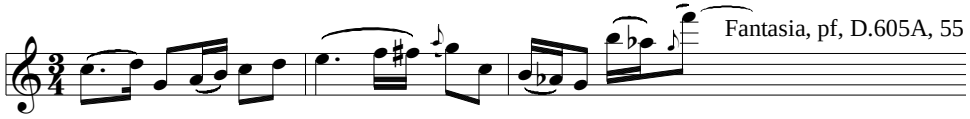


Deutsch WoO 8/#10

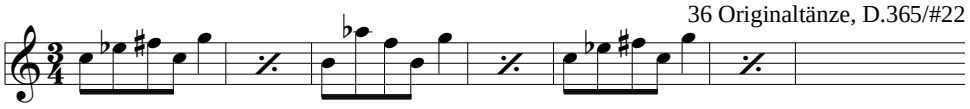
Litany K.195/Sancta Maria, 54



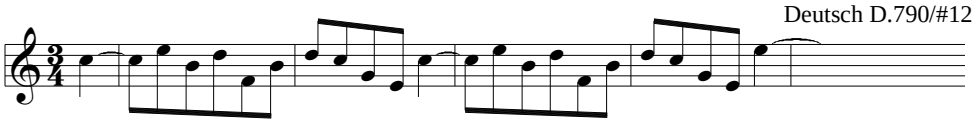
Mödlinger Dance, WoO 17/#7, trio



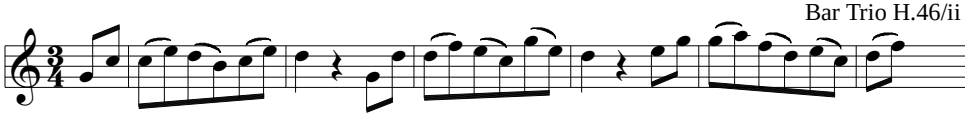
Fantasia, pf, D.605A, 55



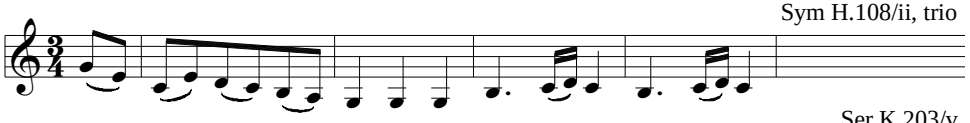
36 Originaltänze, D.365/#22



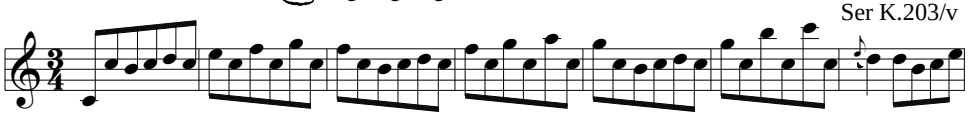
Deutsch D.790/#12



Bar Trio H.46/ii

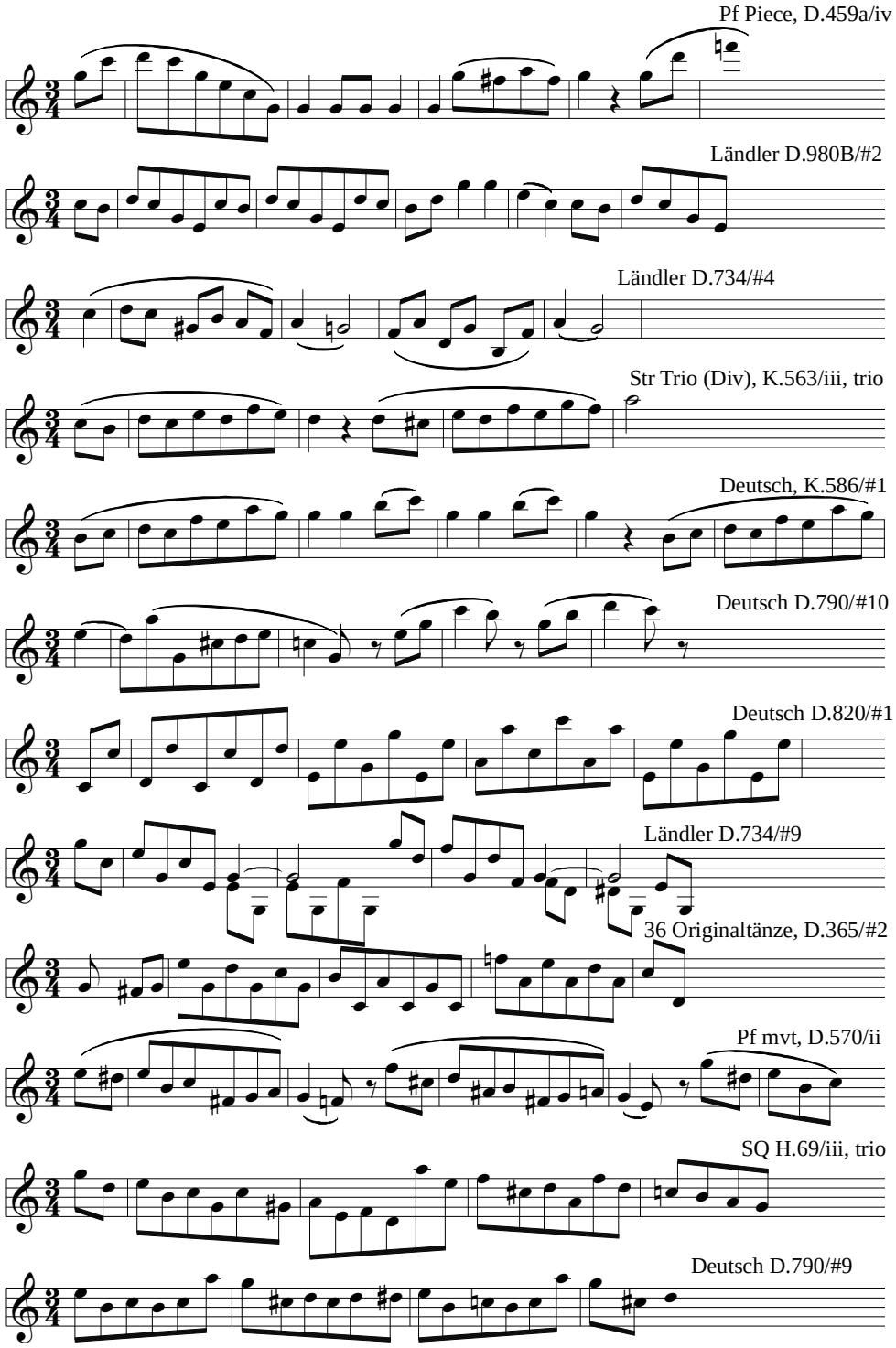


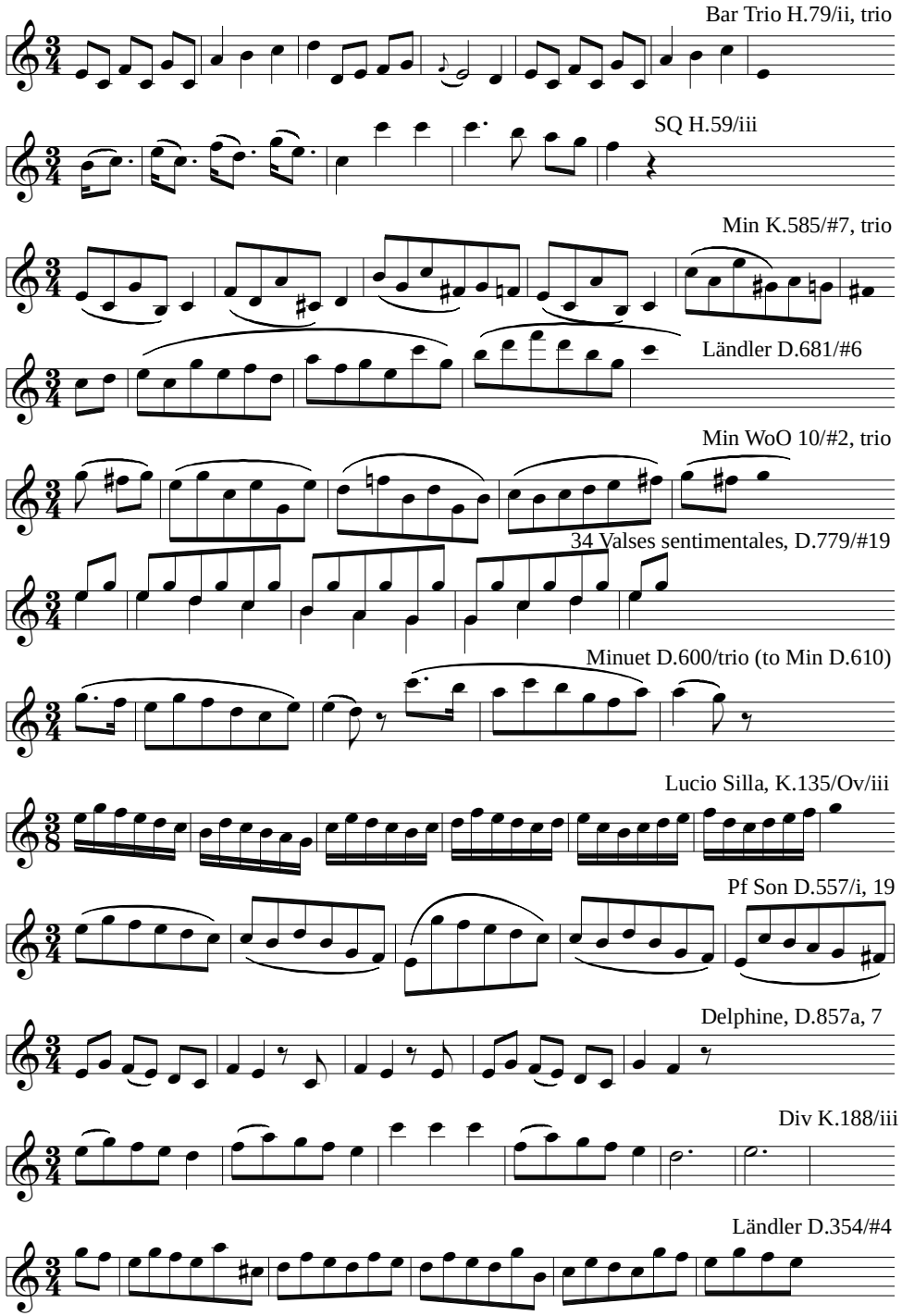
Sym H.108/ii, trio



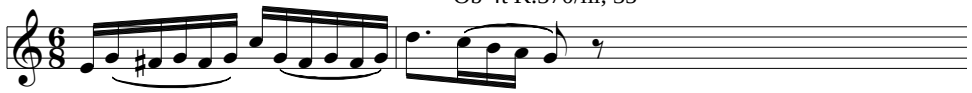
Ser K.203/v

Bar Trio H.57/i

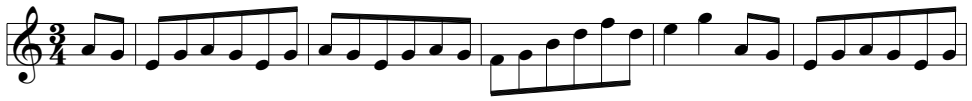

Pf Piece, D.459a/iv
Ländler D.980B/#2
Ländler D.734/#4
Str Trio (Div), K.563/iii, trio
Deutsch, K.586/#1
Deutsch D.790/#10
Deutsch D.820/#1
Ländler D.734/#9
36 Originaltänze, D.365/#2
Pf mvt, D.570/ii
SQ H.69/iii, trio
Deutsch D.790/#9


Bar Trio H.79/ii, trio
SQ H.59/iii
Min K.585/#7, trio
Ländler D.681/#6
Min WoO 10/#2, trio
34 Valses sentimentales, D.779/#19
Minuet D.600/trio (to Min D.610)
Lucio Silla, K.135/Ov/iii
Pf Son D.557/i, 19
Delphine, D.857a, 7
Div K.188/iii
Ländler D.354/#4

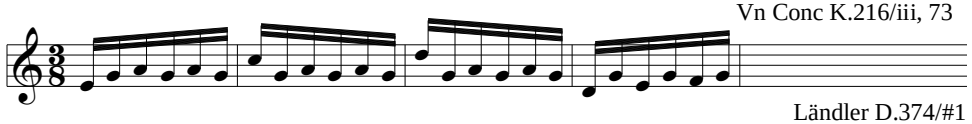
Ob 4t K.370/iii, 35



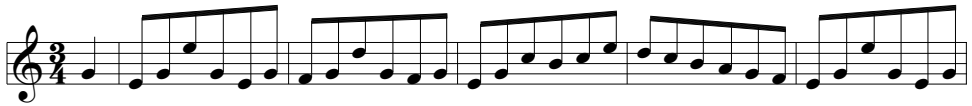
Ländler D.681/#12



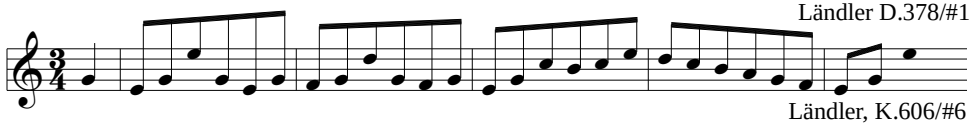
Vn Conc K.216/iii, 73



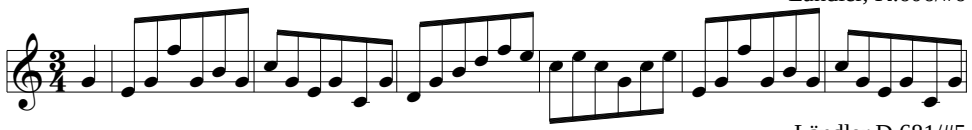
Ländler D.374/#1



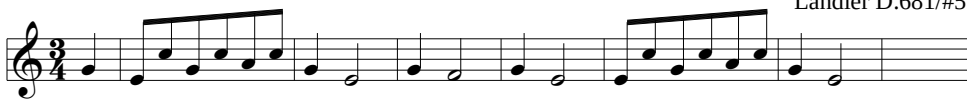
Ländler D.378/#1



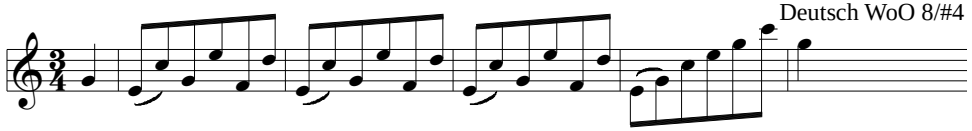
Ländler, K.606/#6



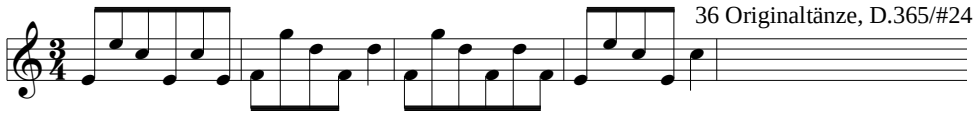
Ländler D.681/#5



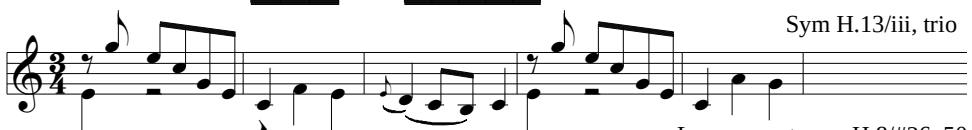
Deutsch WoO 8/#4



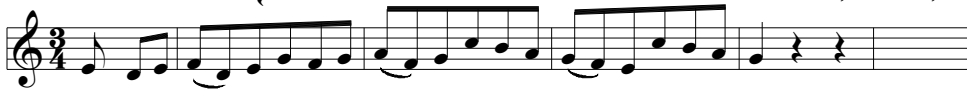
36 Originaltänze, D.365/#24



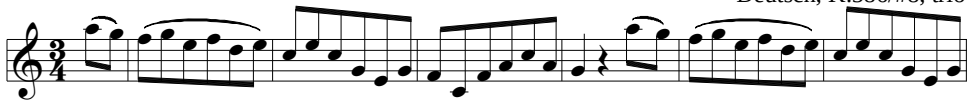
Sym H.13/iii, trio



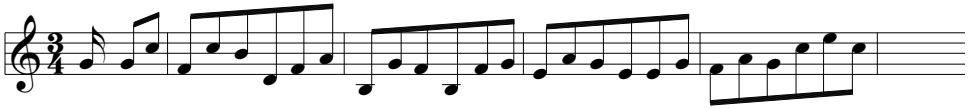
La vera costanza, H.8/#26, 50



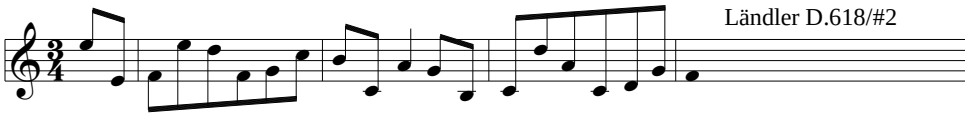
Deutsch, K.586/#8, trio



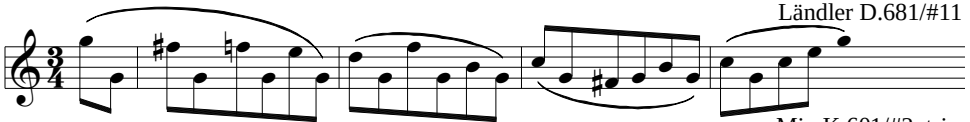
34 Valses sentimentales, D.779/#29



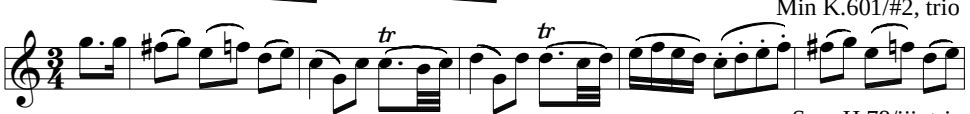
Ländler D.618/#2



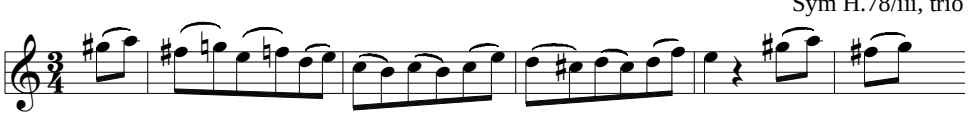
Ländler D.681/#11



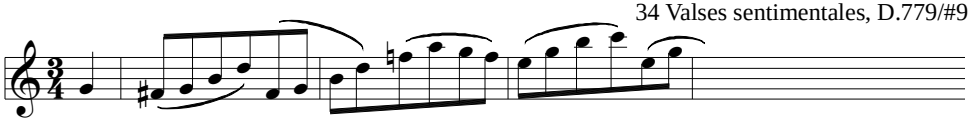
Min K.601/#2, trio



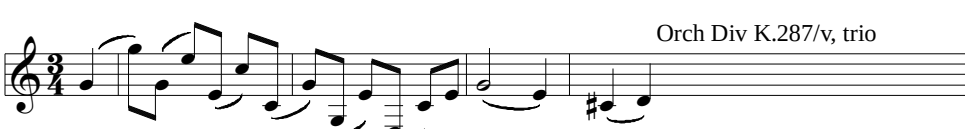
Sym H.78/iii, trio



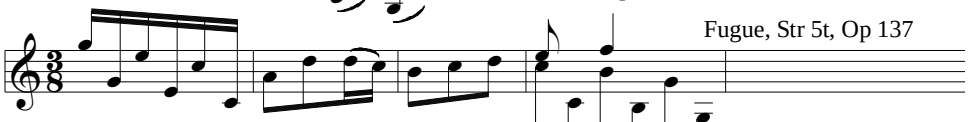
34 Valses sentimentales, D.779/#9



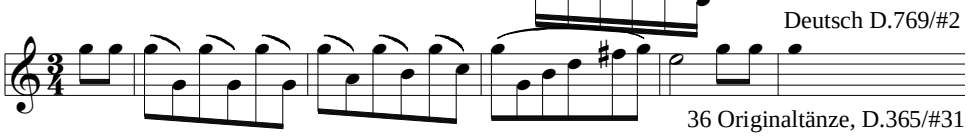
Orch Div K.287/v, trio



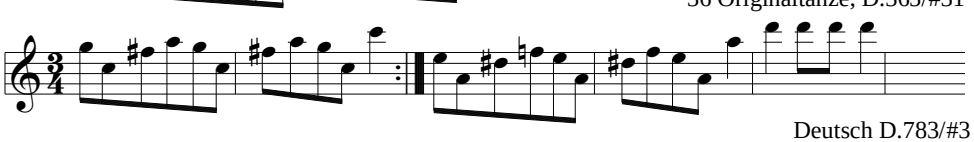
Fugue, Str 5t, Op 137



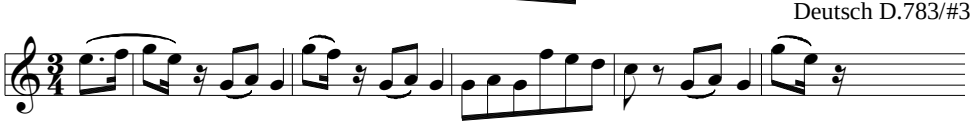
Deutsch D.769/#2



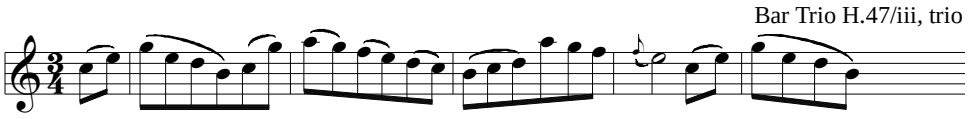
36 Originaltänze, D.365/#31



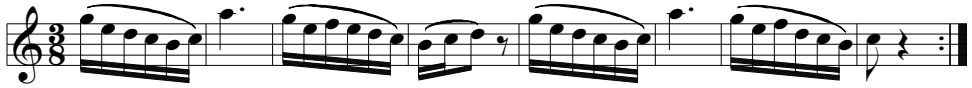
Deutsch D.783/#3



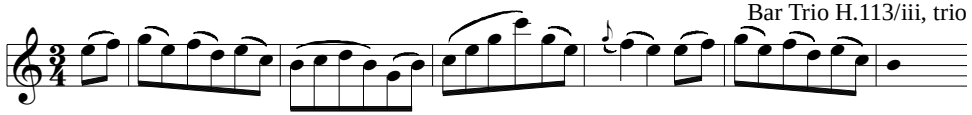
Bar Trio H.47/iii, trio



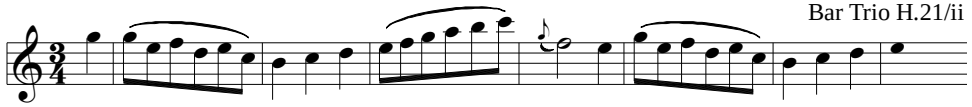
Idomeneo Ballet, K.367/iii



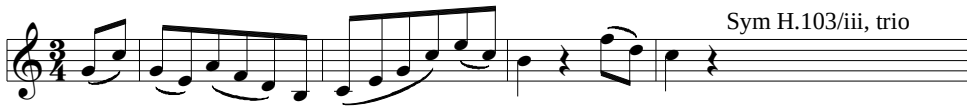
Bar Trio H.113/iii, trio



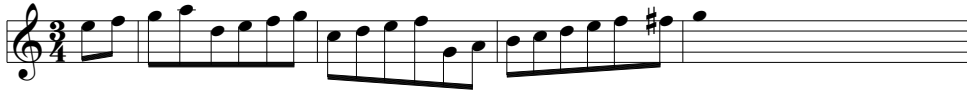
Bar Trio H.21/ii



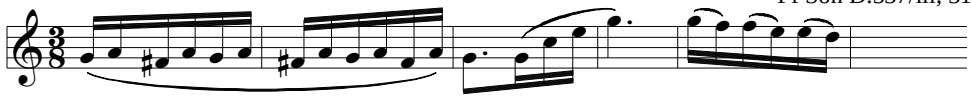
Sym H.103/iii, trio



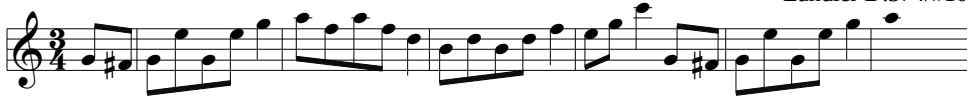
Deutsch D.971/#2



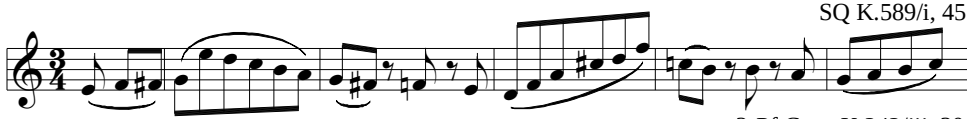
Pf Son D.537/iii, 31



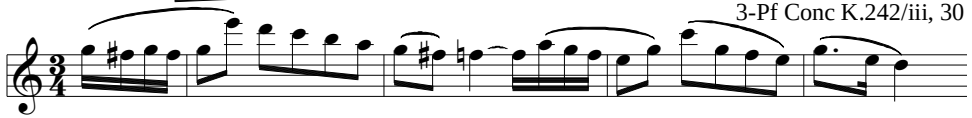
Ländler D.374/#10



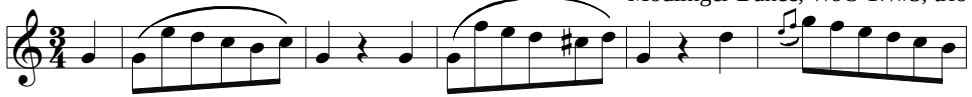
SQ K.589/i, 45



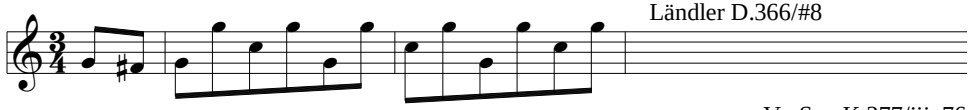
3-Pf Conc K.242/iii, 30



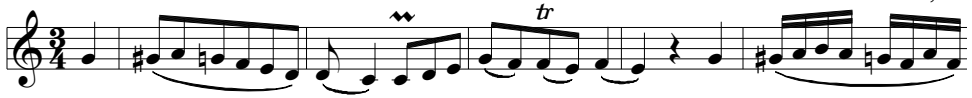
Mödlinger Dance, WoO 17/#3, trio



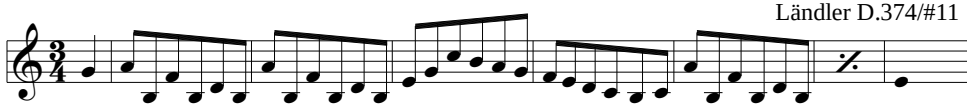
Ländler D.366/#8



Vn Son K.377/iii, 76



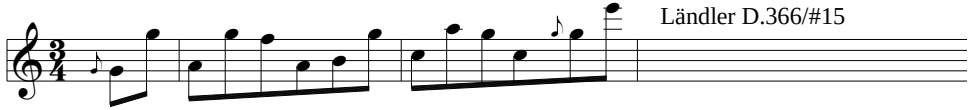
Ländler D.374/#11



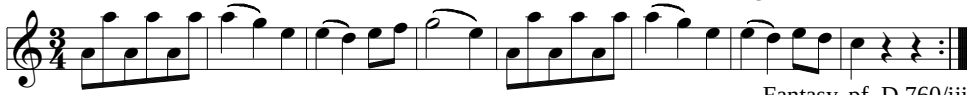
Deutsch D.820/#2

Waltz WoO 85

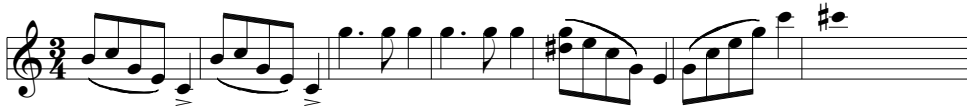
Ländler D.366/#15



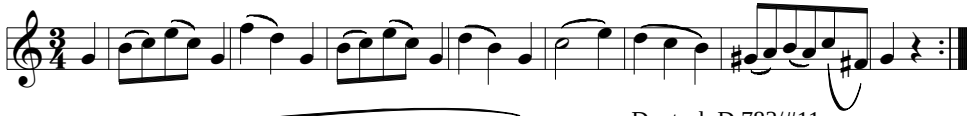
36 Originaltänze, D.365/#30



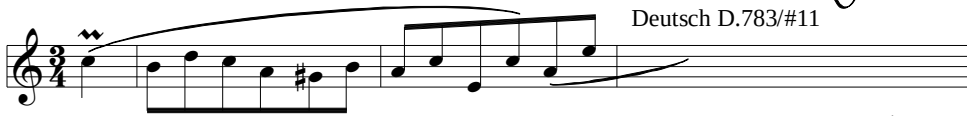
Fantasy, pf, D.760/iii



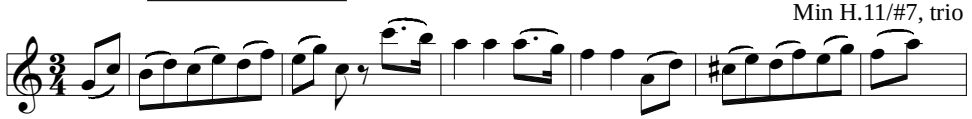
Min H.11/#8



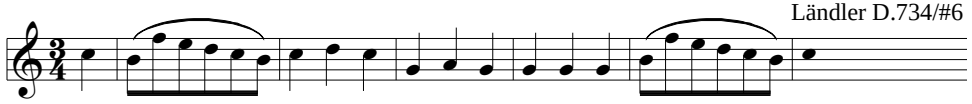
Deutsch D.783/#11



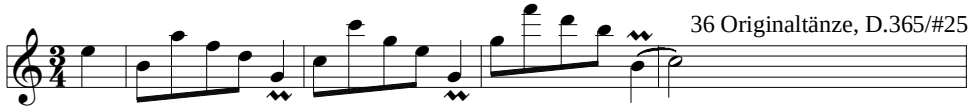
Min H.11/#7, trio



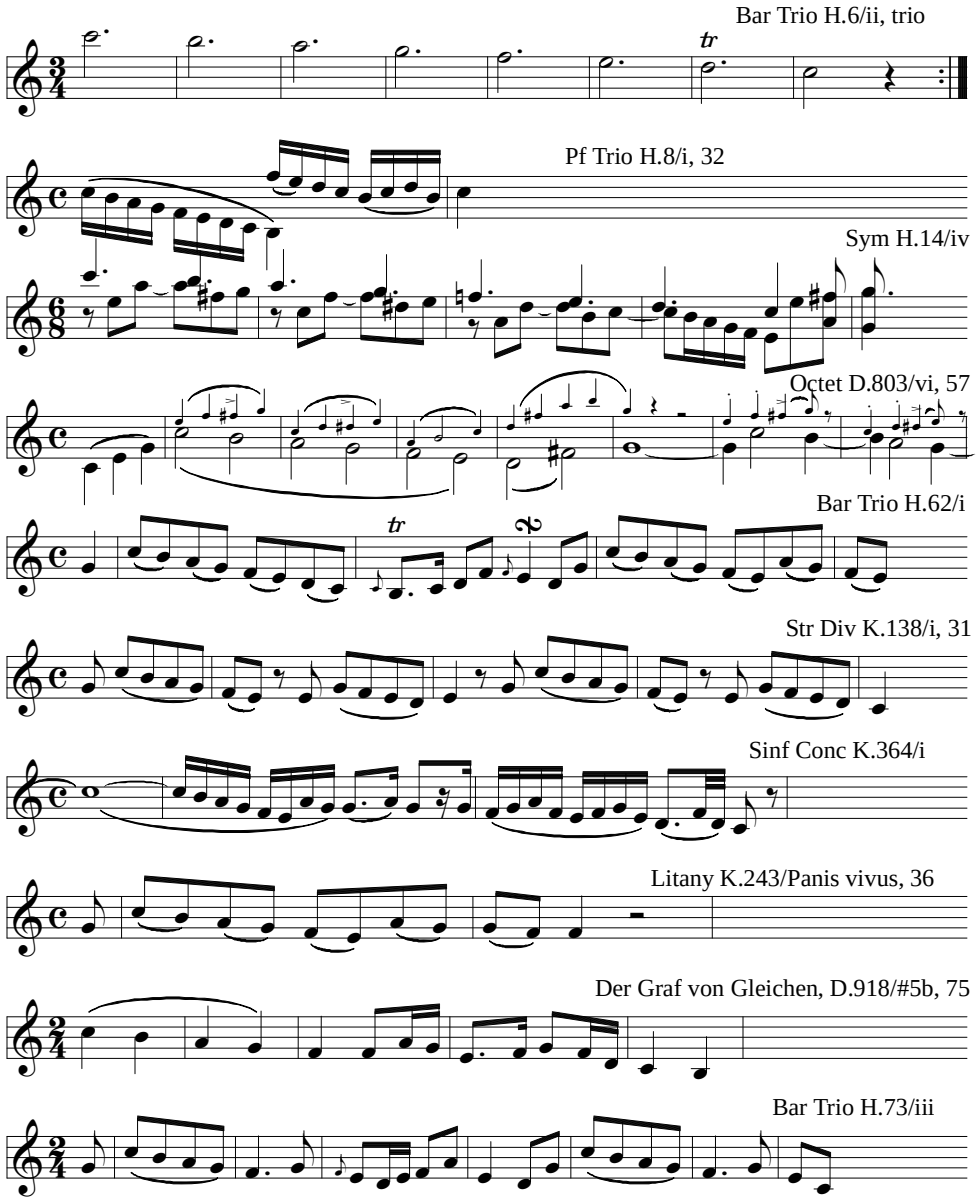
Ländler D.734/#6



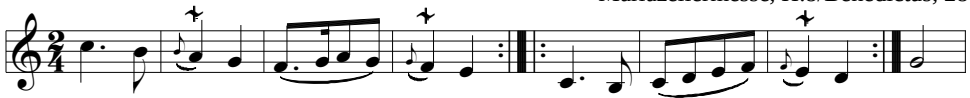
36 Originaltänze, D.365/#25



EX 8:
Z3^K, 4-linear

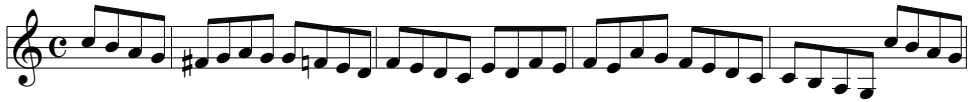


Mariazellermesse, H.8/Benedictus, 28

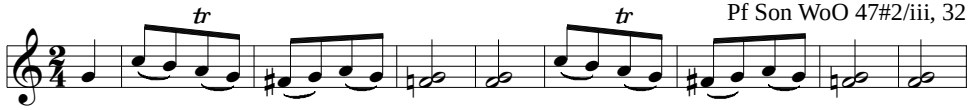


(≈Il mondo della luna, H.7/#37, 98)

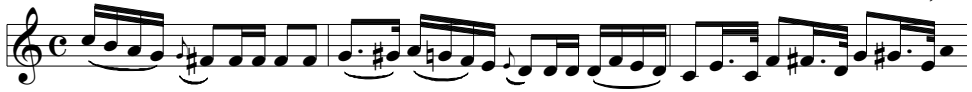
Vn Son K.526/iii



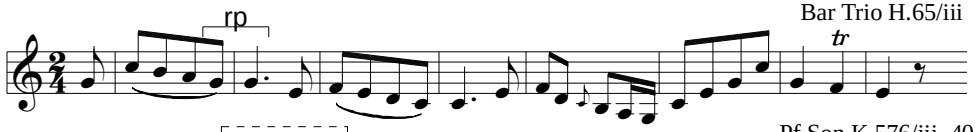
Pf Son WoO 47#2/iii, 32



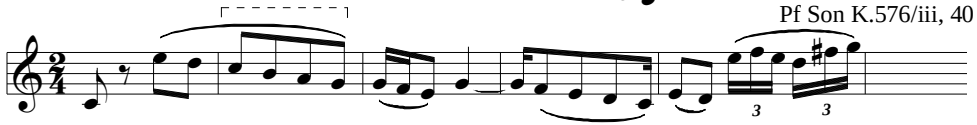
Vn Conc K.211/i, 13



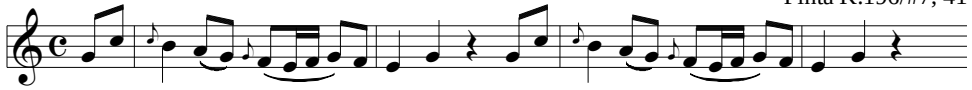
Bar Trio H.65/iii



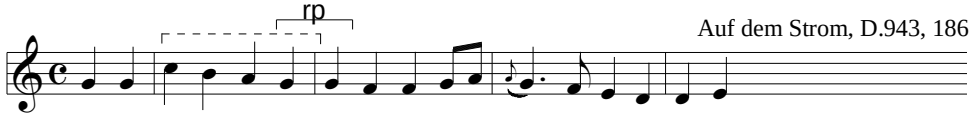
Pf Son K.576/iii, 40



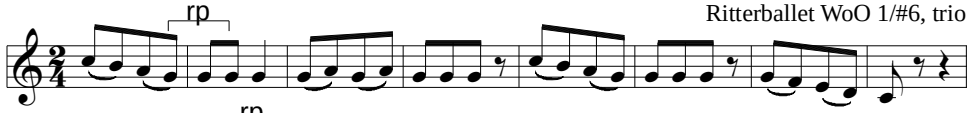
Finta K.196/#7, 41



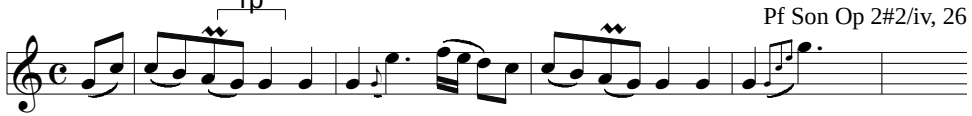
Auf dem Strom, D.943, 186



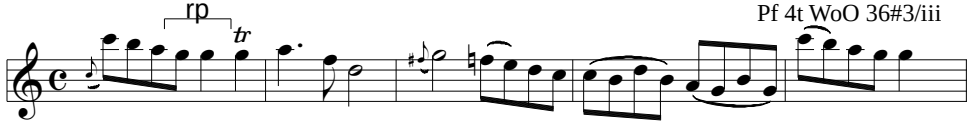
Ritterballet WoO 1/#6, trio



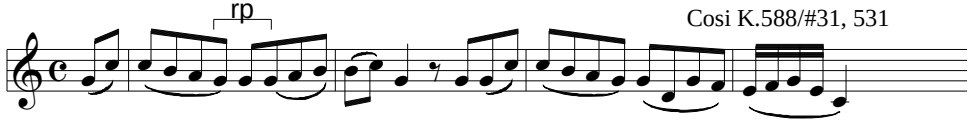
Pf Son Op 2#2/iv, 26



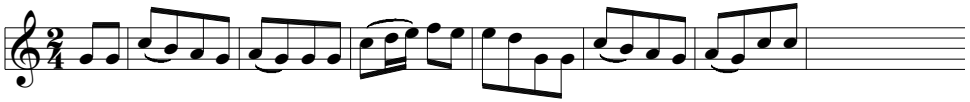
Pf 4t WoO 36#3/iii



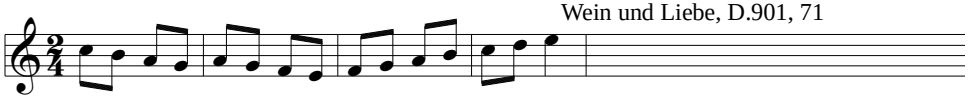
Cosi K.588/#31, 531



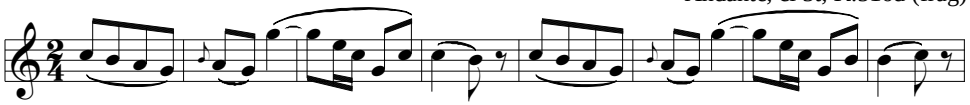
Rondo, pf, WoO 49



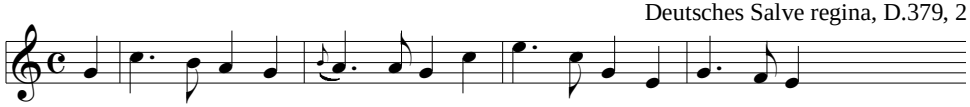
Wein und Liebe, D.901, 71



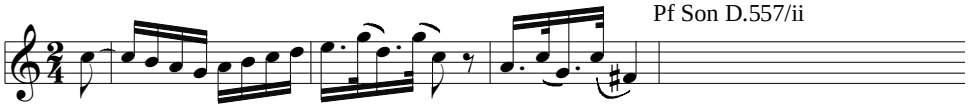
Andante, cl 5t, K.516d (frag)



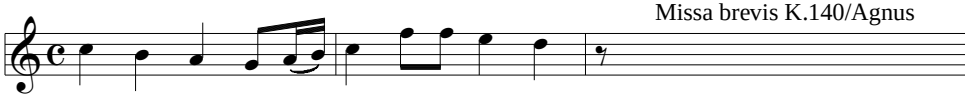
Deutsches Salve regina, D.379, 2



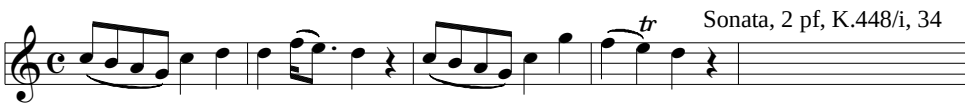
Pf Son D.557/ii



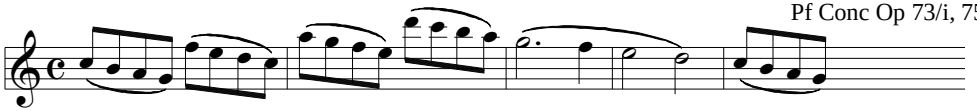
Missa brevis K.140/Agnus



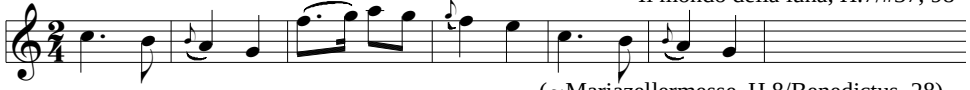
Sonata, 2 pf, K.448/i, 34



Pf Conc Op 73/i, 75

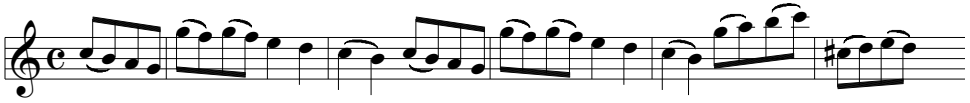


Il mondo della luna, H.7/#37, 98

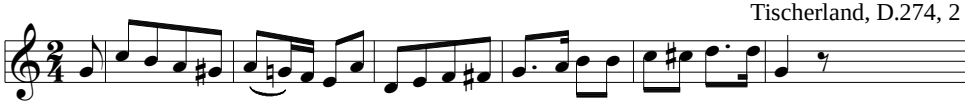


(≈Mariazellermesse, H.8/Benedictus, 28)

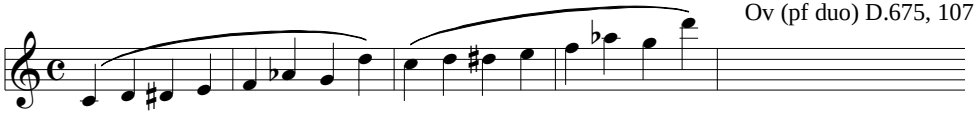
Orch Div K.247/vi, 46

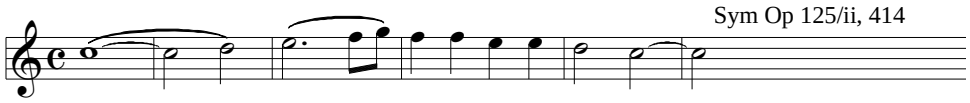


Tischerland, D.274, 2

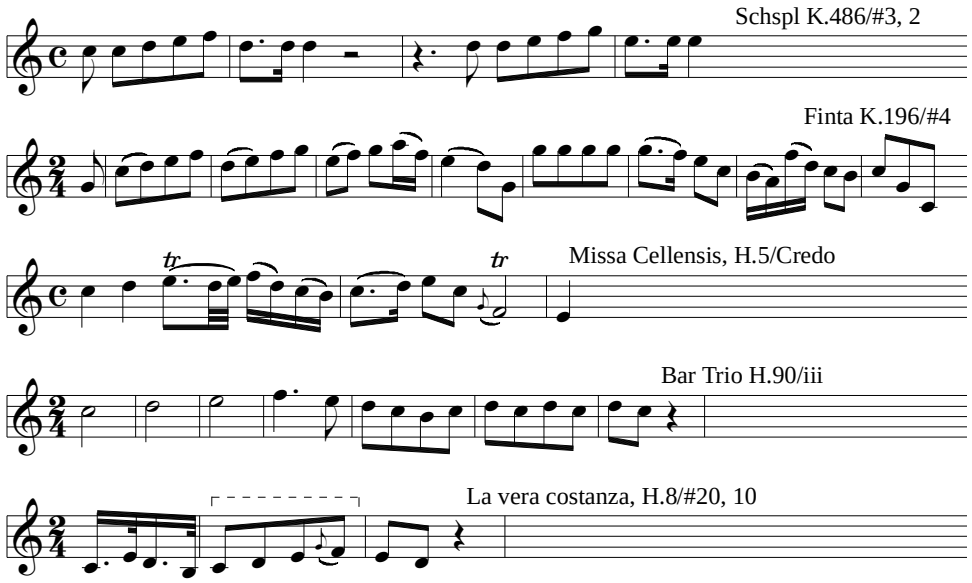


Ov (pf duo) D.675, 107





Sym Op 125/ii, 414



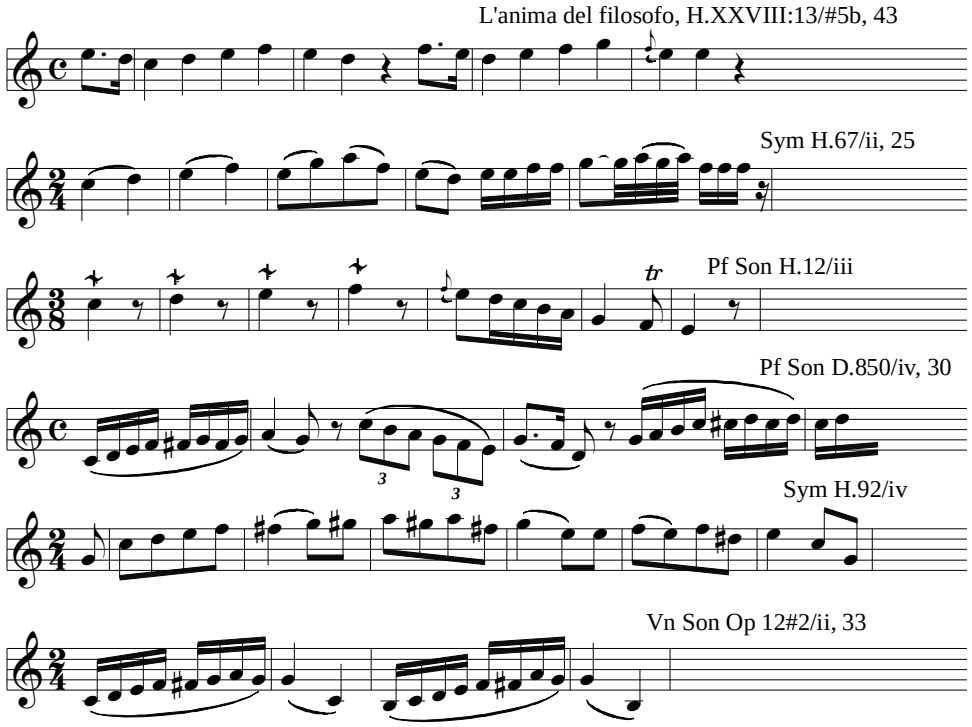
Schspl K.486/#3, 2

Finta K.196/#4

Missa Cellensis, H.5/Credo

Bar Trio H.90/iii

La vera costanza, H.8/#20, 10



L'anima del filosofo, H.XXVIII:13/#5b, 43

Sym H.67/ii, 25

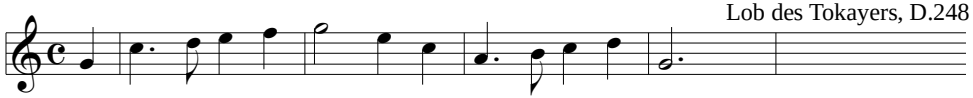
Pf Son H.12/iii

Pf Son D.850/iv, 30

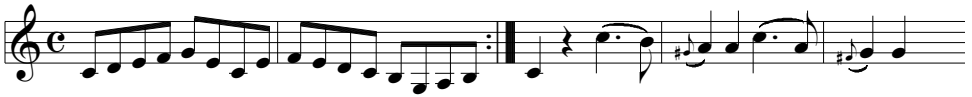
Sym H.92/iv

Vn Son Op 12#2/ii, 33

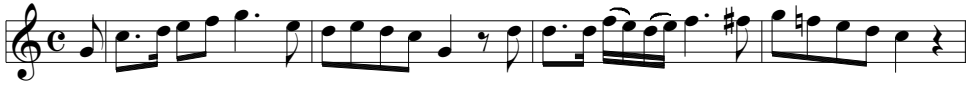
Lob des Tokayers, D.248



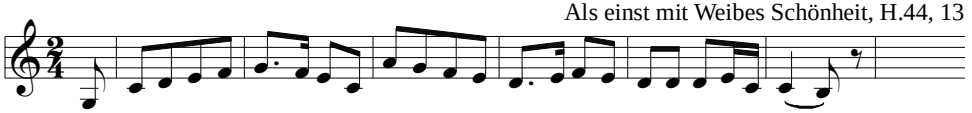
Church Son K.274



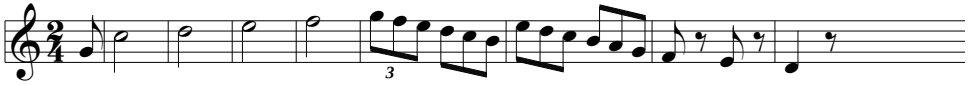
Das Leben, D.269



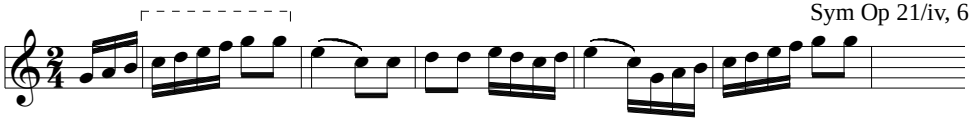
Als einst mit Weibes Schönheit, H.44, 13



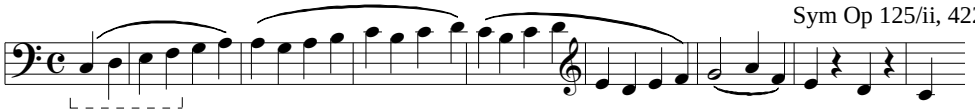
WW Div K.439b#1/v, 16



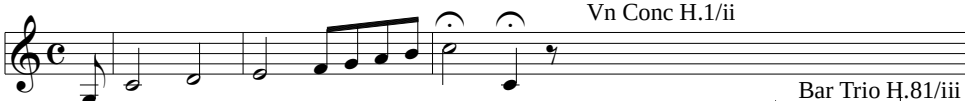
Sym Op 21/iv, 6



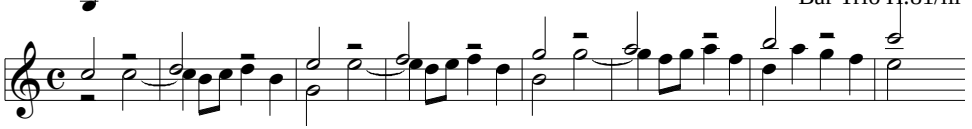
Sym Op 125/ii, 422



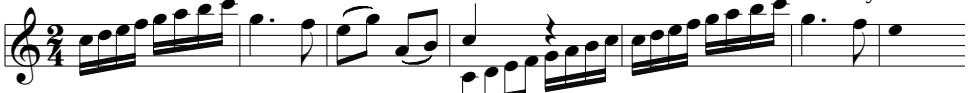
Vn Conc H.1/ii



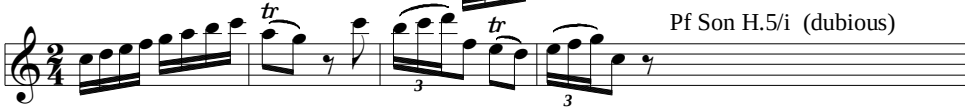
Bar Trio H.81/iii



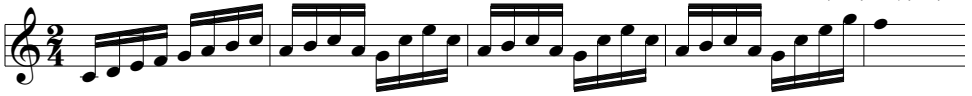
Sym H.6/iv



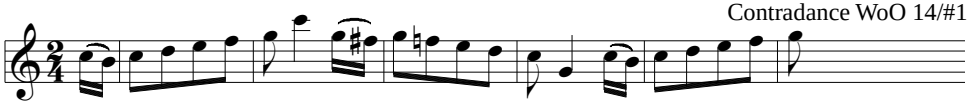
Pf Son H.5/i (dubious)



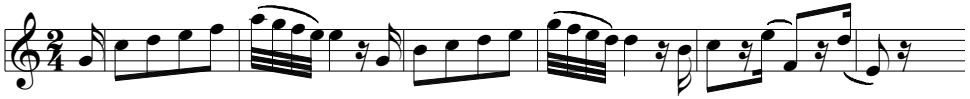
Div H.XIV:F2/iii



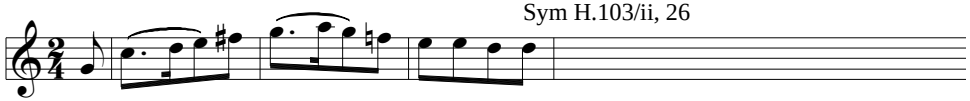
Contradance WoO 14/#1



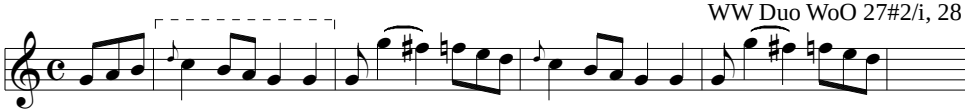
Sym K.162/ii



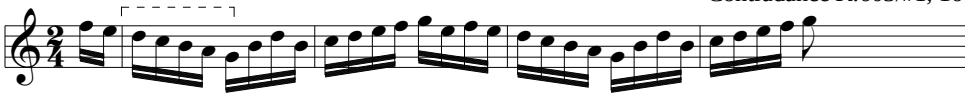
Sym H.103/ii, 26



WW Duo WoO 27#2/i, 28



Contradance K.603/#1, 16



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Lo Sposo, K.430/#4, 25

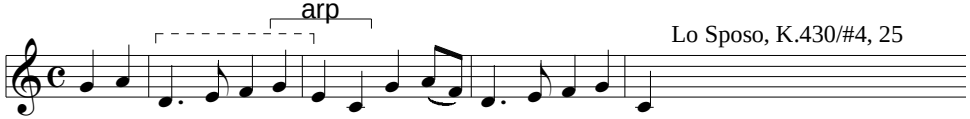
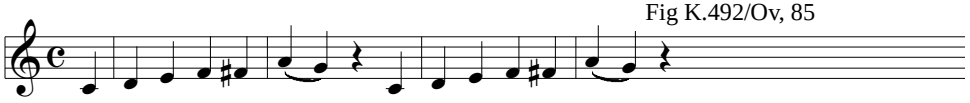
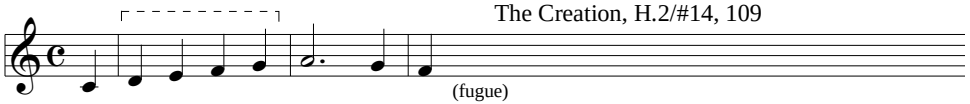


Fig K.492/Ov, 85

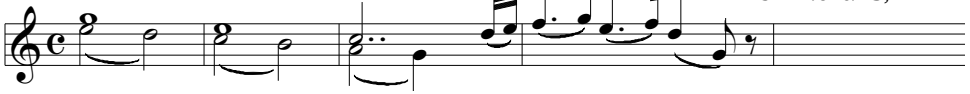


The Creation, H.2/#14, 109

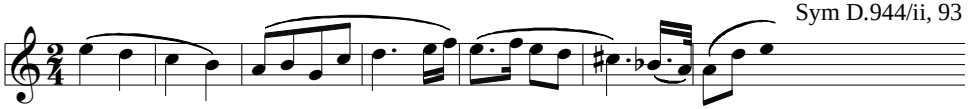


(fugue)

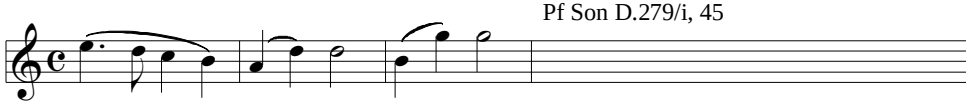
Zbfl K.620/#5, 214



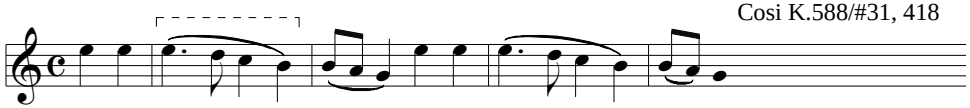
Sym D.944/ii, 93



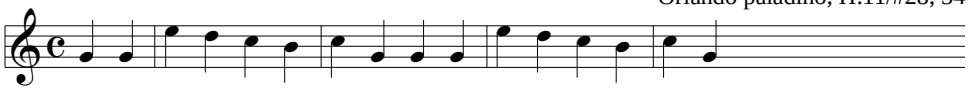
Pf Son D.279/i, 45



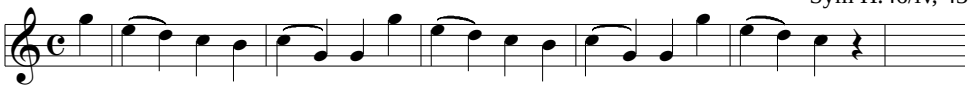
Cosi K.588/#31, 418



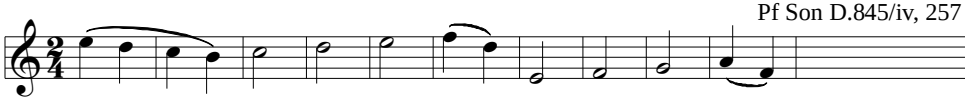
Orlando paladino, H.11/#28, 54



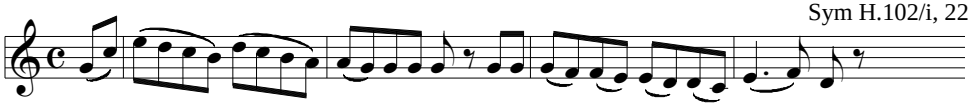
Sym H.46/iv, 43



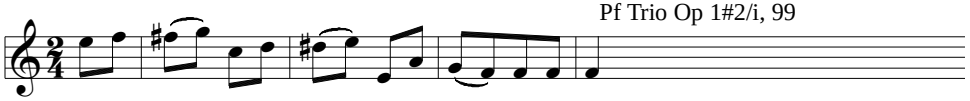
Pf Son D.845/iv, 257



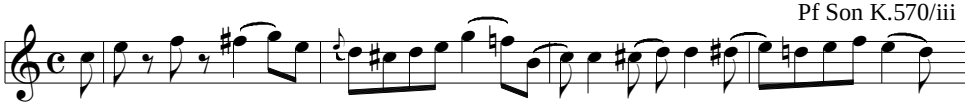
Sym H.102/i, 22



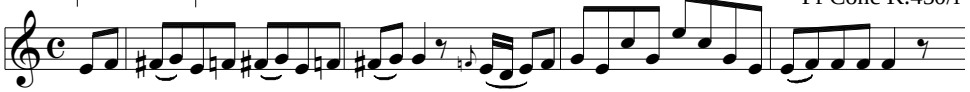
Pf Trio Op 1#2/i, 99



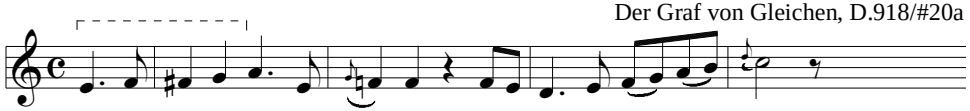
Pf Son K.570/iii



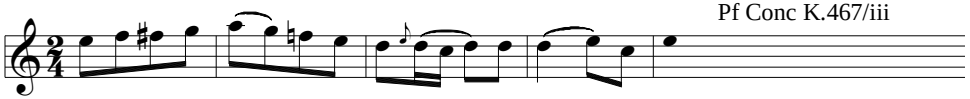
Pf Conc K.450/i



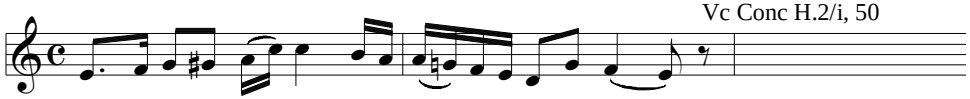
Der Graf von Gleichen, D.918/#20a



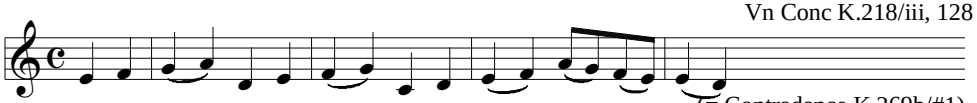
Pf Conc K.467/iii



Vc Conc H.2/i, 50

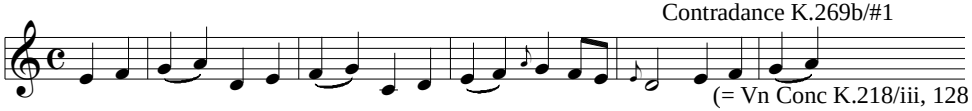


Vn Conc K.218/iii, 128



(= Contradance K.269b/#1)

Contradance K.269b/#1



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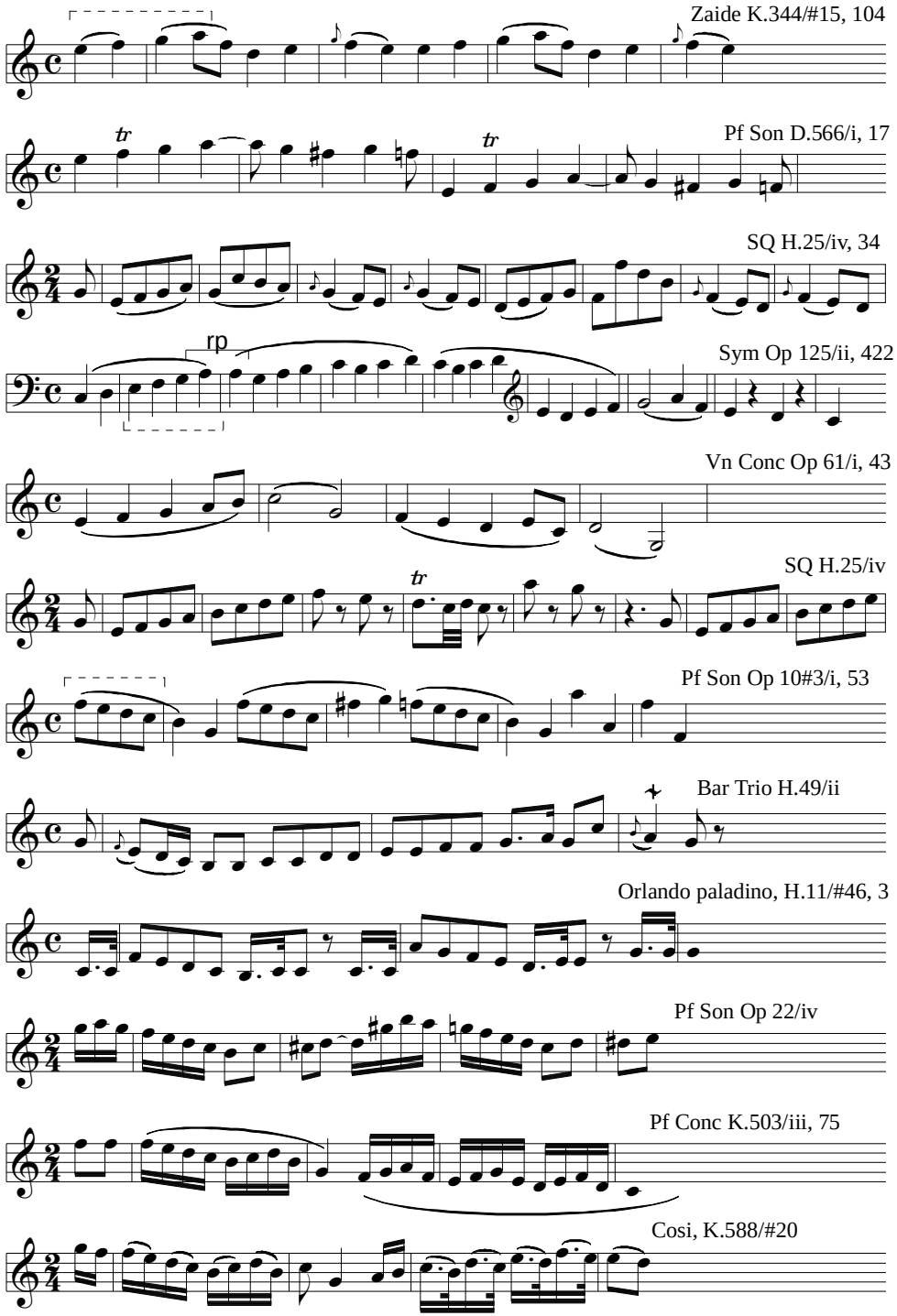
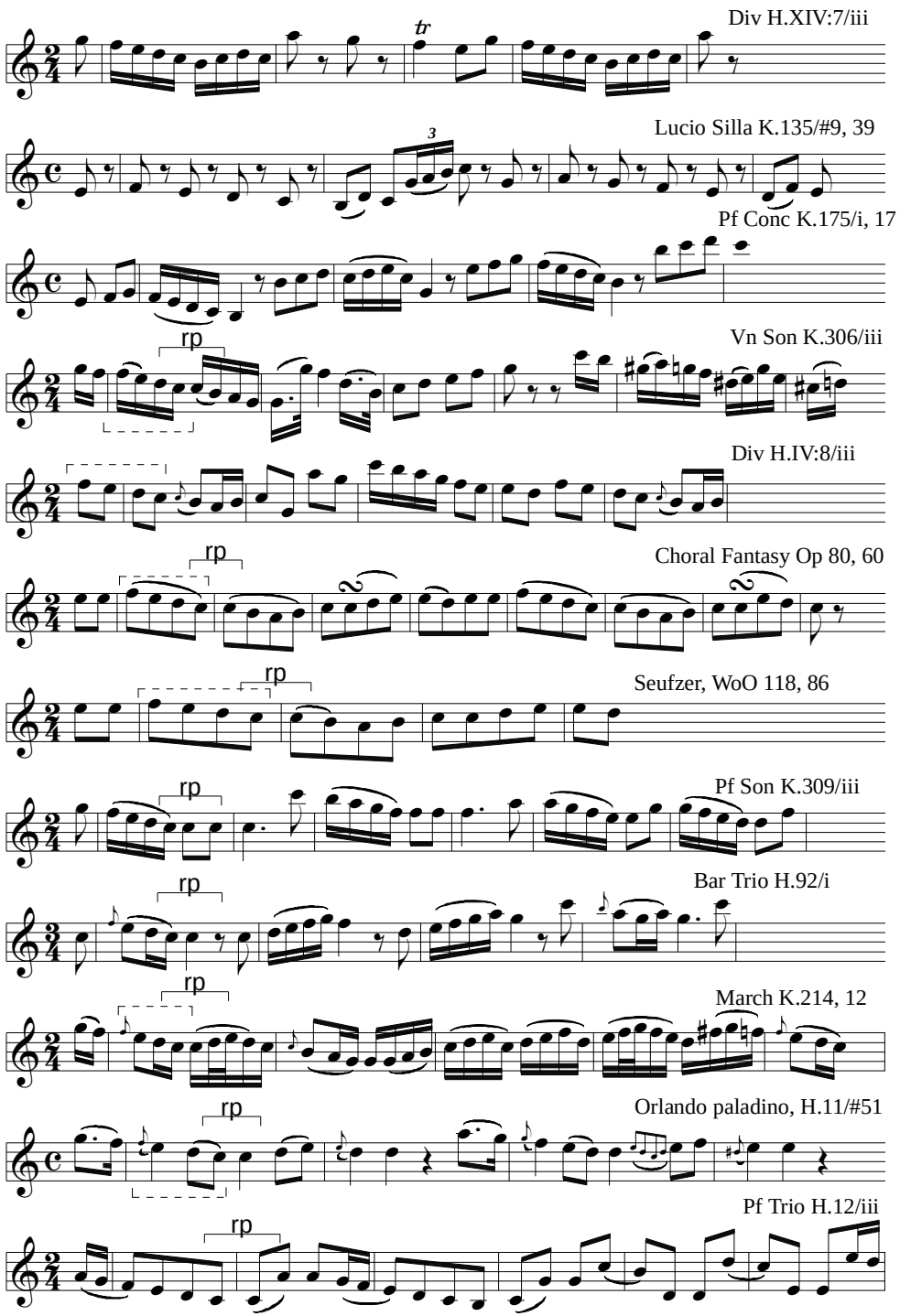

Zaide K.344/#15, 104
Pf Son D.566/i, 17
SQ H.25/iv, 34
rp
Sym Op 125/ii, 422
Vn Conc Op 61/i, 43
SQ H.25/iv
Pf Son Op 10#3/i, 53
Bar Trio H.49/ii
Orlando paladino, H.11/#46, 3
Pf Son Op 22/iv
Pf Conc K.503/iii, 75
Cosi, K.588/#20


Div H.XIV:7/iii
Lucio Silla K.135/#9, 39
Pf Conc K.175/i, 17
Vn Son K.306/iii
Div H.IV:8/iii
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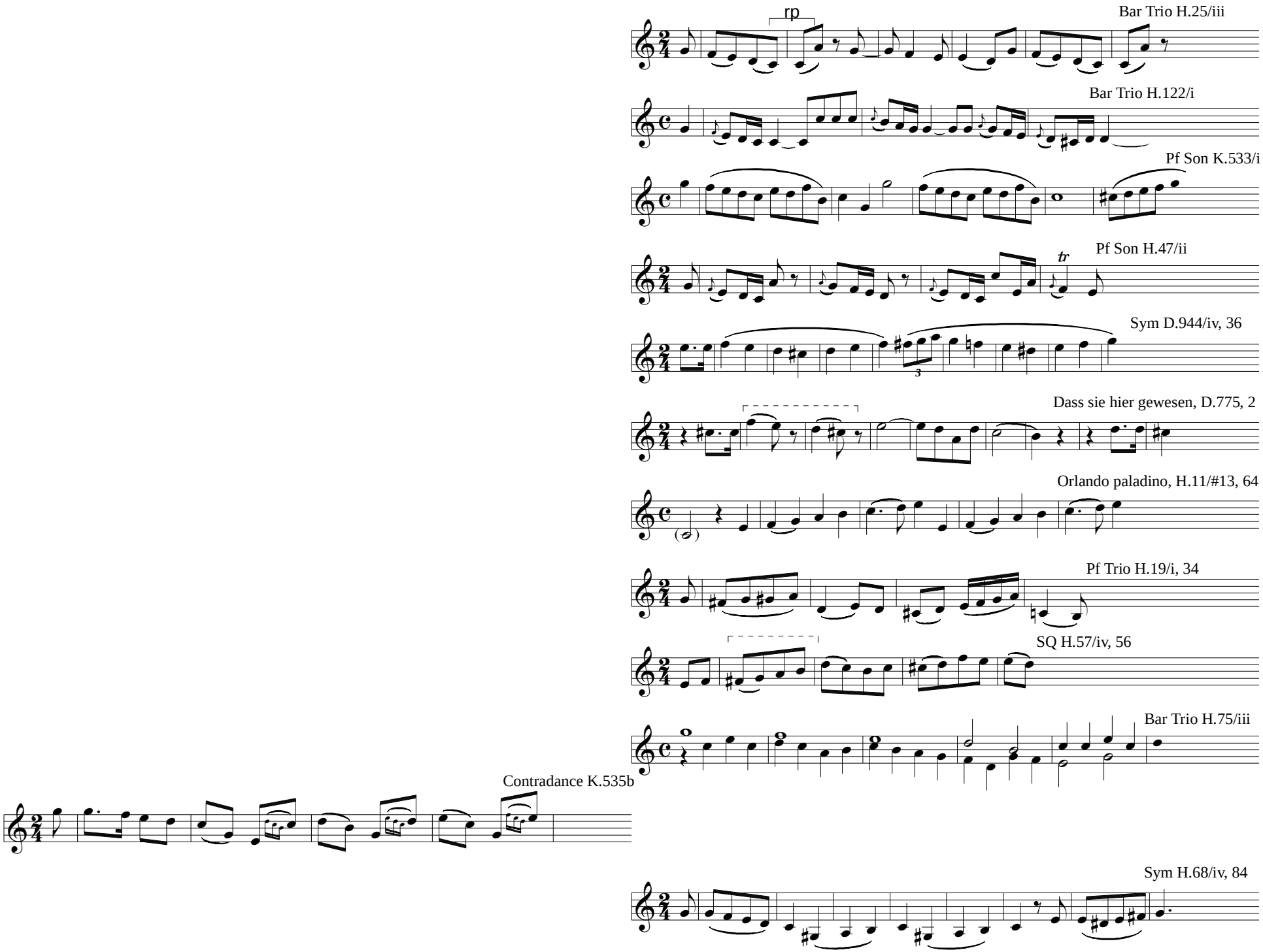
Pf Son K.309/iii
Bar Trio H.92/i
March K.214, 12
Orlando paladino, H.11/#51
Pf Trio H.12/iii
rp


rp
Bar Trio H.25/iii
Bar Trio H.122/i
Pf Son K.533/i
Pf Son H.47/ii
tr
Sym D.944/iv, 36
3
Dass sie hier gewesen, D.775, 2
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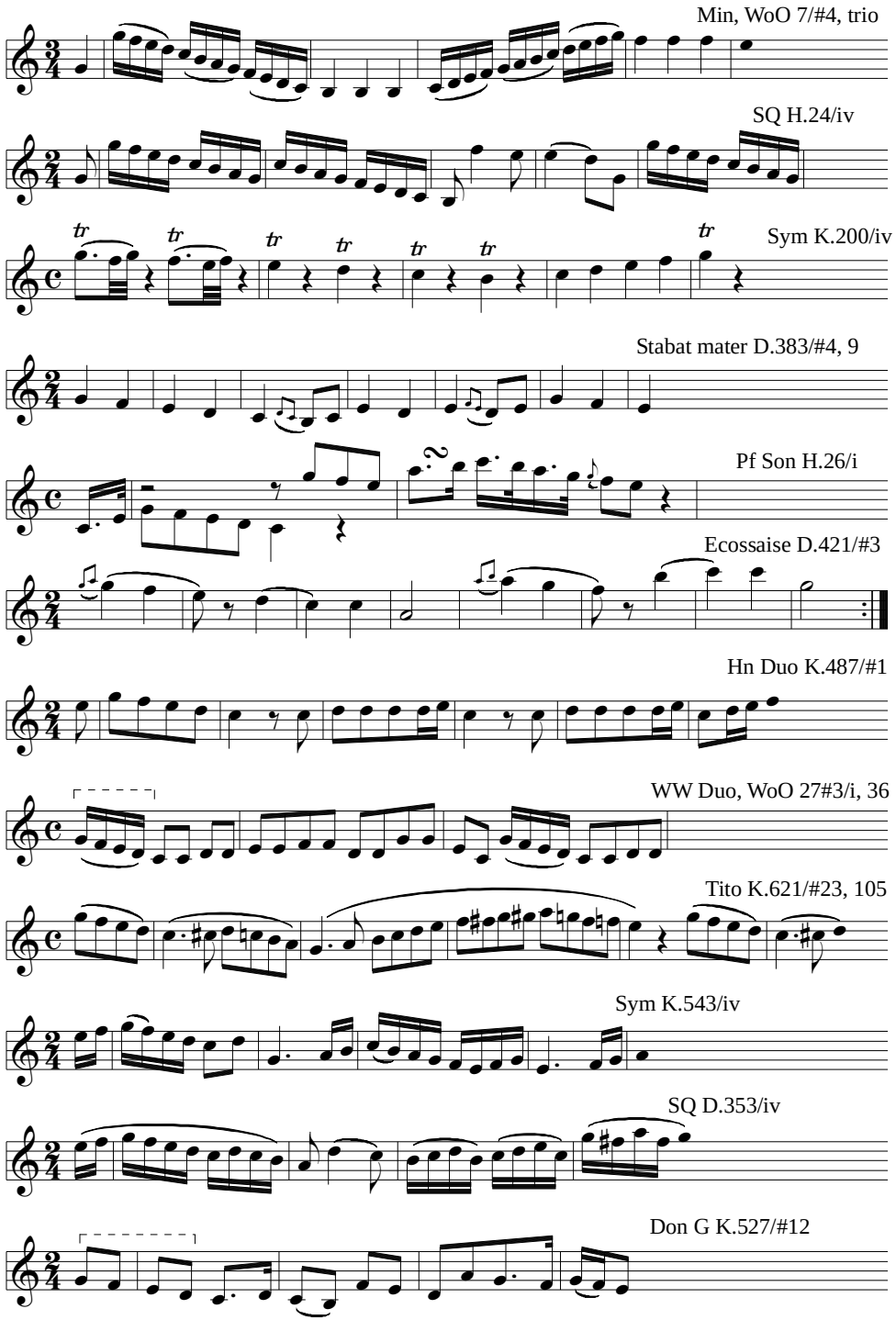
Pf Trio H.19/i, 34
SQ H.57/iv, 56
Bar Trio H.75/iii
Contradance K.535b
Sym H.68/iv, 84


Min, WoO 7/#4, trio
SQ H.24/iv
Sym K.200/iv
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Pf Son H.26/i
Ecossaise D.421/#3
Hn Duo K.487/#1
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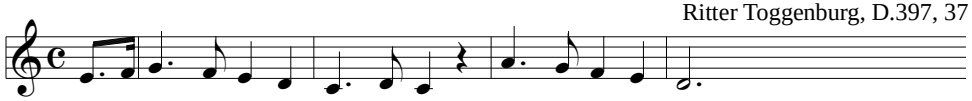
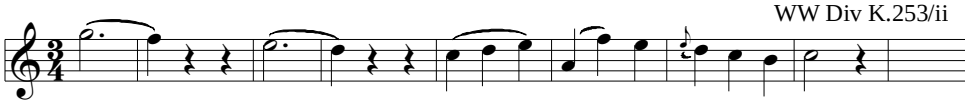
Tito K.621/#23, 105
Sym K.543/iv
SQ D.353/iv
Don G K.527/#12

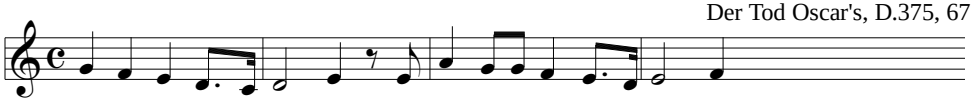
Ritter Toggenburg, D.397, 37



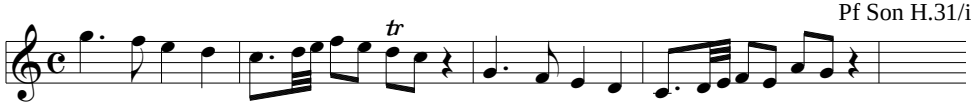
WW Div K.253/ii



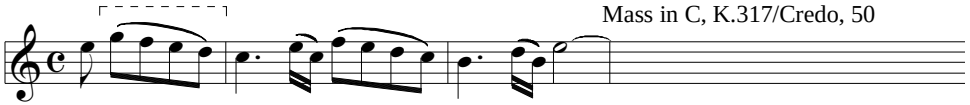
Der Tod Oscar's, D.375, 67



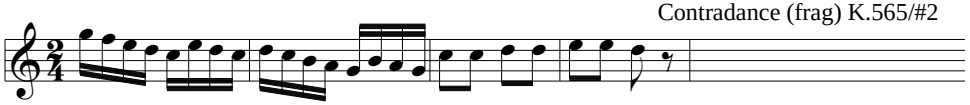
Pf Son H.31/i



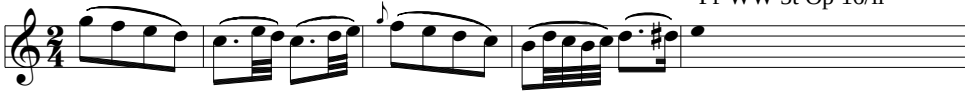
Mass in C, K.317/Credo, 50



Contradance (frag) K.565/#2

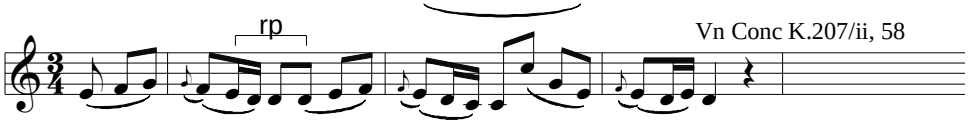


Pf-WW 5t Op 16/ii

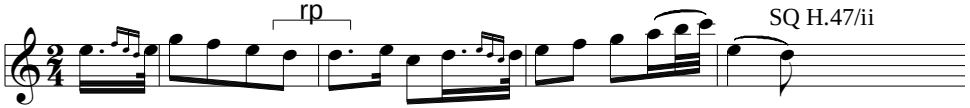


Sym K.543/iv, 41

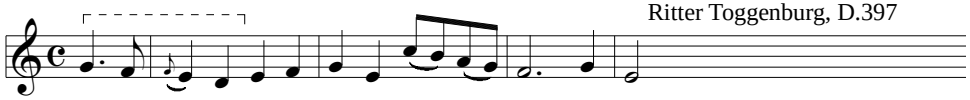
Vn Conc K.207/ii, 58



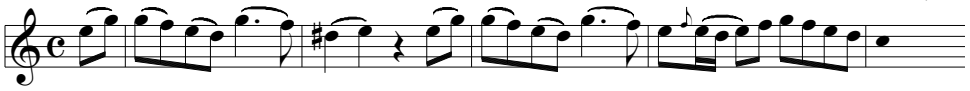
SQ H.47/ii

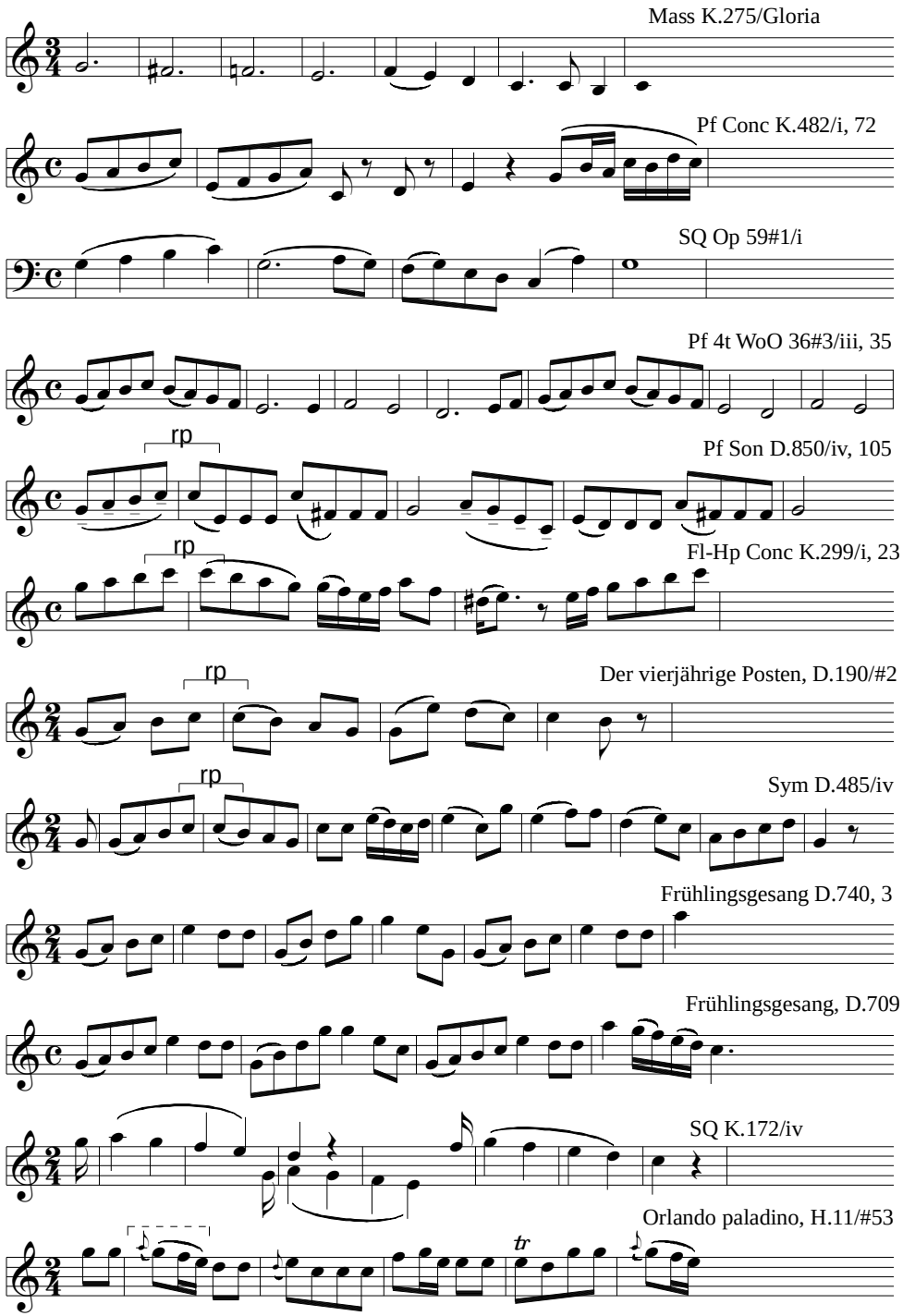


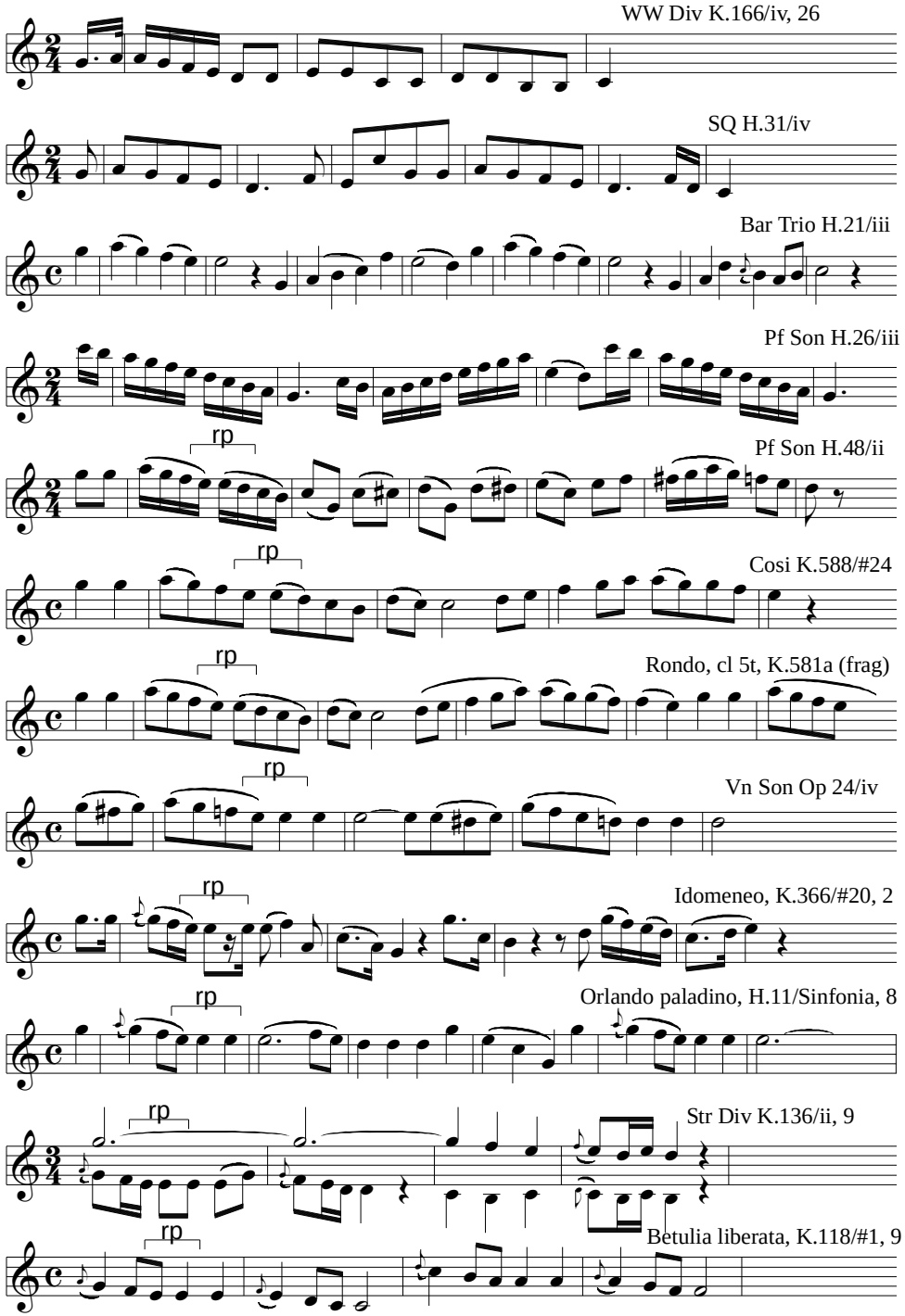
Ritter Toggenburg, D.397



Vn Conc K.207/i, 99




Mass K.275/Gloria
Pf Conc K.482/i, 72
SQ Op 59#1/i
Pf 4t WoO 36#3/iii, 35
rp
Pf Son D.850/iv, 105
rp
Fl-Hp Conc K.299/i, 23
rp
Der vierjährige Posten, D.190/#2
rp
Sym D.485/iv
Frühlingsgesang D.740, 3
Frühlingsgesang, D.709
SQ K.172/iv
Orlando paladino, H.11/#53
tr


WW Div K.166/iv, 26
SQ H.31/iv
Bar Trio H.21/iii
Pf Son H.26/iii
rp
Pf Son H.48/ii
rp
Cosi K.588/#24
rp
Rondo, cl 5t, K.581a (frag)
rp
Vn Son Op 24/iv
rp
Idomeneo, K.366/#20, 2
rp
Orlando paladino, H.11/Sinfonia, 8
rp
Str Div K.136/ii, 9
rp
Betulia liberata, K.118/#1, 9

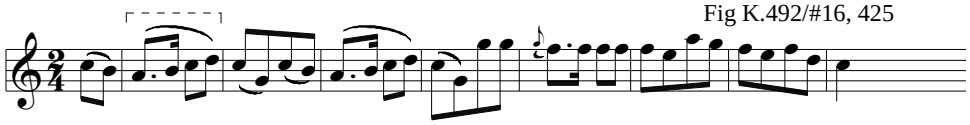
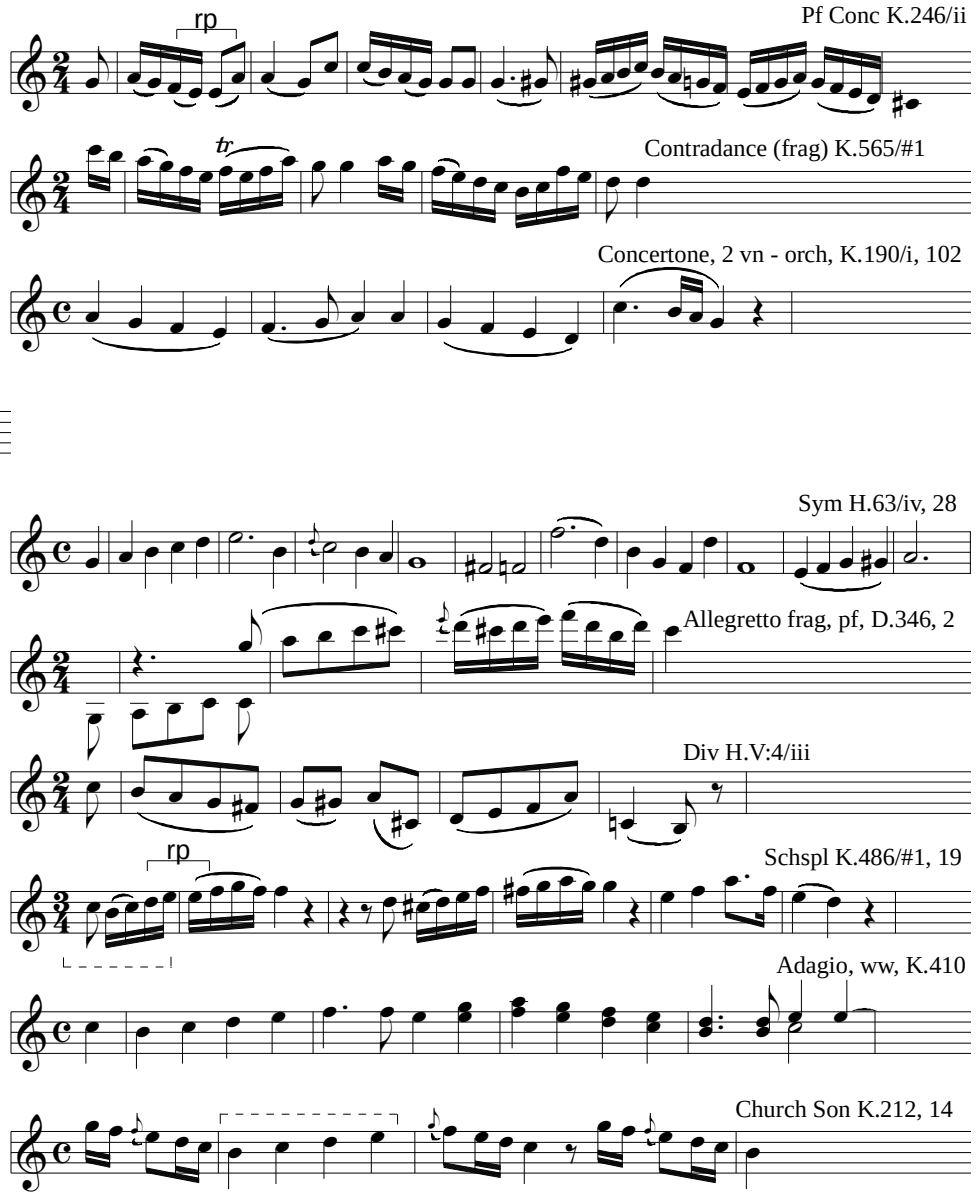
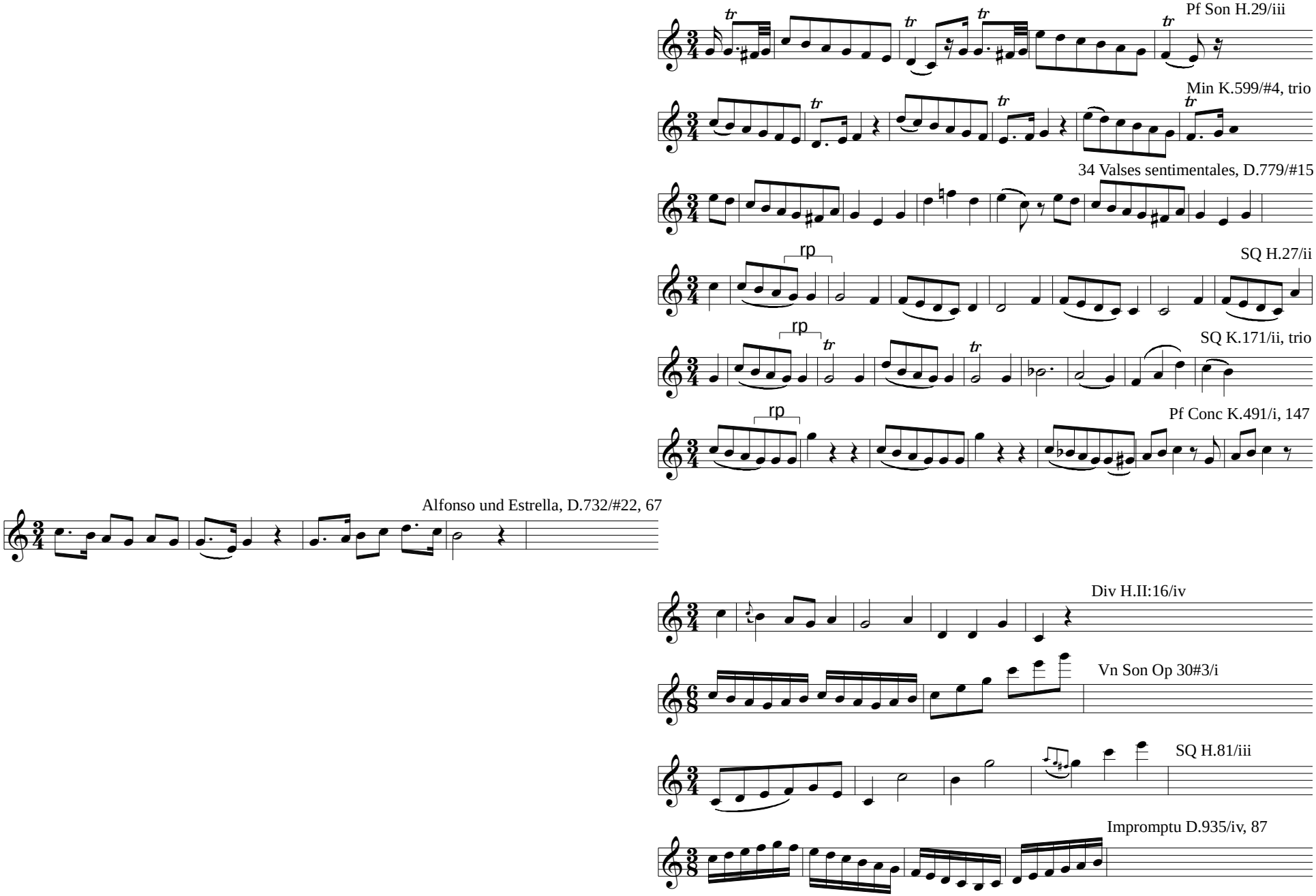


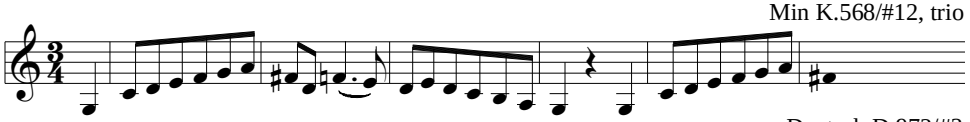
Fig K.492/#16, 425



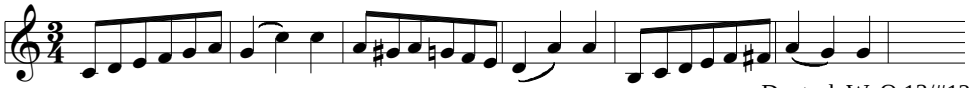
(Z3^K, 4-linear, triple-metered)



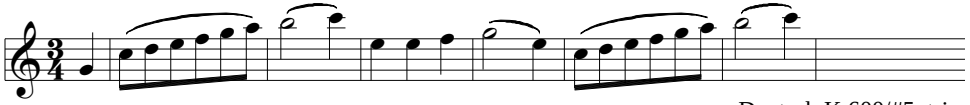
Min K.568/#12, trio



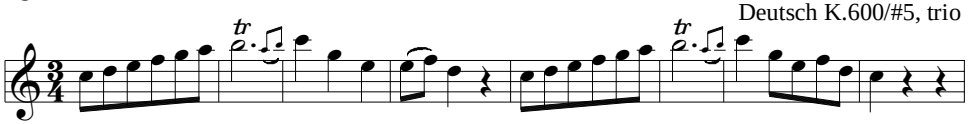
Deutsch D.972/#3



Deutsch WoO 13/#12

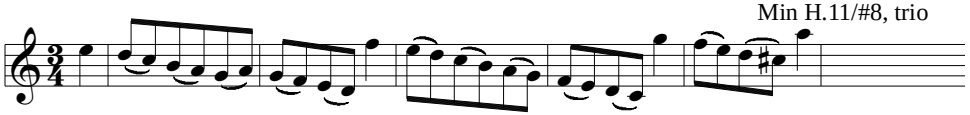


Deutsch K.600/#5, trio

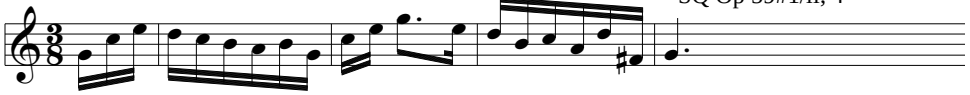


Pf Son D.664/iii

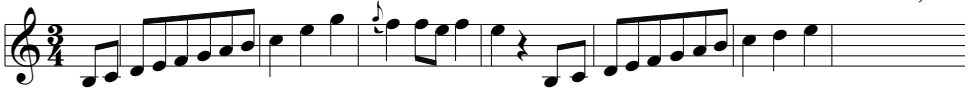
Min H.11/#8, trio



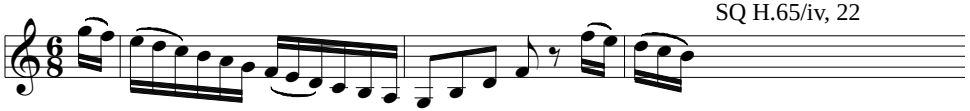
SQ Op 59#1/ii, 4



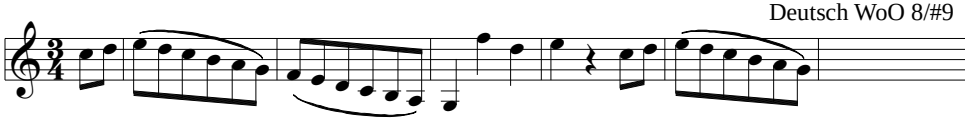
Deutsch WoO42/#6, trio



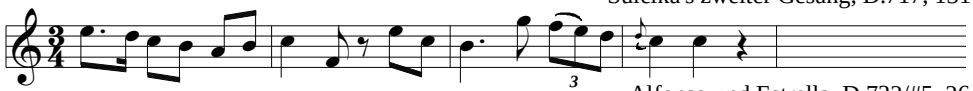
SQ H.65/iv, 22



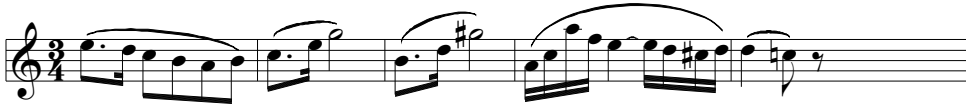
Deutsch WoO 8/#9



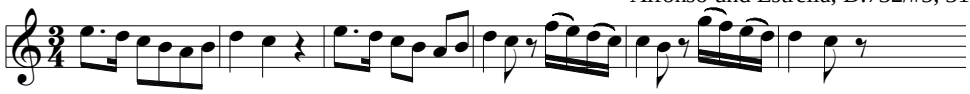
Suleika's zweiter Gesang, D.717, 131



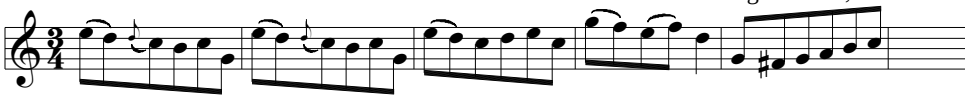
Alfonso und Estrella, D.732/#5, 26



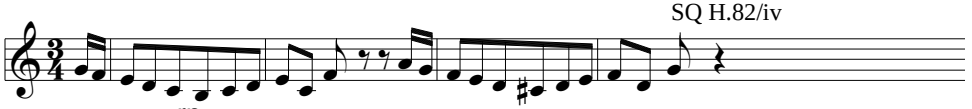
Alfonso und Estrella, D.732/#5, 31



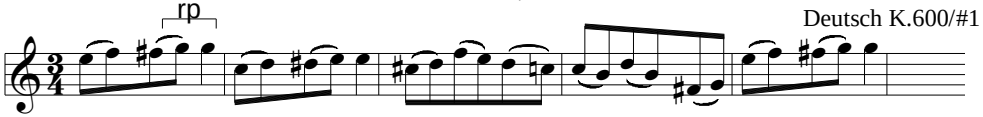
Mödlinger Dance, WoO 17/#1



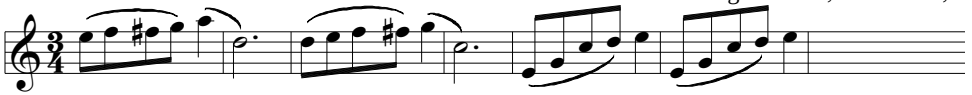
SQ H.82/iv



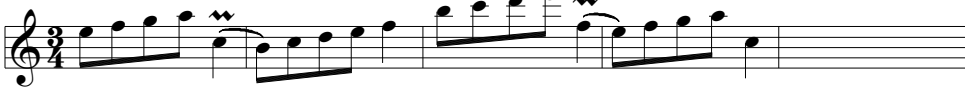
Deutsch K.600/#1



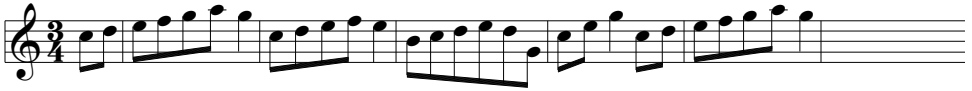
36 Originaltänze, D.365/#34, 3



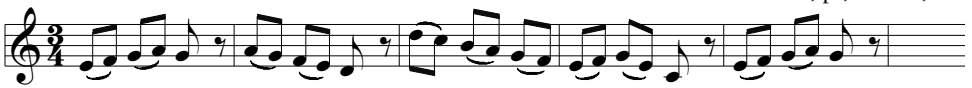
38 Dances, D.145/Ländler 14



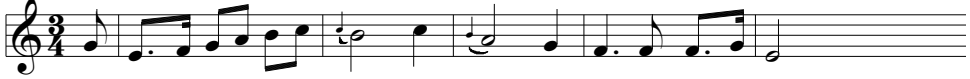
Ländler D.370/#6



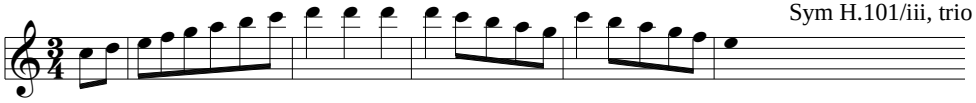
Min, pf, H.8/#4, trio



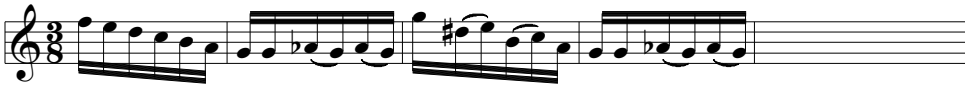
Gott im Frühling, D.448



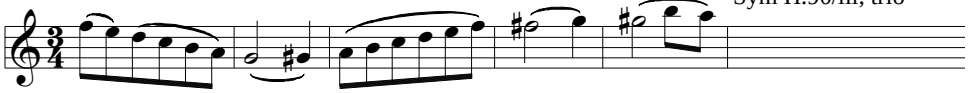
Sym H.101/iii, trio

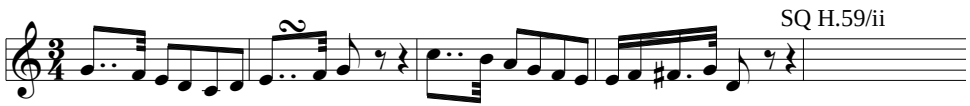


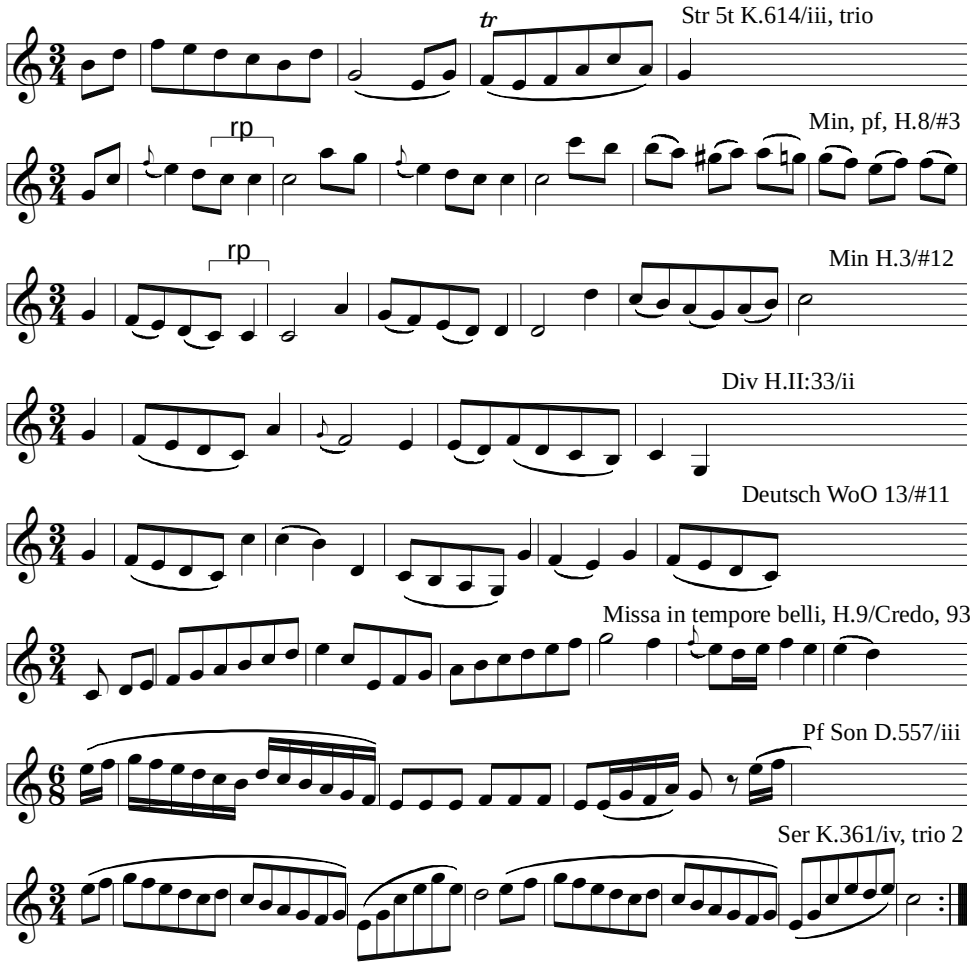
Mödlinger Dance, WoO 17/#10, trio

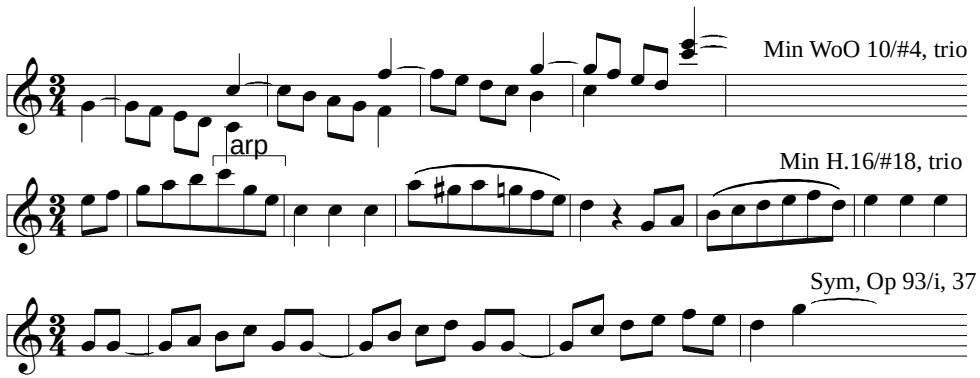


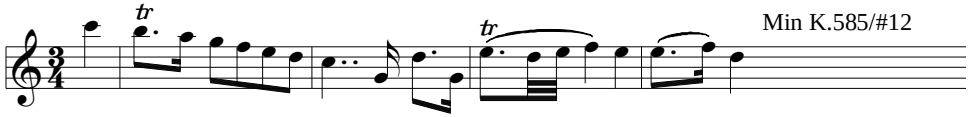
Sym H.90/iii, trio




SQ H.59/ii

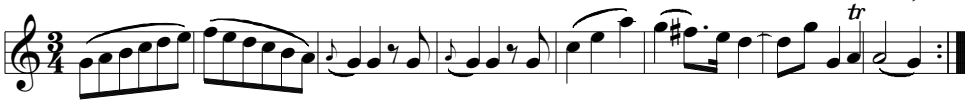

Str 5t K.614/iii, trio
tr
Min, pf, H.8/#3
rp
Min H.3/#12
rp
Div H.II:33/ii
Deutsch WoO 13/#11
Missa in tempore belli, H.9/Credo, 93
Pf Son D.557/iii
Ser K.361/iv, trio 2


Min WoO 10/#4, trio
arp
Min H.16/#18, trio
Sym, Op 93/i, 37

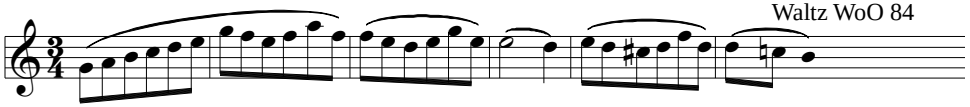


Min K.585/#12

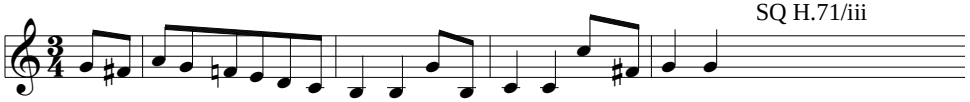
Div K.270/iii, trio



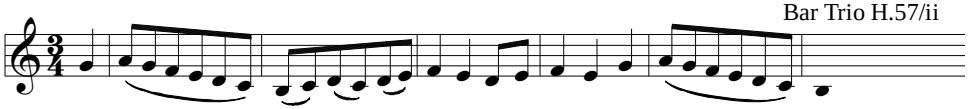
Waltz WoO 84



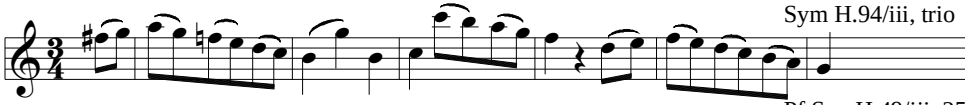
SQ H.71/iii



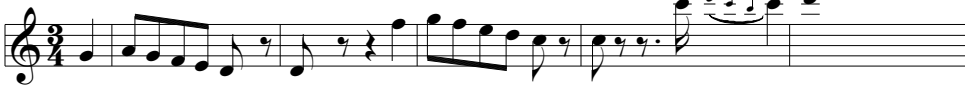
Bar Trio H.57/ii



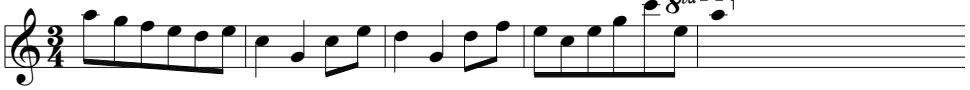
Sym H.94/iii, trio



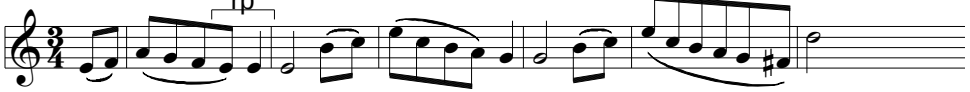
Pf Son H.49/iii, 25



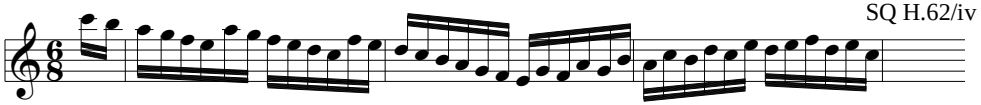
38 Dances, D.145/Ländler 17



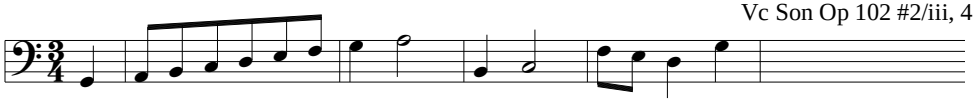
Pf Son H.43/ii, trio



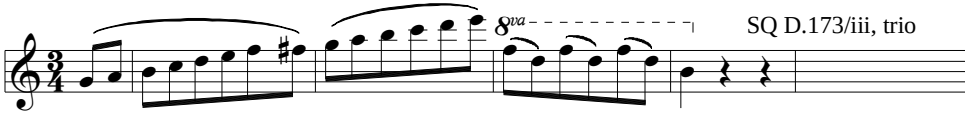
SQ H.62/iv



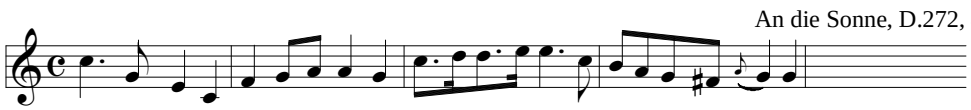
Vc Son Op 102 #2/iii, 4

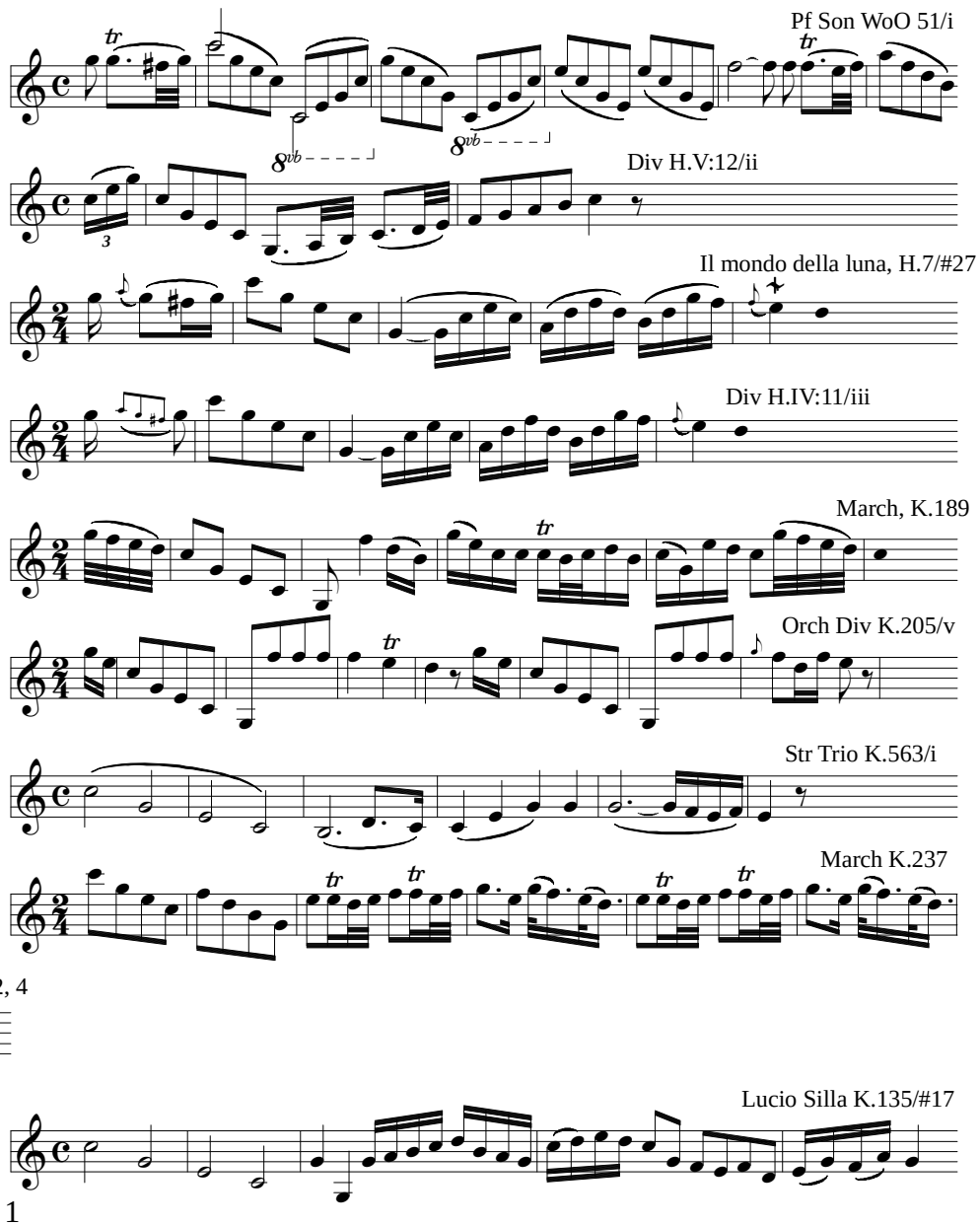


SQ D.173/iii, trio

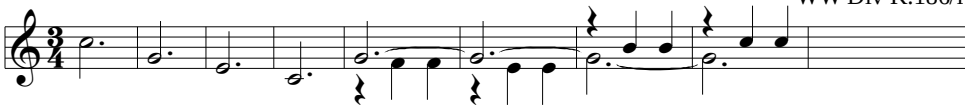


EX 9.1:
Z3^K, ARP

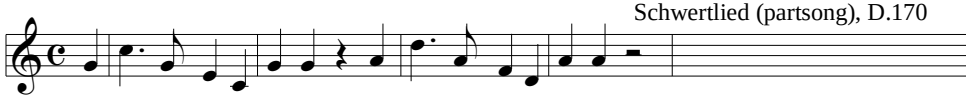

An die Sonne, D.272, 4


Pf Son WoO 51/i
Div H.V:12/ii
Il mondo della luna, H.7/#27
Div H.IV:11/iii
March, K.189
Orch Div K.205/v
Str Trio K.563/i
March K.237
Lucio Silla K.135/#17

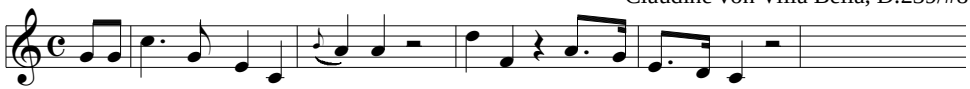
WW Div K.186/i



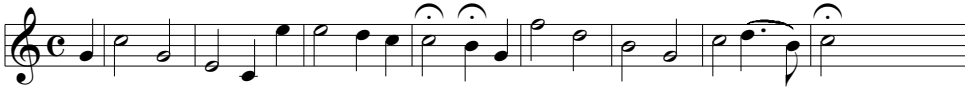
Schwertlied (partsong), D.170



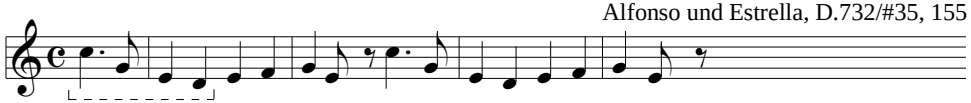
Claudine von Villa Bella, D.239/#8



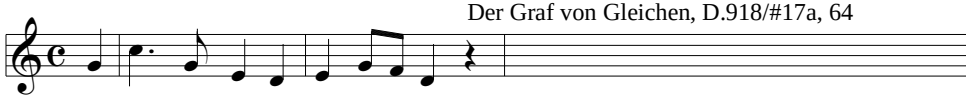
Die Ehre Gottes aus der Natur, Op 48/#4, 2



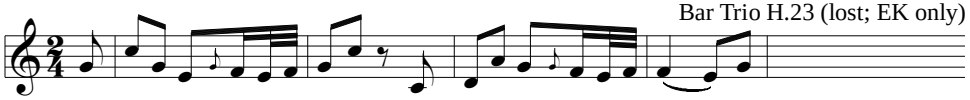
Alfonso und Estrella, D.732/#35, 155



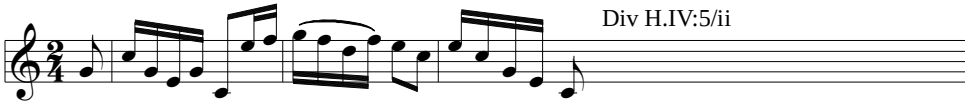
Der Graf von Gleichen, D.918/#17a, 64



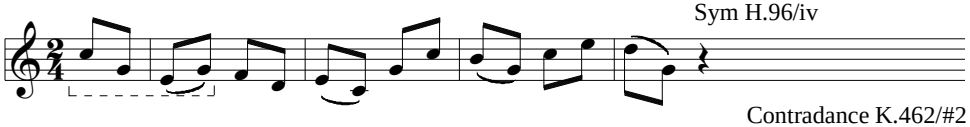
Bar Trio H.23 (lost; EK only)



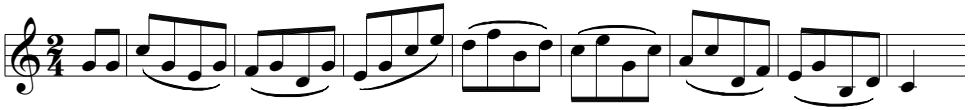
Div H.IV:5/ii



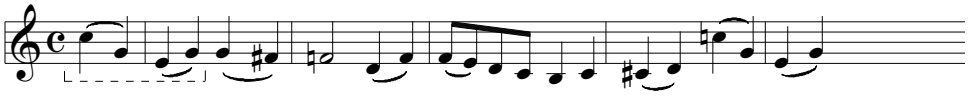
Sym H.96/iv



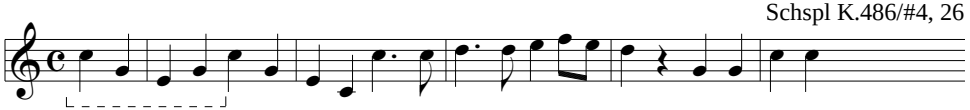
Contradance K.462/#2



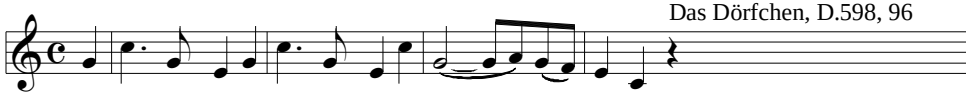
Contradance K.267/#2



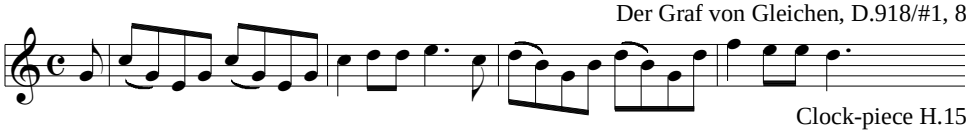
Schspl K.486/#4, 26



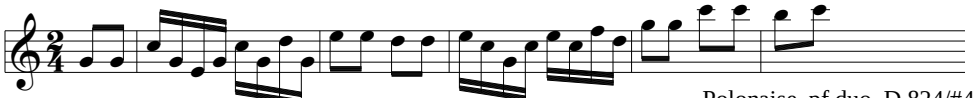
Das Dörfchen, D.598, 96



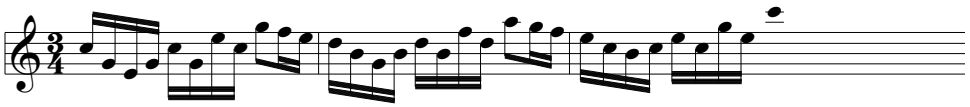
Der Graf von Gleichen, D.918/#1, 8



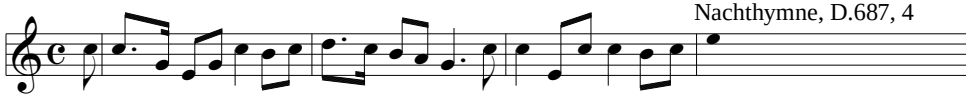
Clock-piece H.15



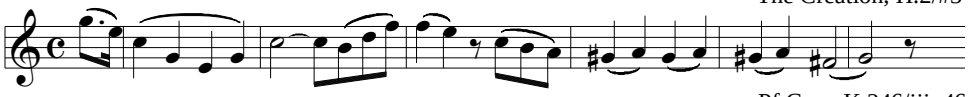
Polonaise, pf duo, D.824/#4



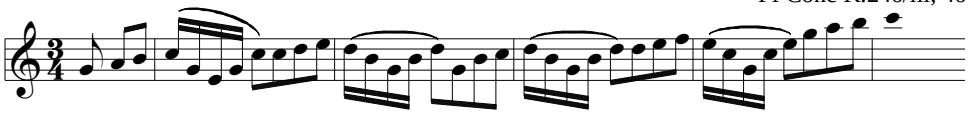
Nachthymne, D.687, 4



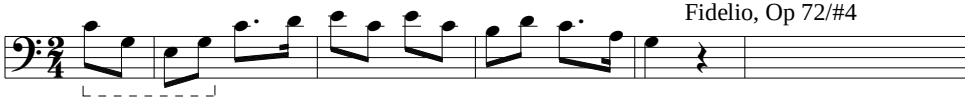
The Creation, H.2/#3



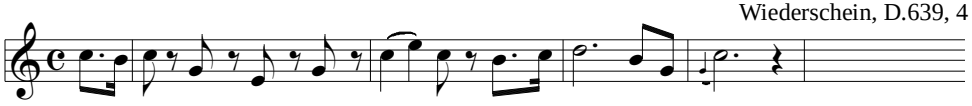
Pf Conc K.246/iii, 46



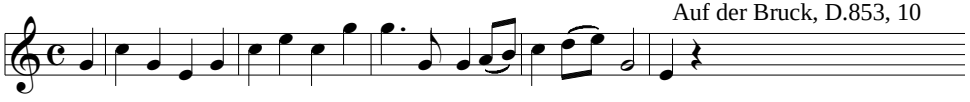
Fidelio, Op 72/#4



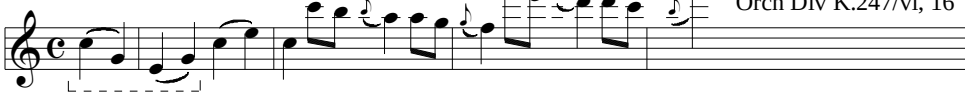
Wiederschein, D.639, 4



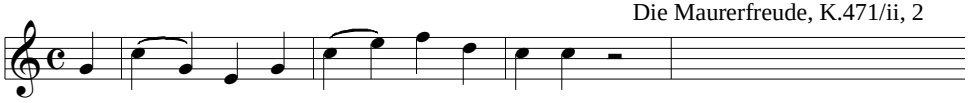
Auf der Bruck, D.853, 10



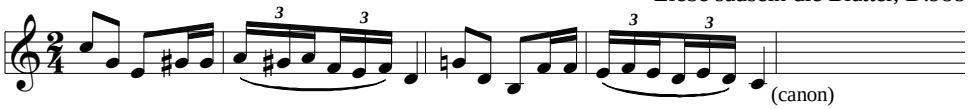
Orch Div K.247/vi, 16



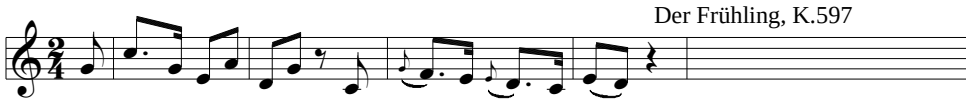
Die Maurerfreude, K.471/ii, 2



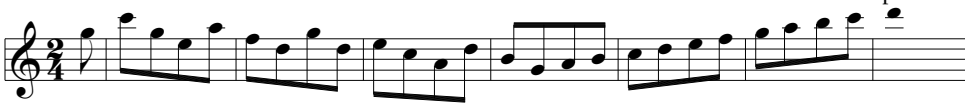
Liebe säuseln die Blätter, D.988



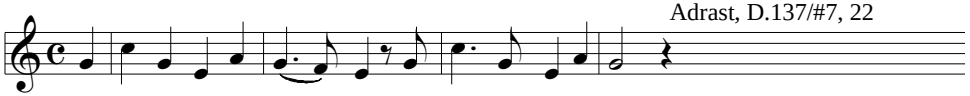
Der Frühling, K.597



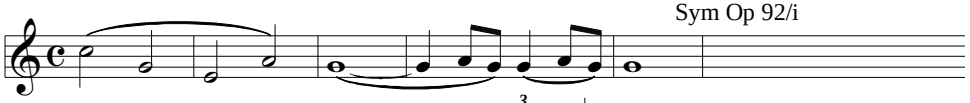
Str Trio Op 9#1/iv



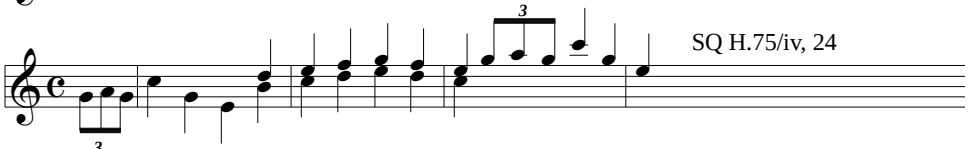
Adrast, D.137/#7, 22



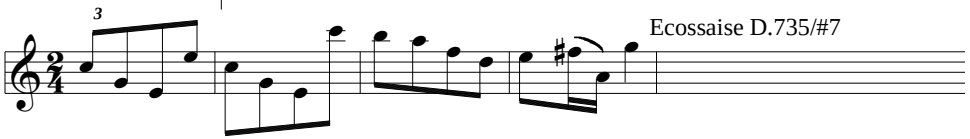
Sym Op 92/i



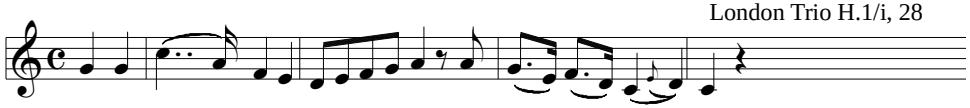
SQ H.75/iv, 24



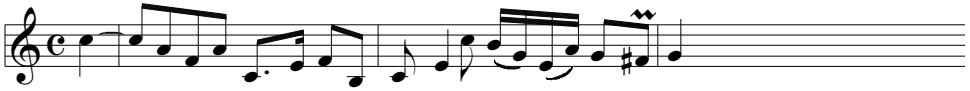
Ecossaise D.735/#7



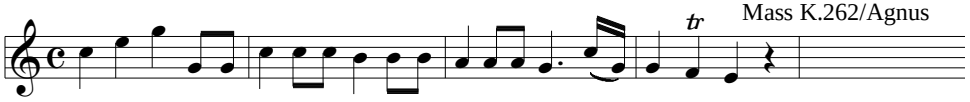
London Trio H.1/i, 28



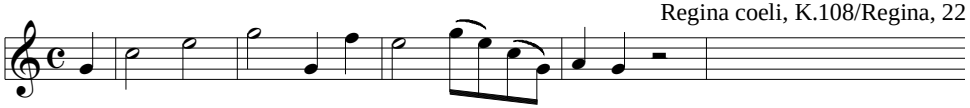
Bei dem Grabe meines Vaters, D.496



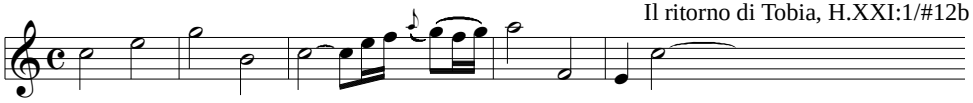
Mass K.262/Agnus

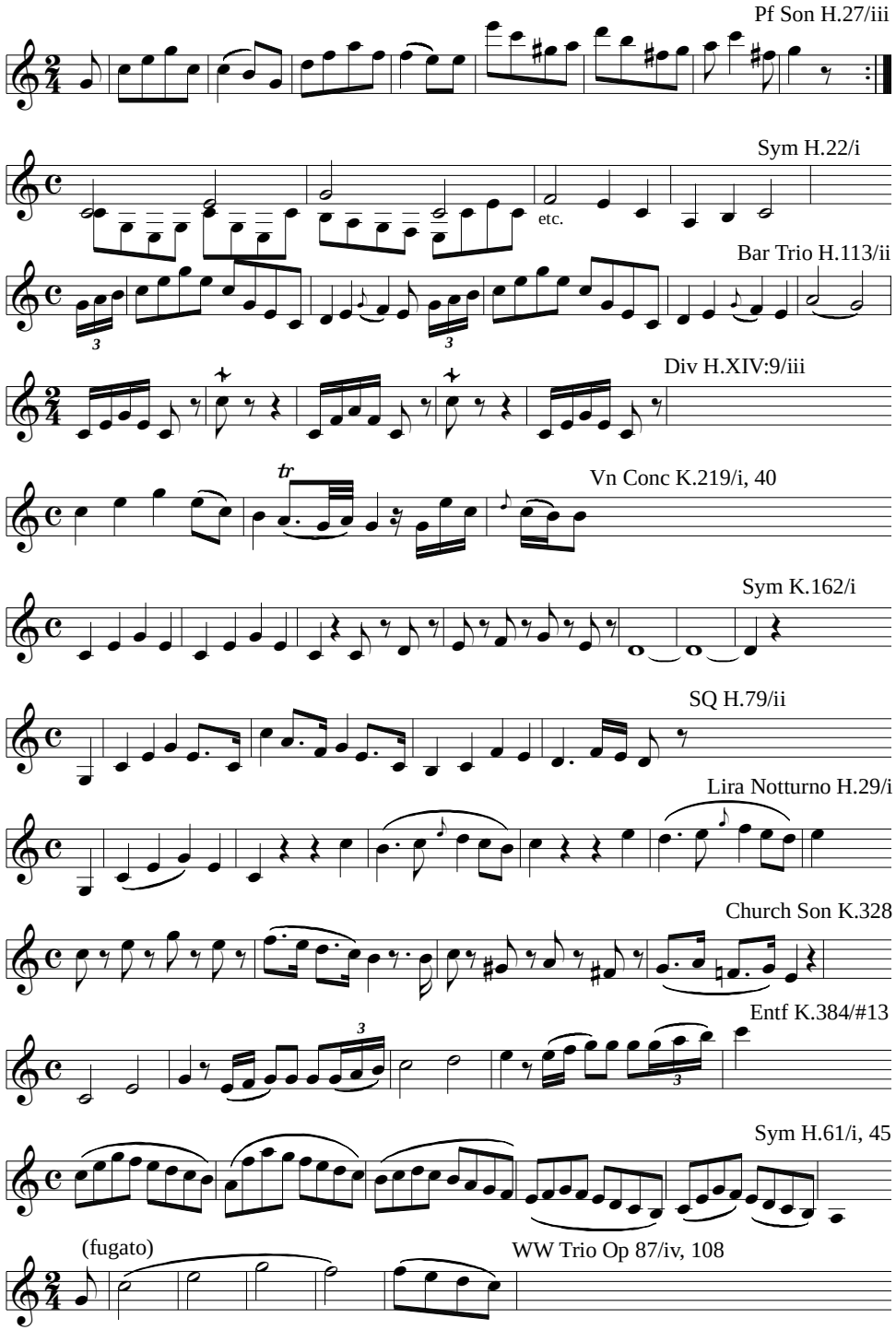


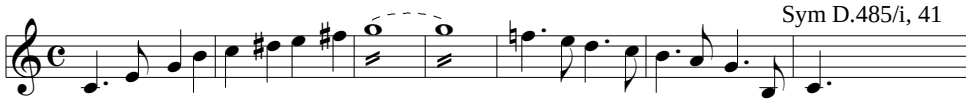
Regina coeli, K.108/Regina, 22



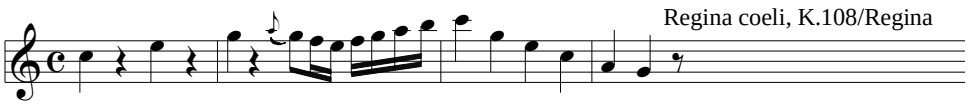
Il ritorno di Tobia, H.XXI:1/#12b



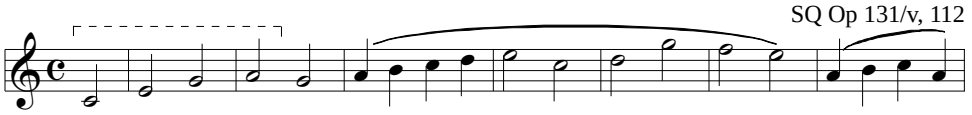

Pf Son H.27/iii
Sym H.22/i
etc.
Bar Trio H.113/ii
Div H.XIV:9/iii
Vn Conc K.219/i, 40
Sym K.162/i
SQ H.79/ii
Lira Notturno H.29/i
Church Son K.328
Entf K.384/#13
Sym H.61/i, 45
(fugato)
WW Trio Op 87/iv, 108



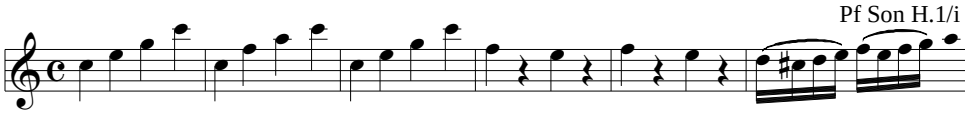
Sym D.485/i, 41



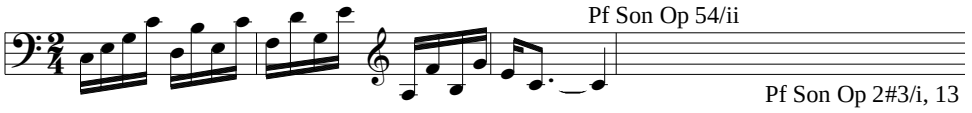
Regina coeli, K.108/Regina



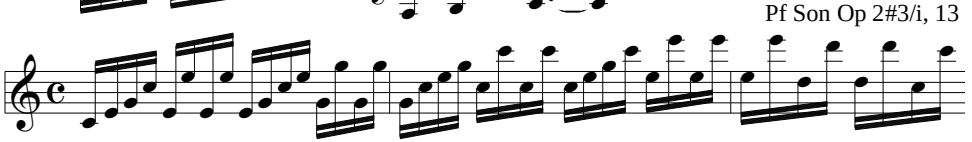
SQ Op 131/v, 112



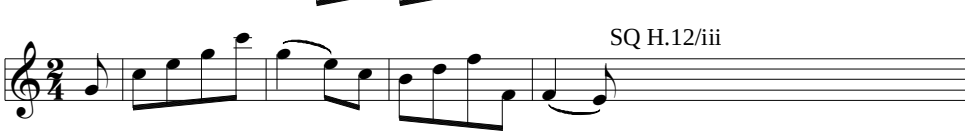
Pf Son H.1/i



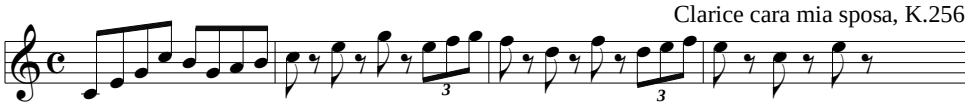
Pf Son Op 54/ii



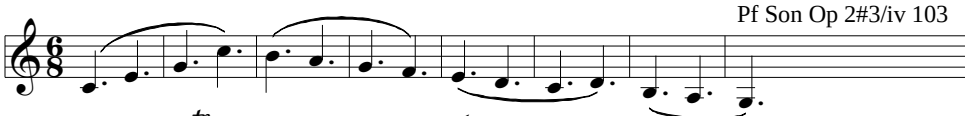
Pf Son Op 2#3/i, 13



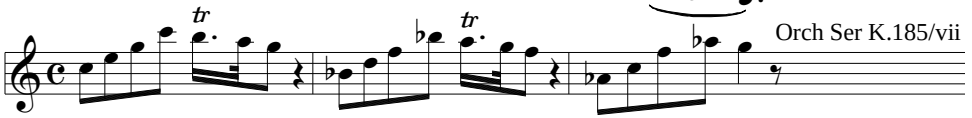
SQ H.12/iii



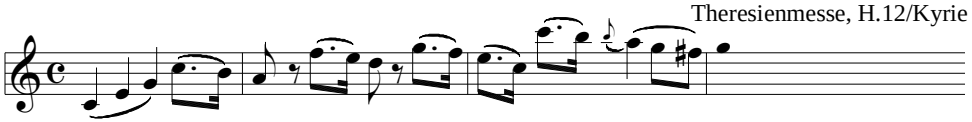
Clarice cara mia sposa, K.256



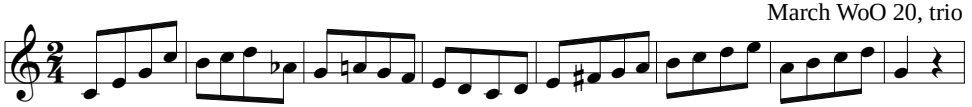
Pf Son Op 2#3/iv 103



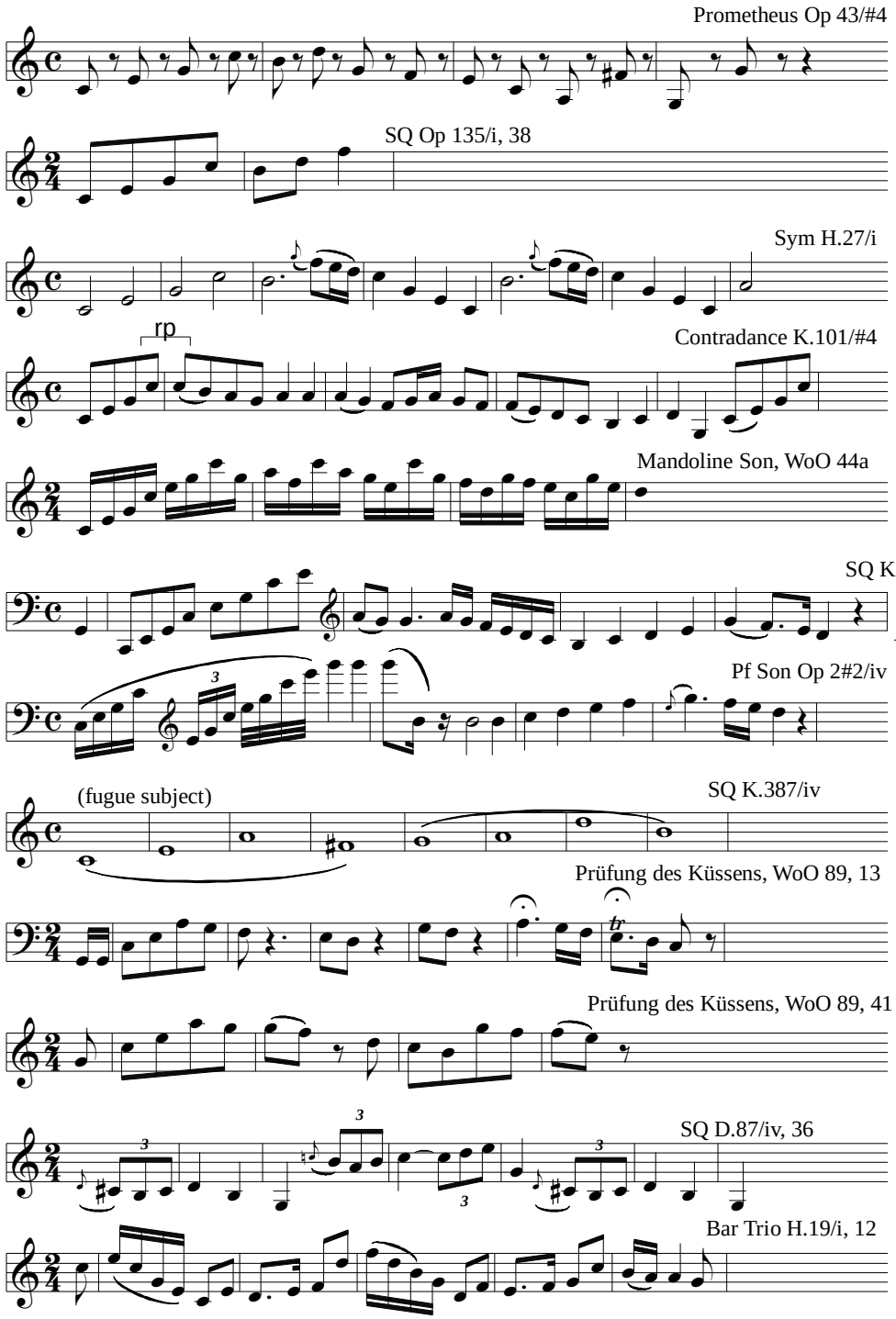
Orch Ser K.185/vii

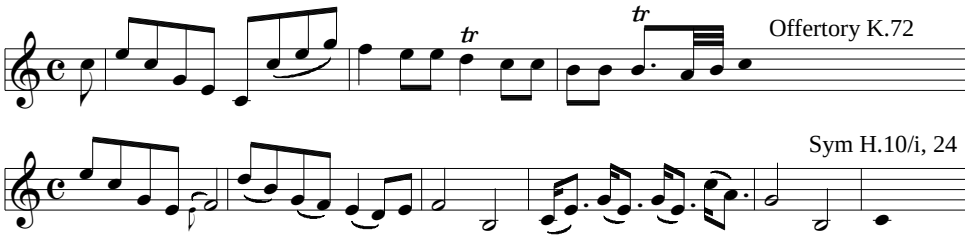


Theresienmesse, H.12/Kyrie

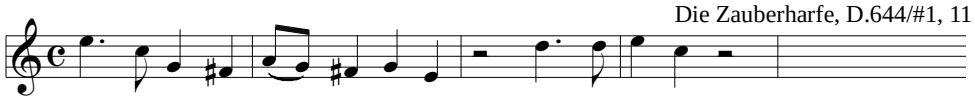


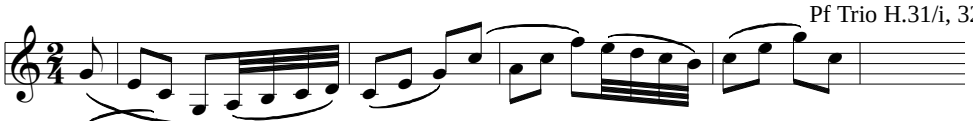
March WoO 20, trio

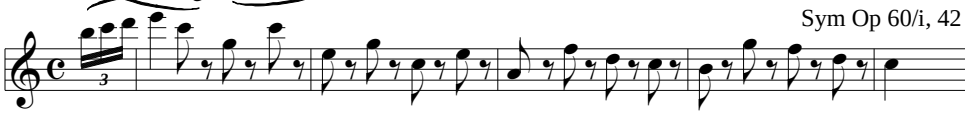

Prometheus Op 43/#4
SQ Op 135/i, 38
Sym H.27/i
rp
Contradance K.101/#4
Mandoline Son, WoO 44a
SQ K.590/i, 31
Pf Son Op 2#2/iv
(fugue subject)
SQ K.387/iv
Prüfung des Küssens, WoO 89, 13
Prüfung des Küssens, WoO 89, 41
SQ D.87/iv, 36
Bar Trio H.19/i, 12

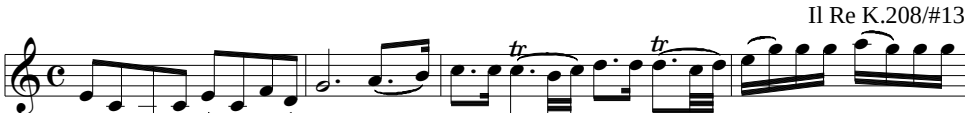

Offertory K.72

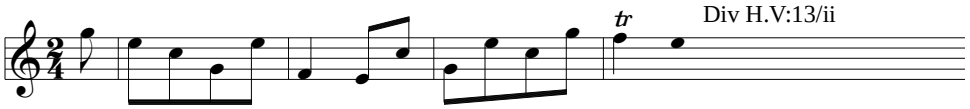
Sym H.10/i, 24

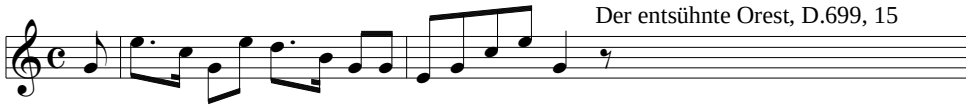

Die Zauberharfe, D.644/#1, 11

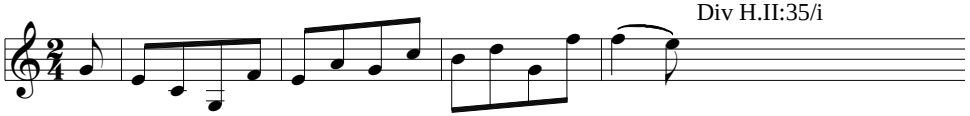

Pf Trio H.31/i, 32

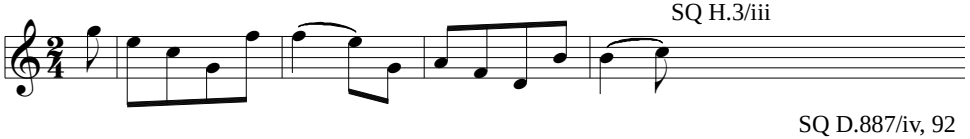

Sym Op 60/i, 42

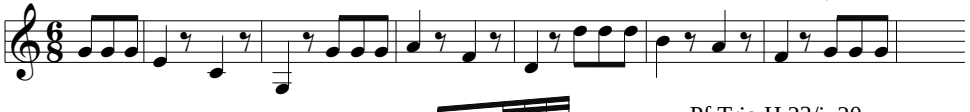

Il Re K.208/#13

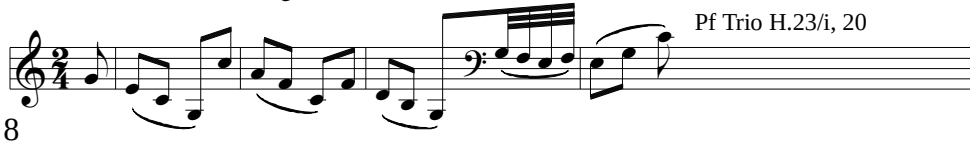

Div H.V:13/ii


Der entsühnte Orest, D.699, 15

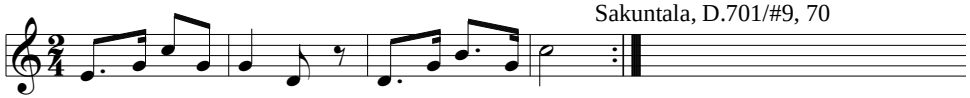

Div H.II:35/i


SQ H.3/iii

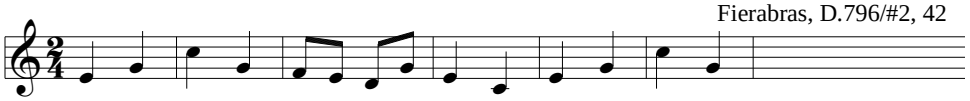

SQ D.887/iv, 92


Pf Trio H.23/i, 20

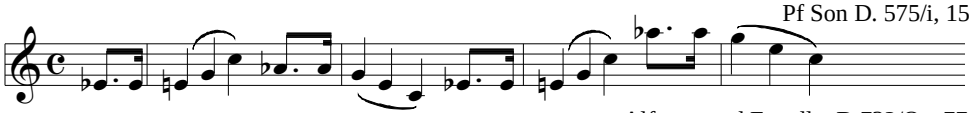
Sakuntala, D.701/#9, 70



Fierabras, D.796/#2, 42

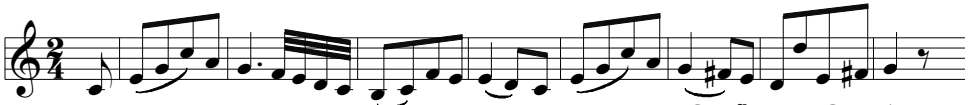


Pf Son D. 575/i, 15

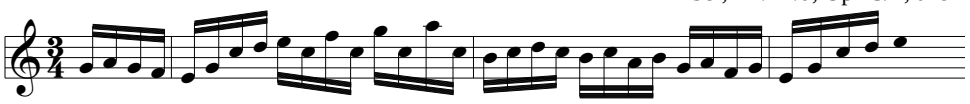


Alfonso und Estrella, D.732/Ov, 77

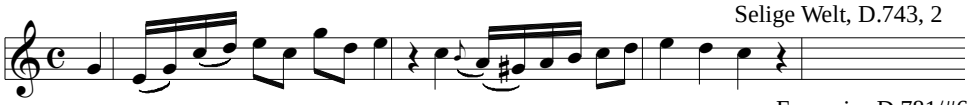
Bar Trio H.116/i



Ser, fl-vn-va, Op 25/ii, trio 1

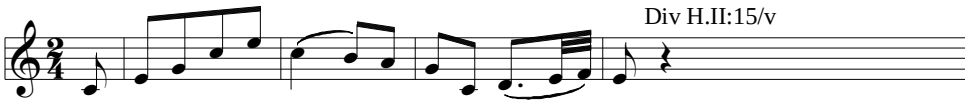


Selige Welt, D.743, 2

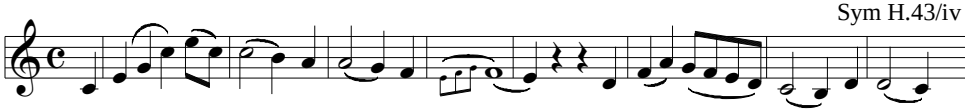


Ecossaise D.781/#6

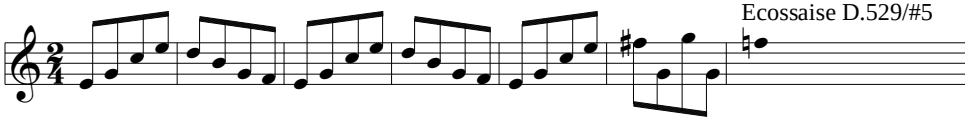
Div H.II:15/v



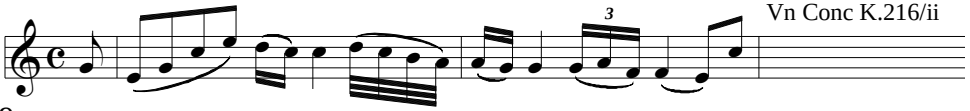
Sym H.43/iv

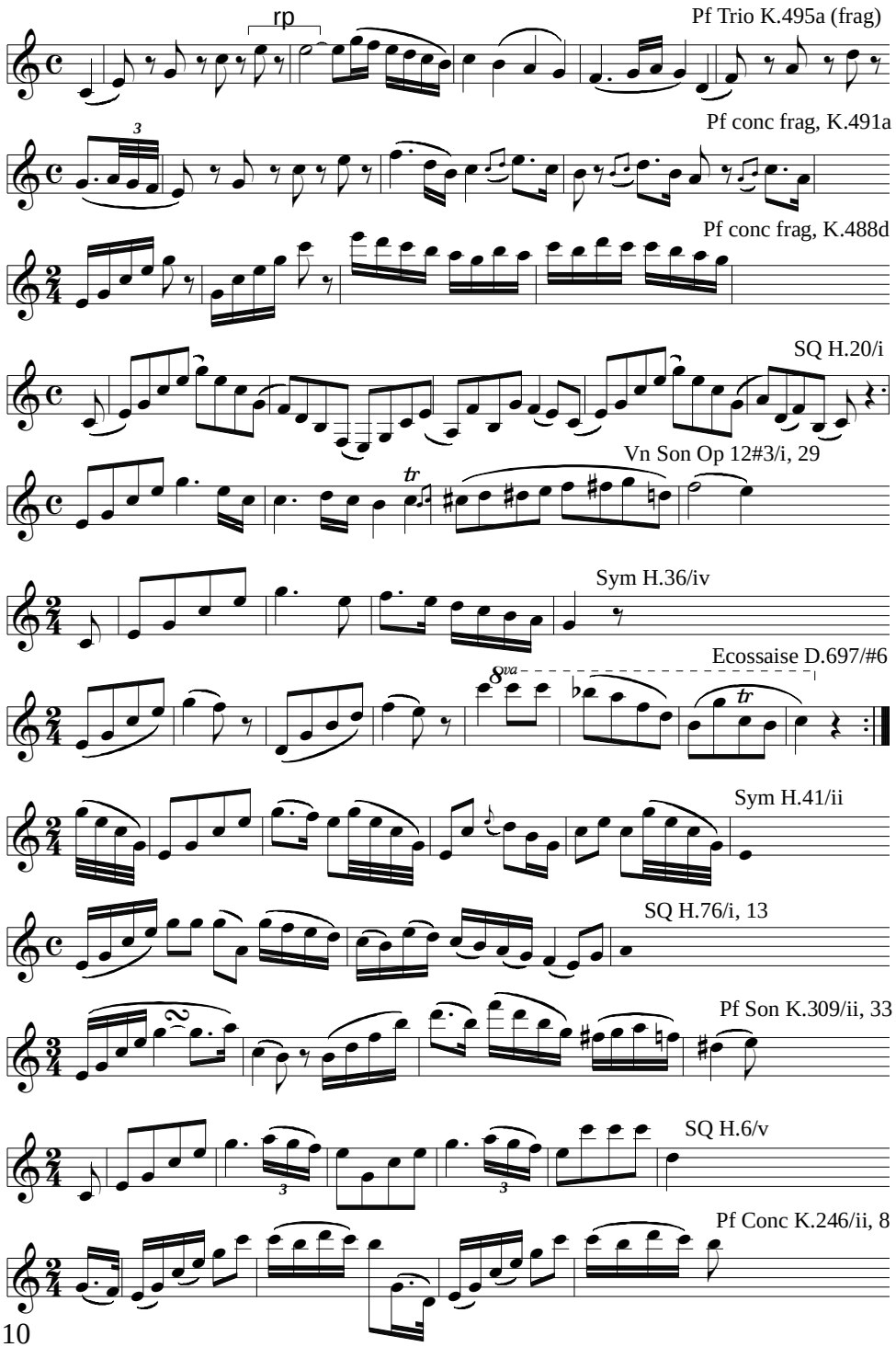


Ecossaise D.529/#5

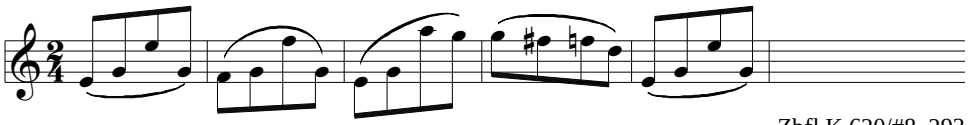


Vn Conc K.216/ii

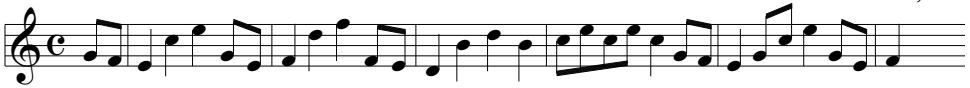



rp
Pf Trio K.495a (frag)
Pf conc frag, K.491a
Pf conc frag, K.488d
SQ H.20/i
Vn Son Op 12#3/i, 29
Sym H.36/iv
Ecossaise D.697/#6
Sym H.41/ii
SQ H.76/i, 13
Pf Son K.309/ii, 33
SQ H.6/v
Pf Conc K.246/ii, 8

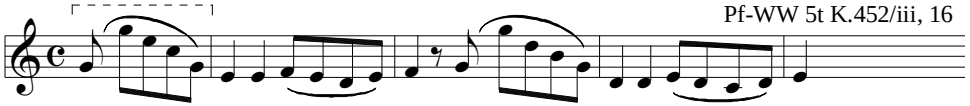
Dance D.145/Ecossaise 2



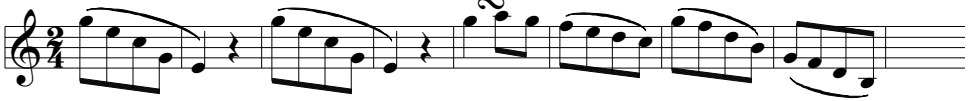
Zbfl K.620/#8, 293



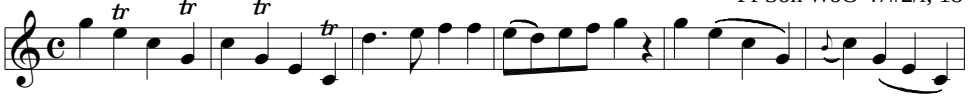
Pf-WW 5t K.452/iii, 16



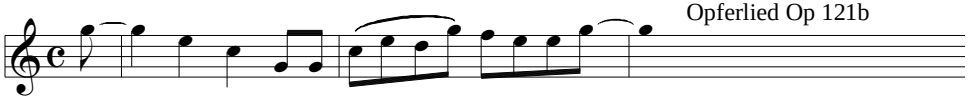
Ecossaise WoO 83/#2



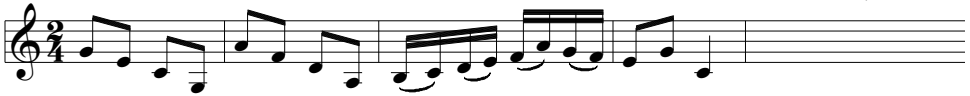
Pf Son WoO 47#2/i, 18



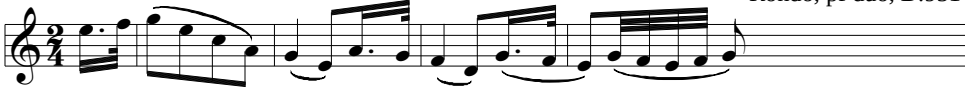
Opferlied Op 121b



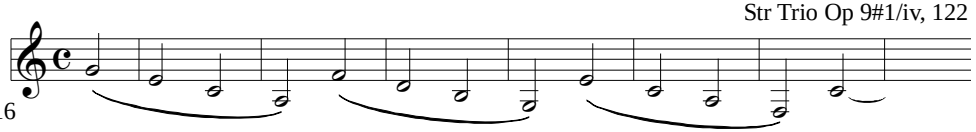
Der Graf von Gleichen, D.918/#9



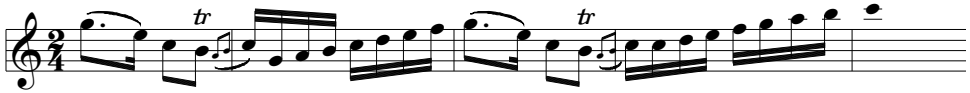
Rondo, pf duo, D.951



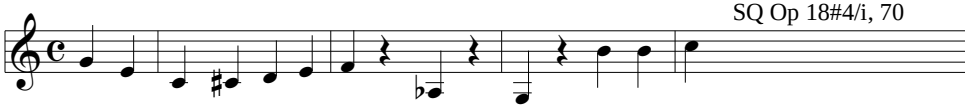
Str Trio Op 9#1/iv, 122



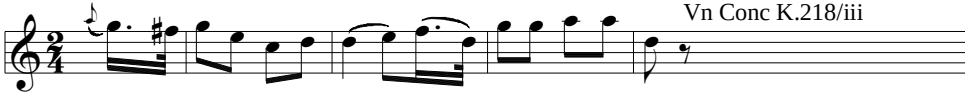
Prometheus Op 43/#1, 16



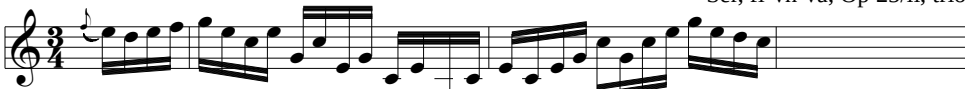
SQ Op 18#4/i, 70



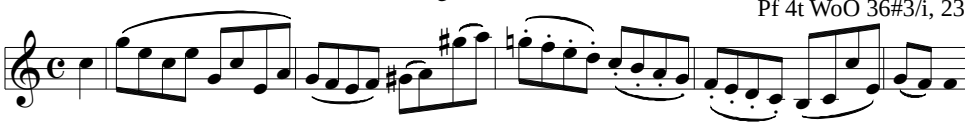
Vn Conc K.218/iii



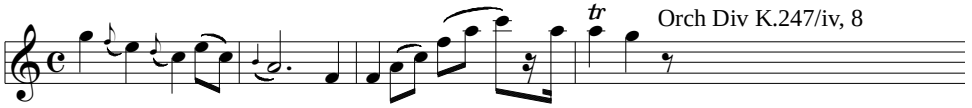
Ser, fl-vn-va, Op 25/ii, trio 2



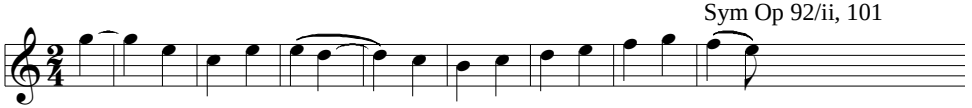
Pf 4t WoO 36#3/i, 23



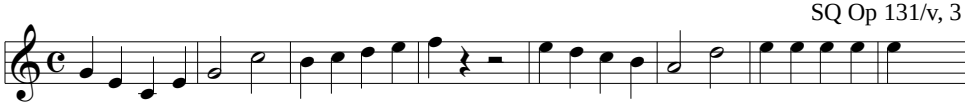
Orch Div K.247/iv, 8



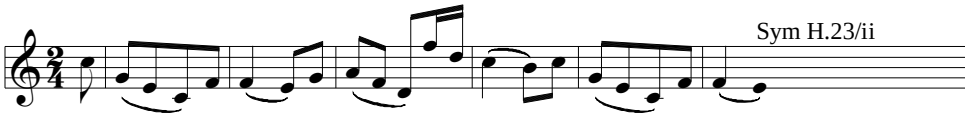
Sym Op 92/ii, 101



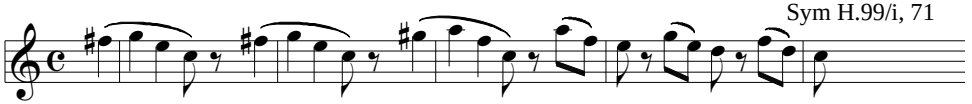
SQ Op 131/v, 3



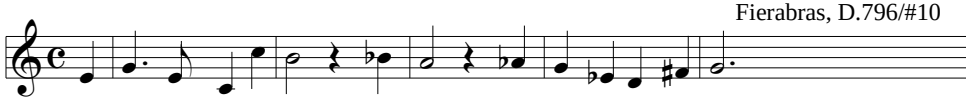
Sym H.23/ii



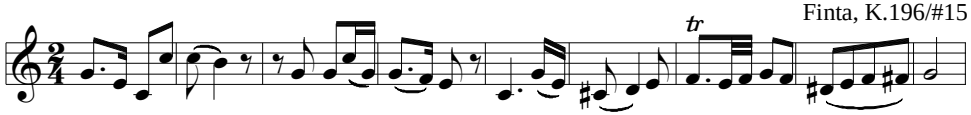
Sym H.99/i, 71



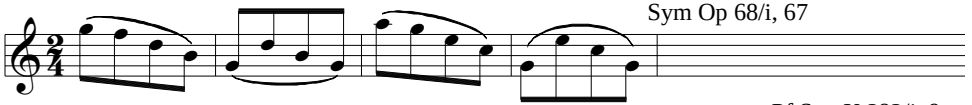
Fierabras, D.796/#10



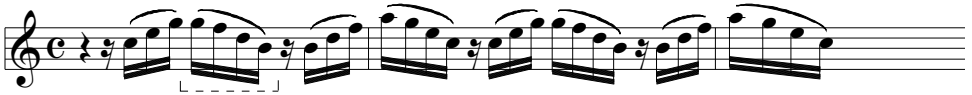
Finta, K.196/#15



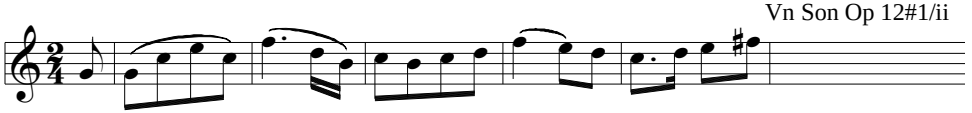
Sym Op 68/i, 67



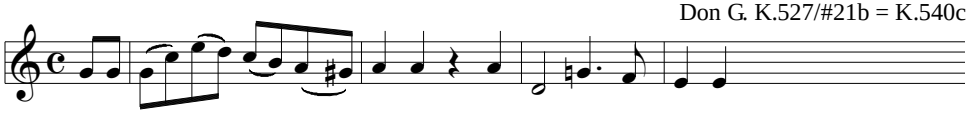
Pf Son K.282/i, 9



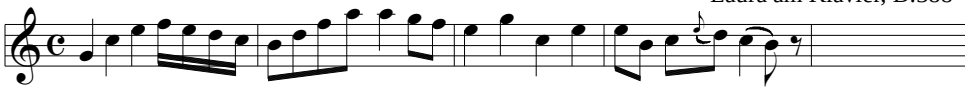
Vn Son Op 12#1/ii



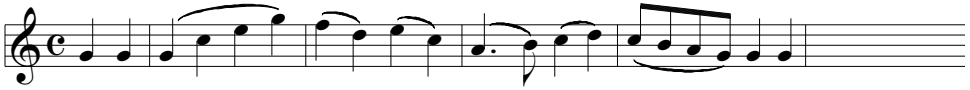
Don G. K.527/#21b = K.540c



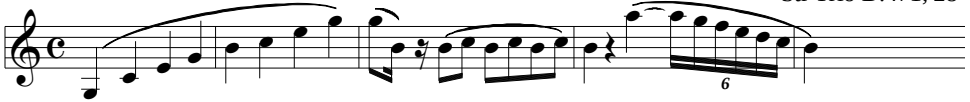
Laura am Klavier, D.388



Pf-WW 5t K.452/iii

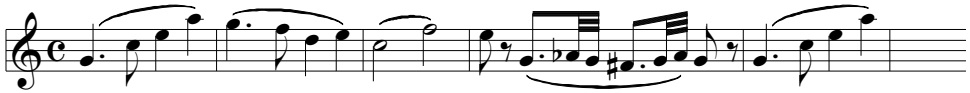


Str Trio D.471, 28

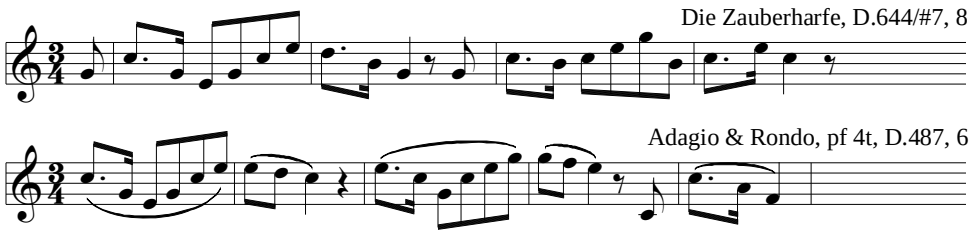


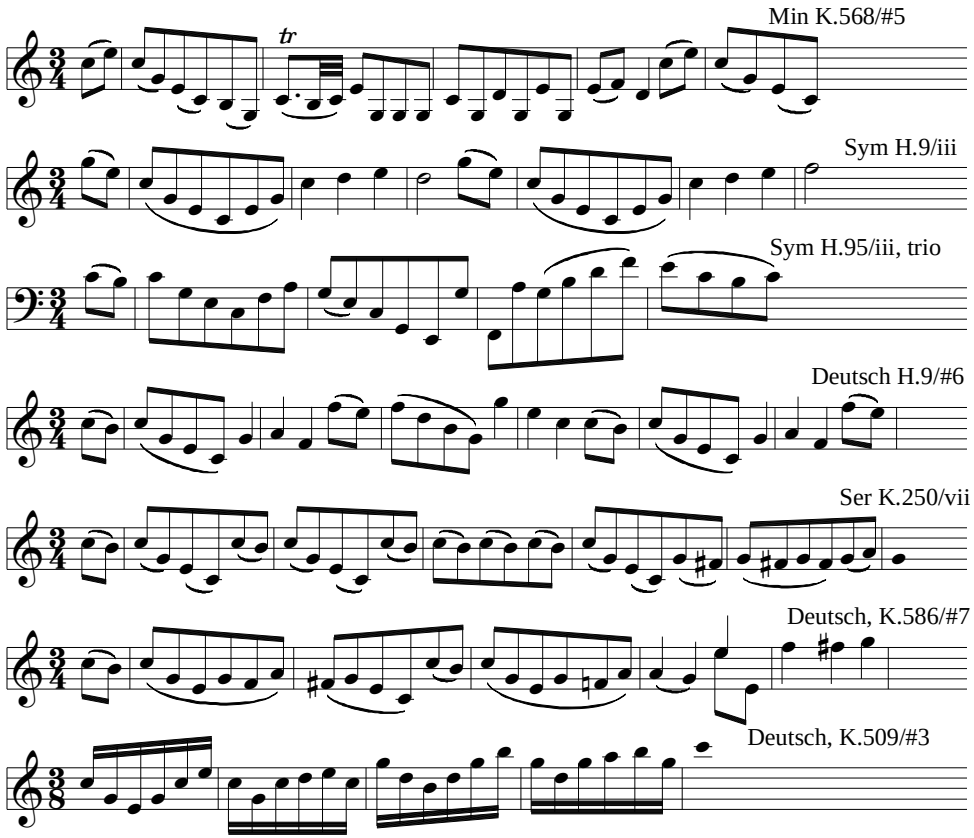
WW 6t Op 71/ii

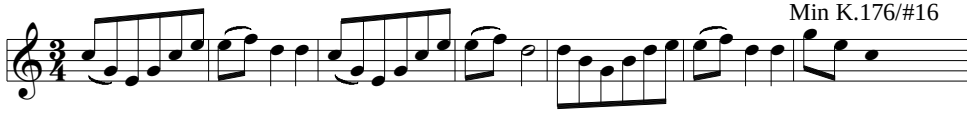
Pf Son D.784/ii

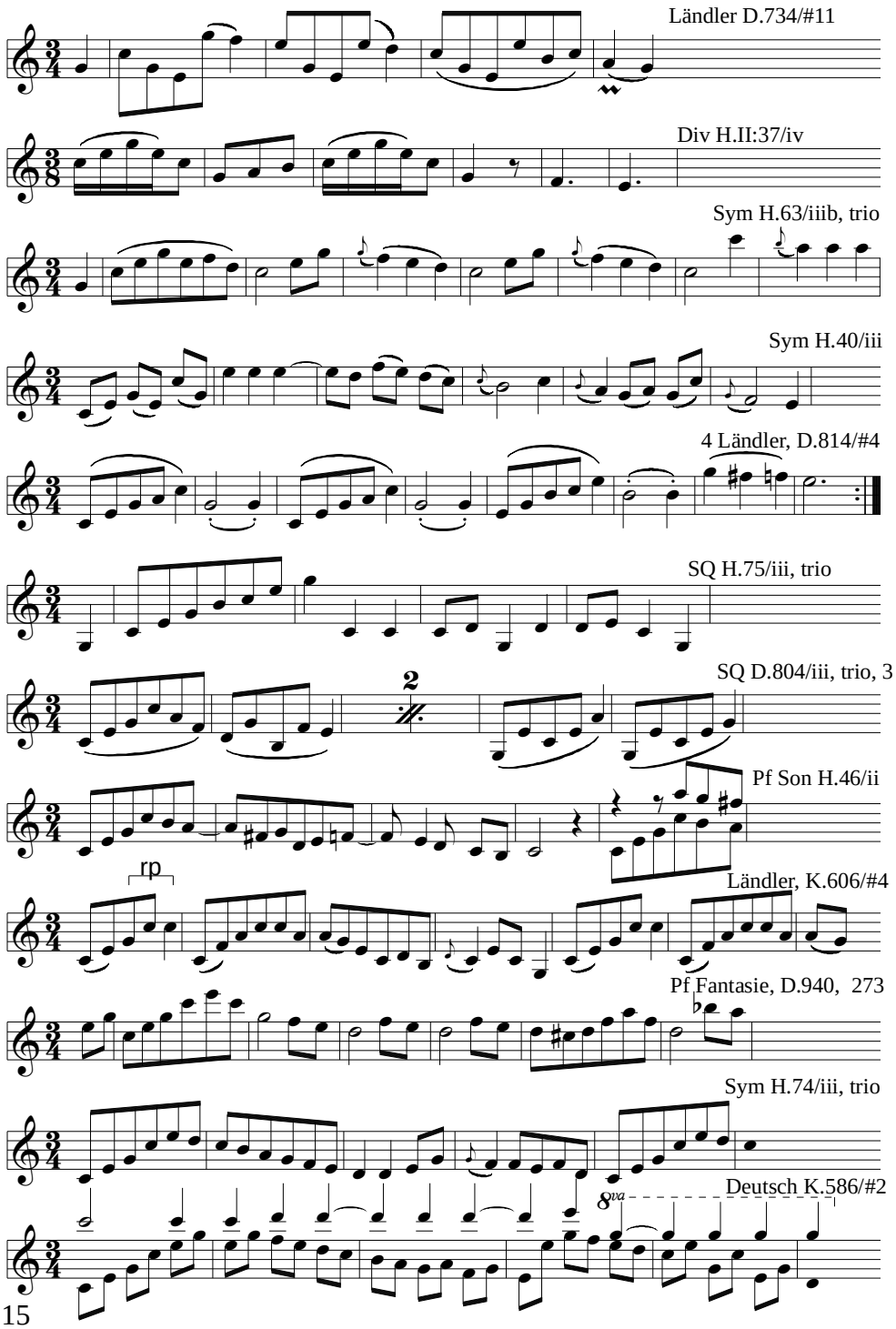


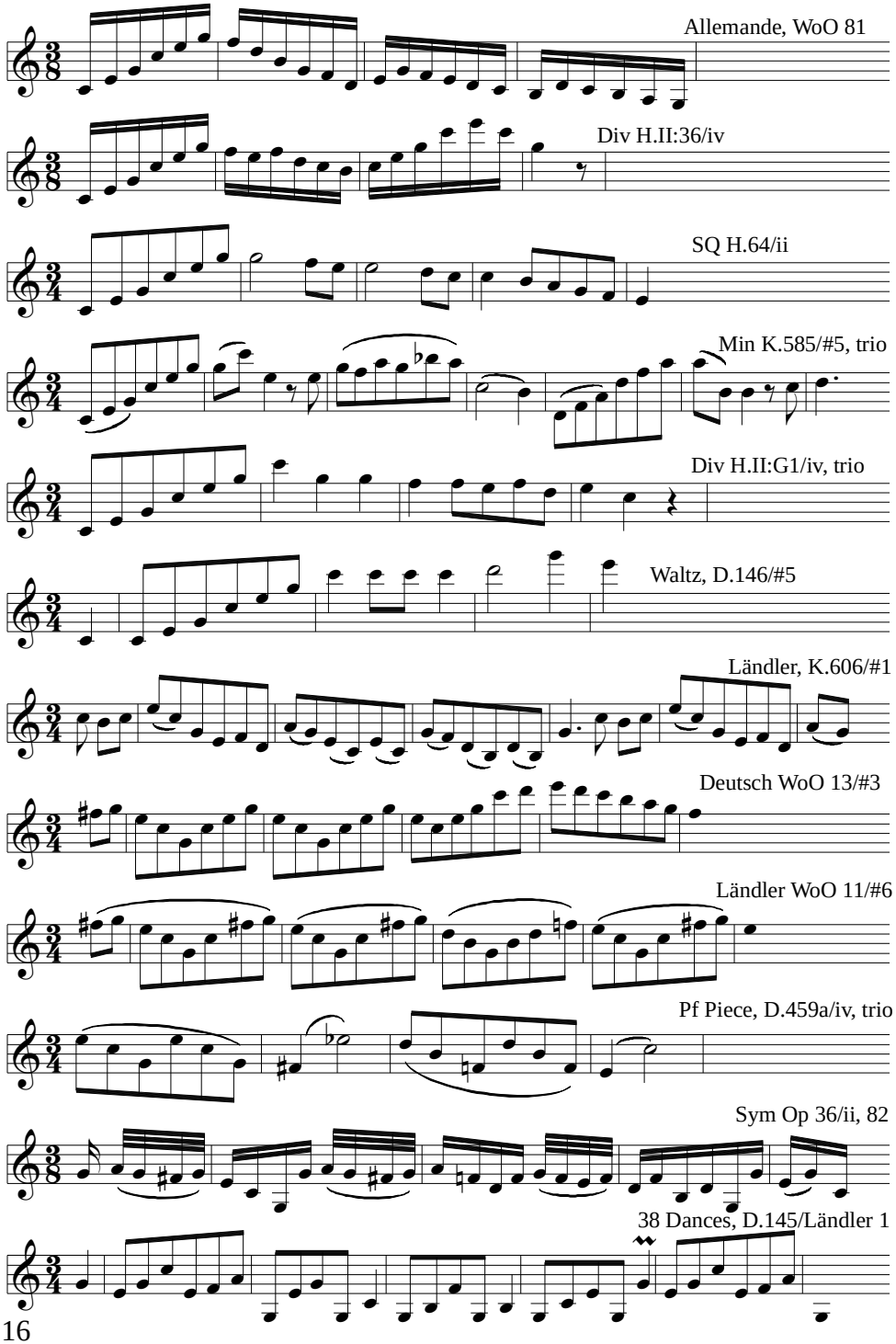
(Z3^K, ARP, triple-metered)



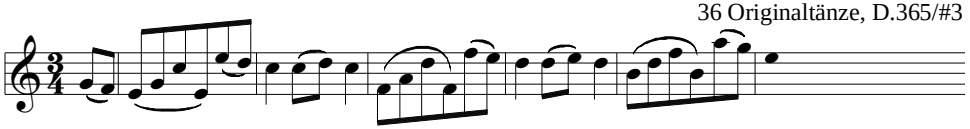




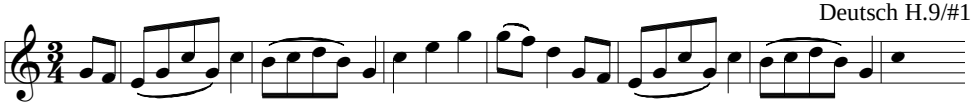

Ländler D.734/#11
Div H.II:37/iv
Sym H.63/iiib, trio
Sym H.40/iii
4 Ländler, D.814/#4
SQ H.75/iii, trio
SQ D.804/iii, trio, 3
Pf Son H.46/ii
rp
Ländler, K.606/#4
Pf Fantasie, D.940, 273
Sym H.74/iii, trio
Deutsch K.586/#2
8va


Allemande, WoO 81
Div H.II:36/iv
SQ H.64/ii
Min K.585/#5, trio
Div H.II:G1/iv, trio
Waltz, D.146/#5
Ländler, K.606/#1
Deutsch WoO 13/#3
Ländler WoO 11/#6
Pf Piece, D.459a/iv, trio
Sym Op 36/ii, 82
38 Dances, D.145/Ländler 1

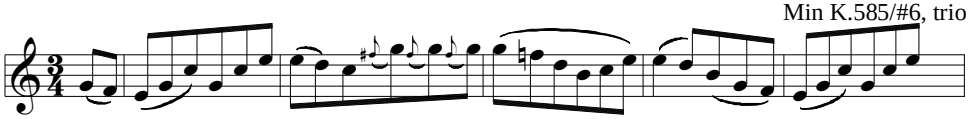
36 Originaltänze, D.365/#3



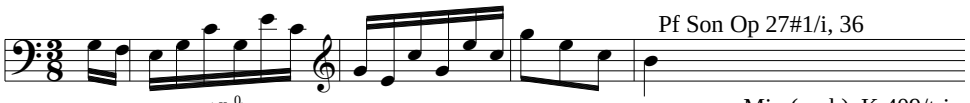
Deutsch H.9/#1



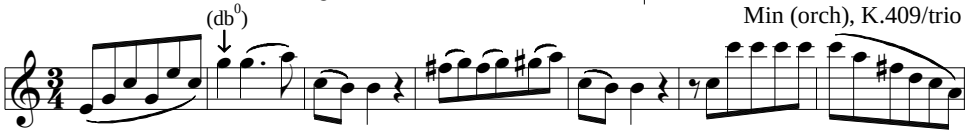
Min K.585/#6, trio



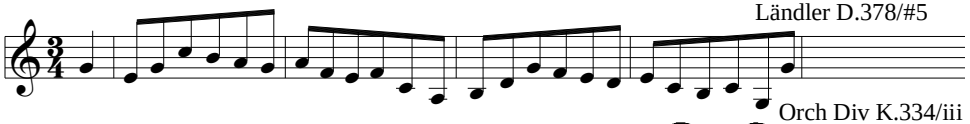
Pf Son Op 27#1/i, 36



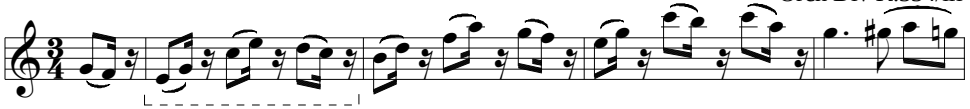
Min (orch), K.409/trio



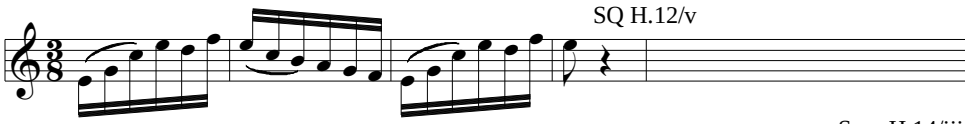
Ländler D.378/#5



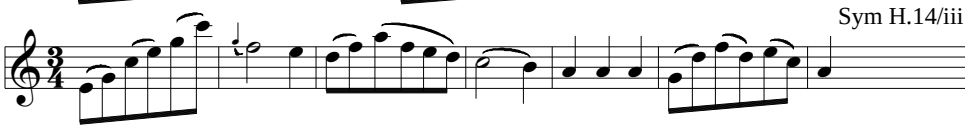
Orch Div K.334/iii



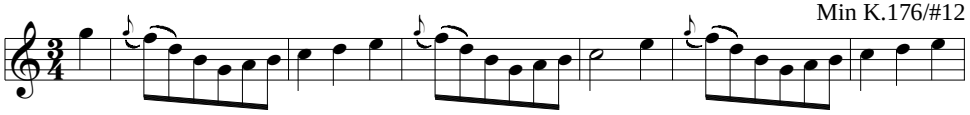
SQ H.12/v



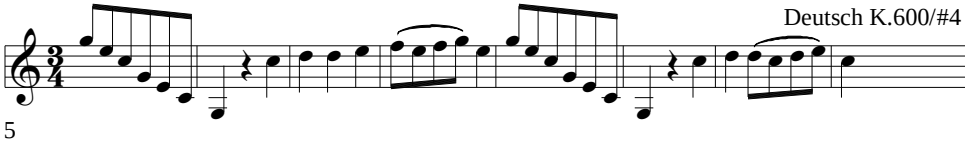
Sym H.14/iii



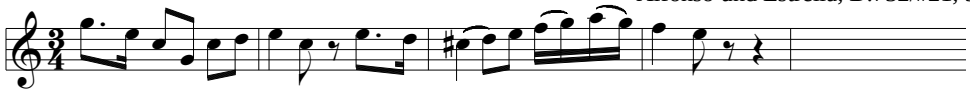
Min K.176/#12

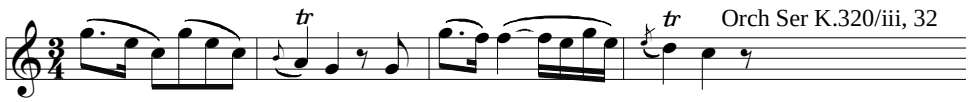


Deutsch K.600/#4

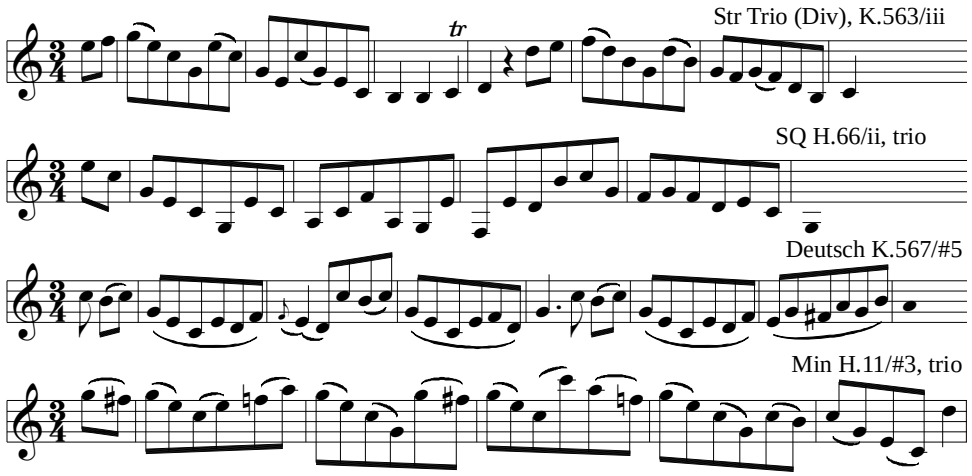


Alfonso und Estrella, D.732/#21, 5





Orch Ser K.320/iii, 32

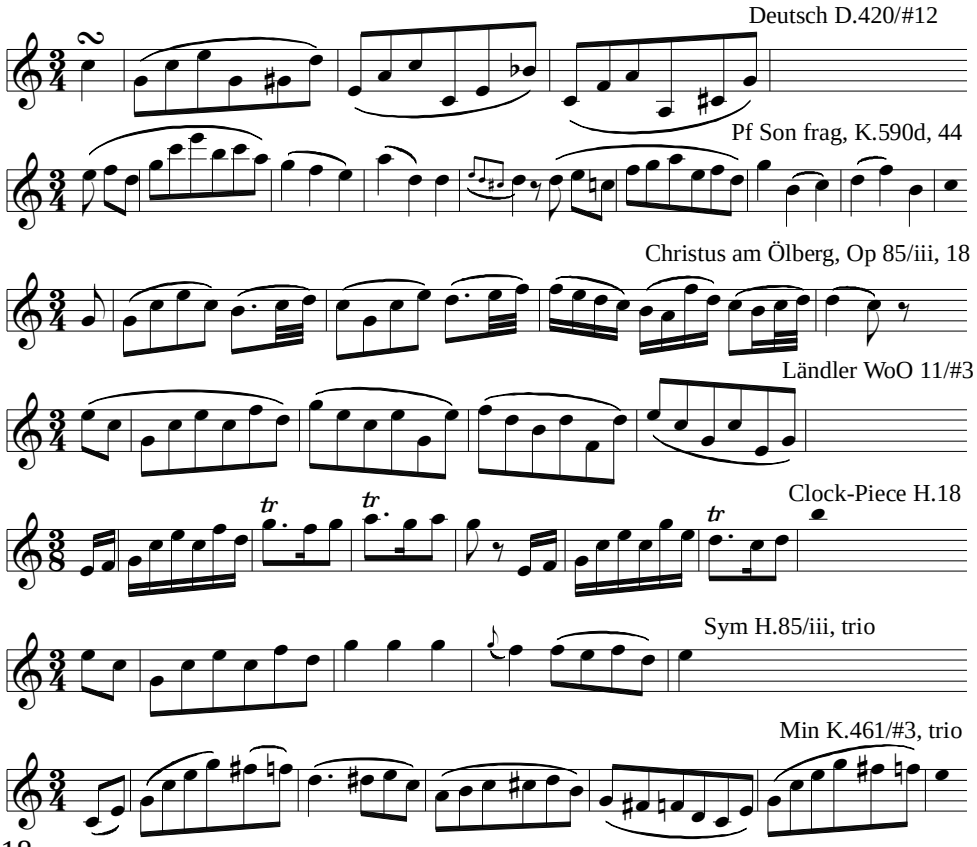


Str Trio (Div), K.563/iii

SQ H.66/ii, trio

Deutsch K.567/#5

Min H.11/#3, trio



Deutsch D.420/#12

Pf Son frag, K.590d, 44

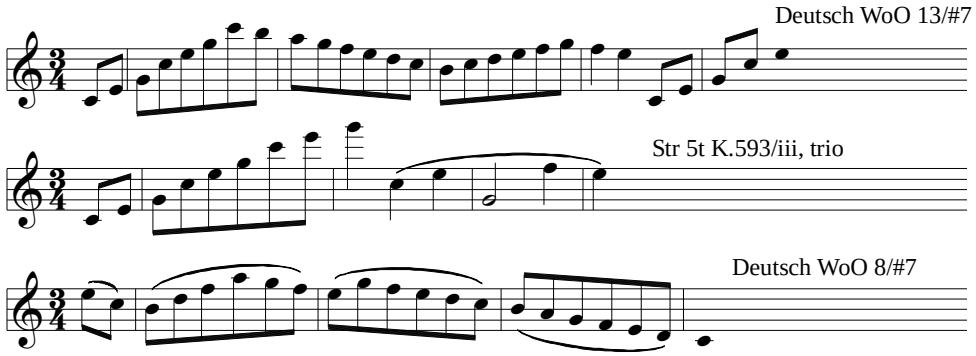
Christus am Ölberg, Op 85/iii, 18

Ländler WoO 11/#3

Clock-Piece H.18

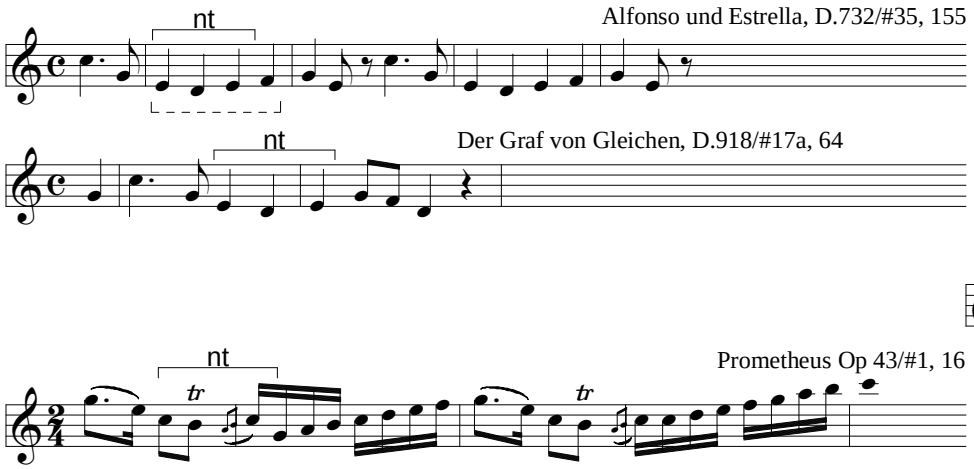
Sym H.85/iii, trio

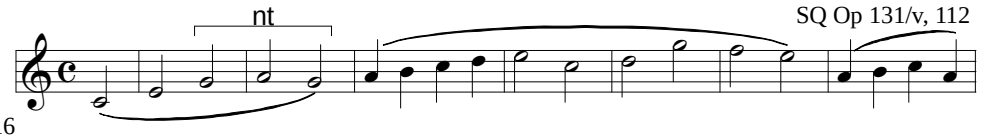
Min K.461/#3, trio


Deutsch WoO 13/#7
Str 5t K.593/iii, trio
Deutsch WoO 8/#7

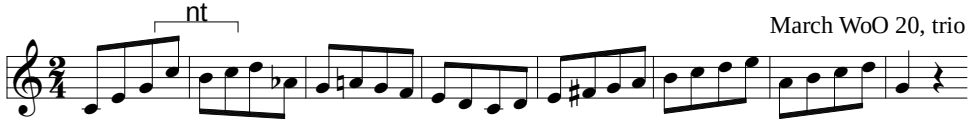
EX 9.2:
Z3^K, ARP

Z3^K, 3ARP+NT

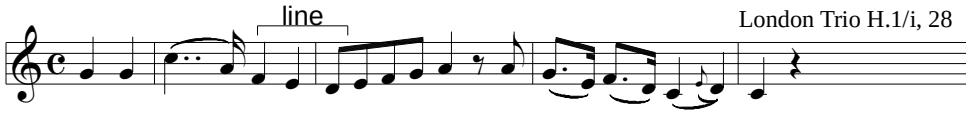




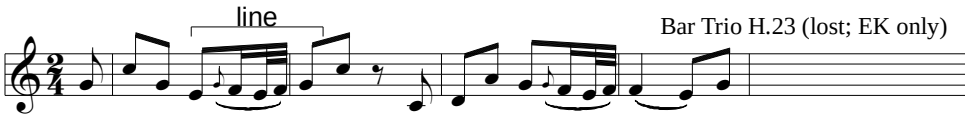
Z3^K, 4ARP+NT



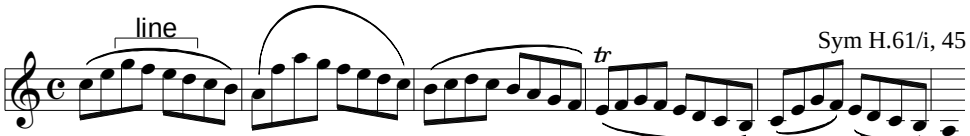
Z3^K, 3ARP+L



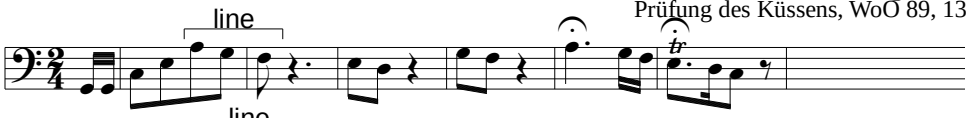
London Trio H.1/i, 28



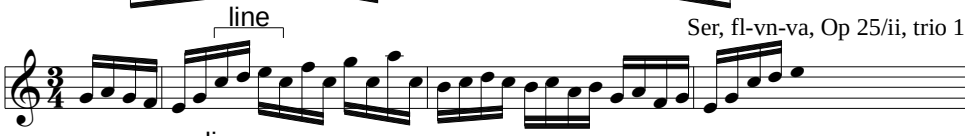
Bar Trio H.23 (lost; EK only)



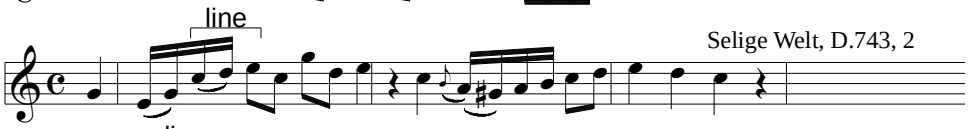
Sym H.61/i, 45



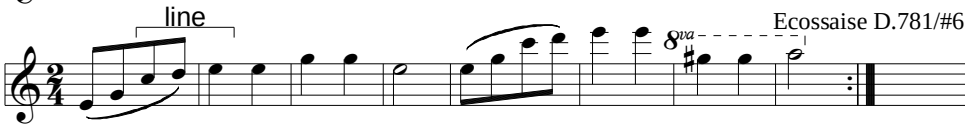
Prüfung des Küssens, WoO 89, 13



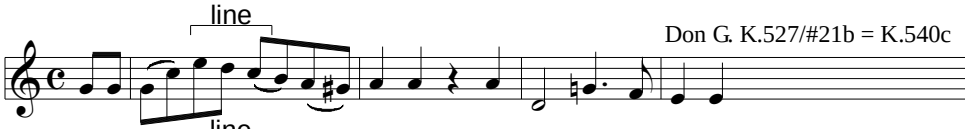
Ser, fl-vn-va, Op 25/ii, trio 1



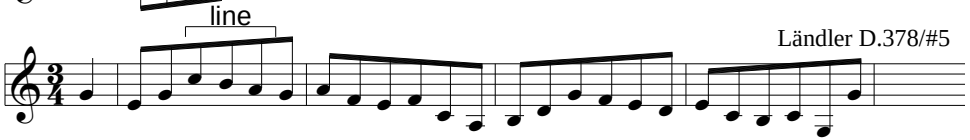
Selige Welt, D.743, 2



Ecossaise D.781/#6

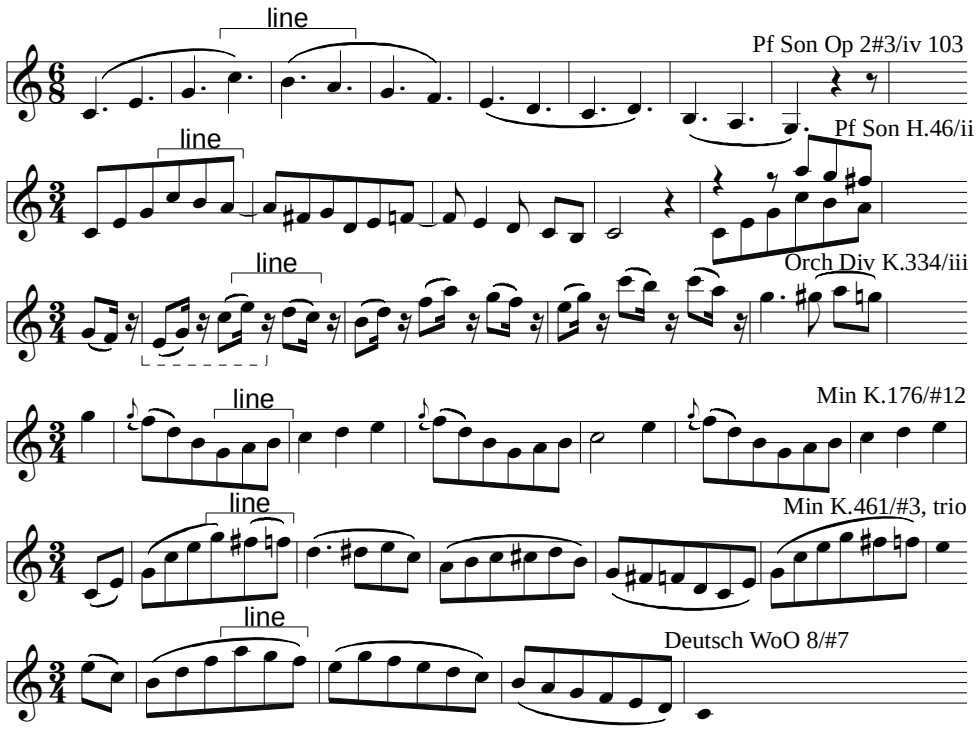


Don G. K.527/#21b = K.540c

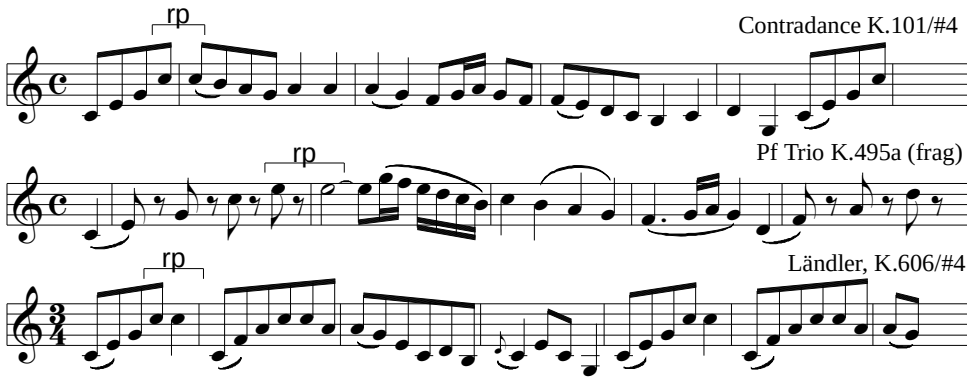


Ländler D.378/#5

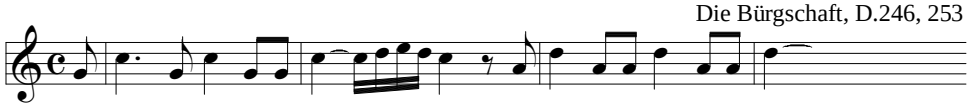
Z3^K, 4ARP+L

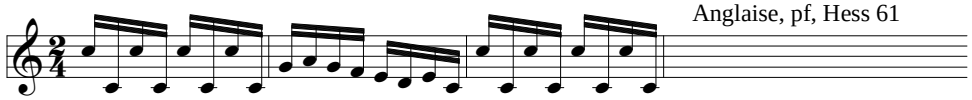

line
Pf Son Op 2#3/iv 103
line
Pf Son H.46/ii
line
Orch Div K.334/iii
line
Min K.176/#12
line
Min K.461/#3, trio
line
Deutsch WoO 8/#7

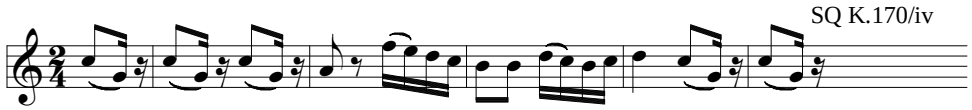
Z3^K, 4ARP+RP

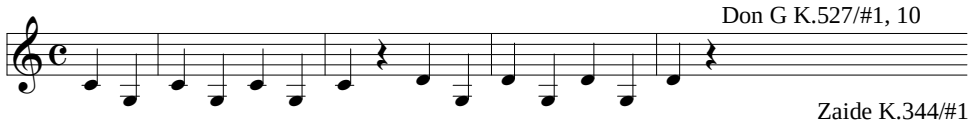


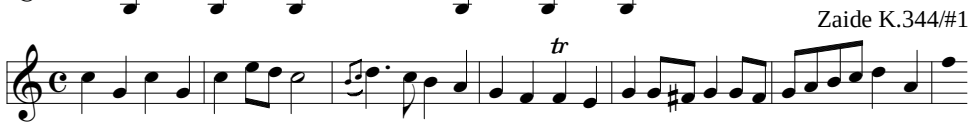
EX 14:
Z3^K, OSC

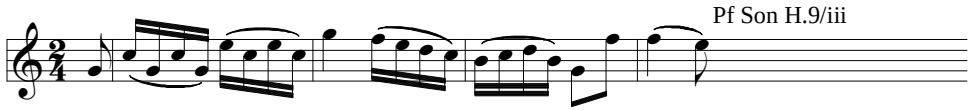

Die Bürgschaft, D.246, 253

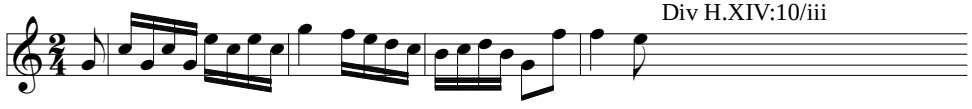

Anglaise, pf, Hess 61

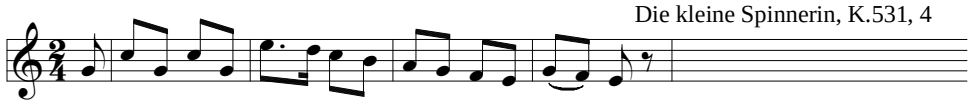

SQ K.170/iv

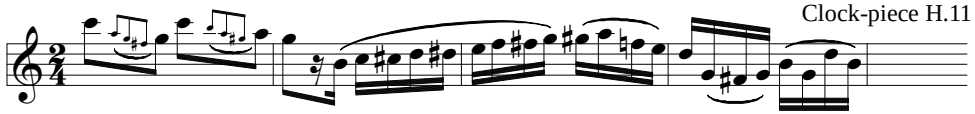

Don G K.527/#1, 10

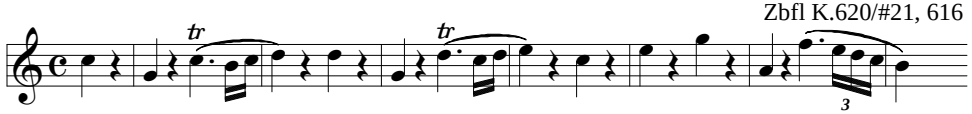

Zaide K.344/#1

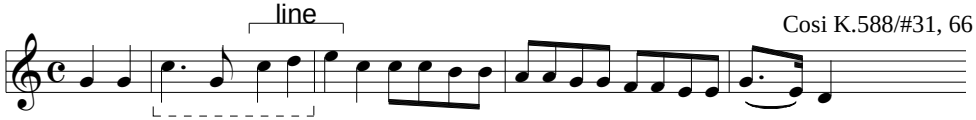

Pf Son H.9/iii


Div H.XIV:10/iii

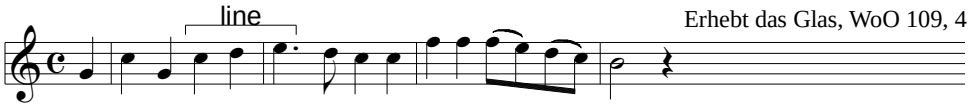

Die kleine Spinnerin, K.531, 4


Clock-piece H.11

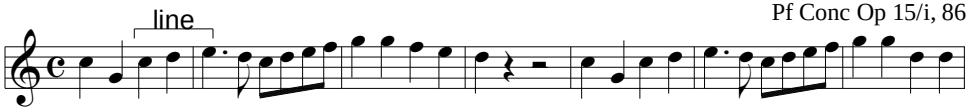

Zbfl K.620/#21, 616



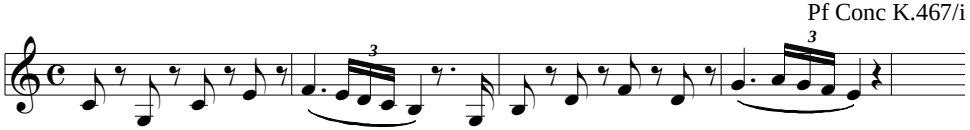
Cosi K.588/#31, 66



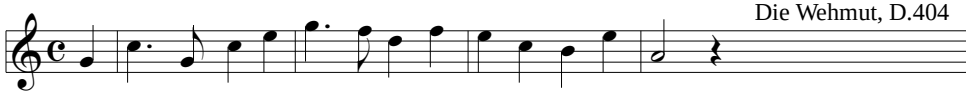
Erhebt das Glas, WoO 109, 4



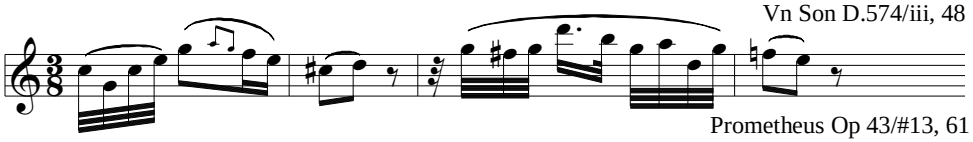
Pf Conc Op 15/i, 86



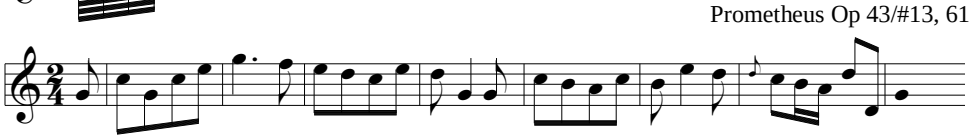
Pf Conc K.467/i



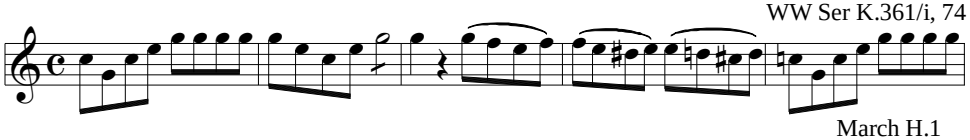
Die Wehmut, D.404



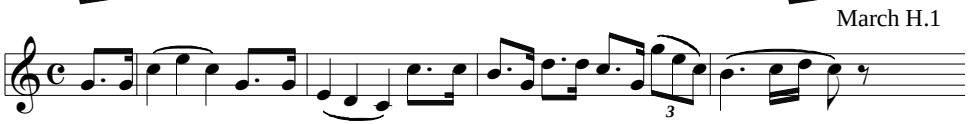
Vn Son D.574/iii, 48



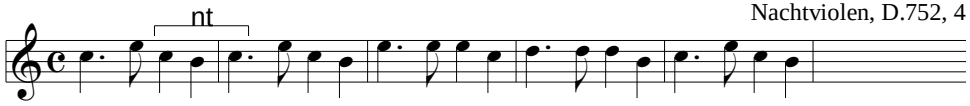
Prometheus Op 43/#13, 61



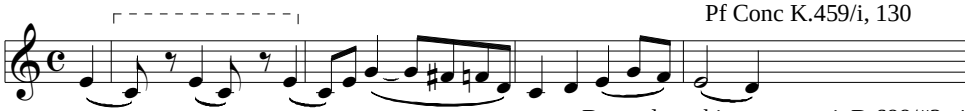
WW Ser K.361/i, 74



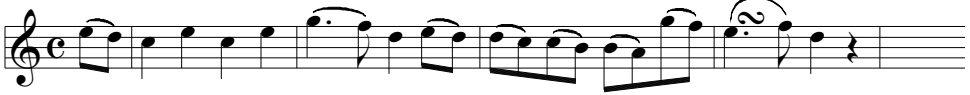
March H.1



Nachtviolen, D.752, 4

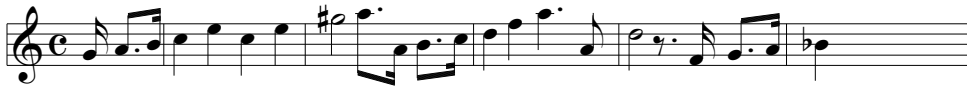


Pf Conc K.459/i, 130

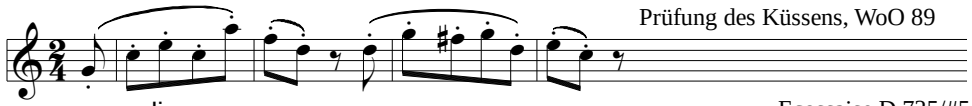


Da quel sembiante appresi, D.688/#3, 4

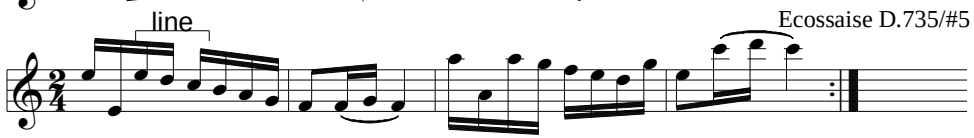
Alfonso und Estrella, D.732/#17, 228



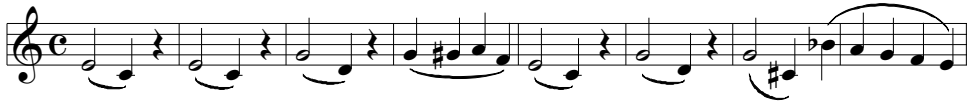
Prüfung des Küssens, WoO 89



Ecossaise D.735/#5

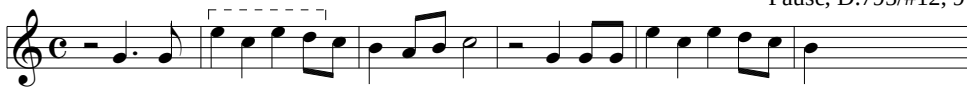


Sym D.417/iv, 85

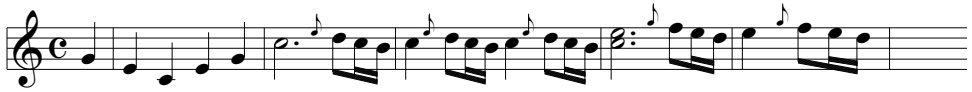


Pf Trio Op 1#3/iv, 43

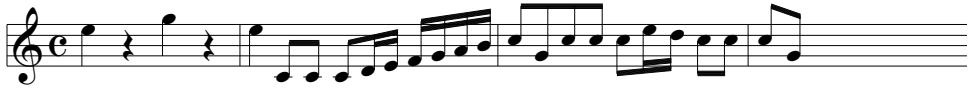
Pause, D.795/#12, 9



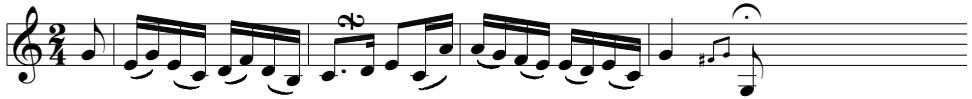
Lucio Silla K.135/#8



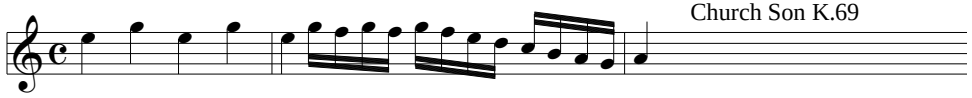
Acide, H.1/Sinfonia/i



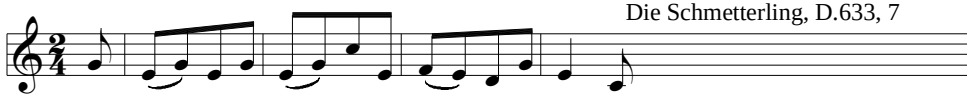
O liebes Mädchen, höre mich, H.15, 8



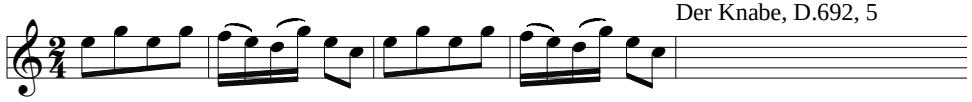
Church Son K.69



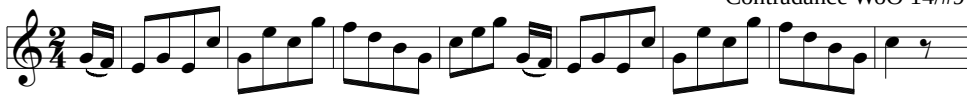
Die Schmetterling, D.633, 7



Der Knabe, D.692, 5

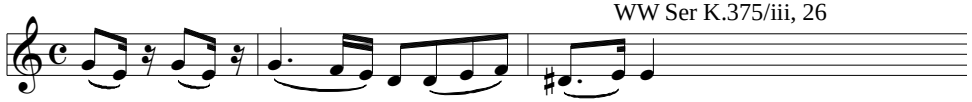


Contradance WoO 14/#9

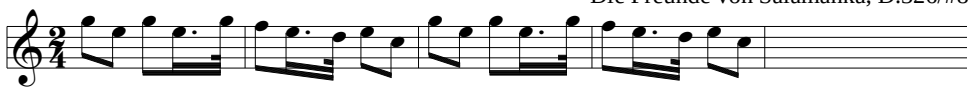


WW Ser K.361/vii

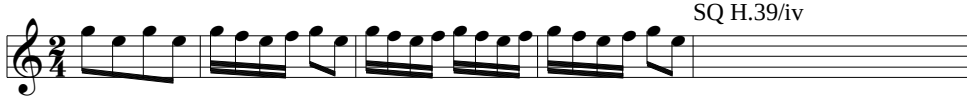
WW Ser K.375/iii, 26



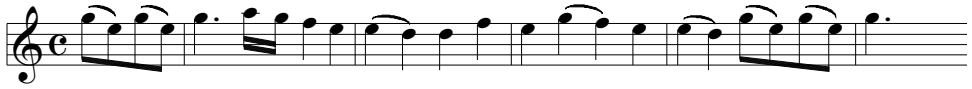
Die Freunde von Salamanka, D.326/#8



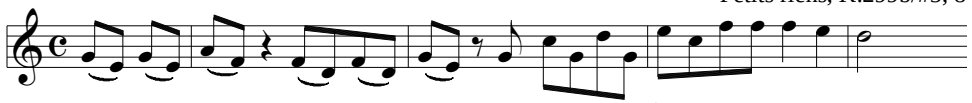
SQ H.39/iv



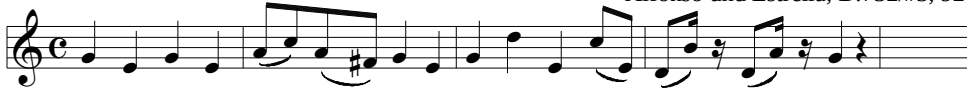
Contradance K.101/#4, 16



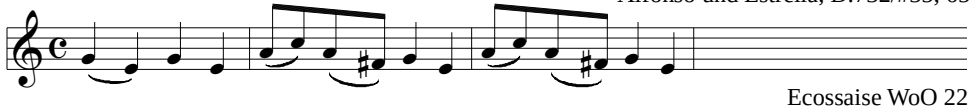
Petits riens, K.299b/#5, 8



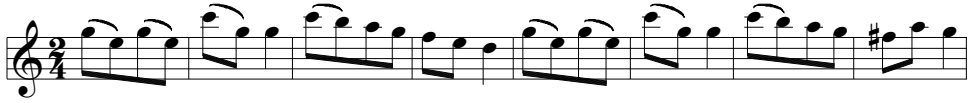
Alfonso und Estrella, D.732/#3, 92



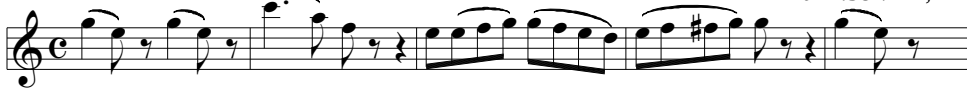
Alfonso und Estrella, D.732/#35, 65



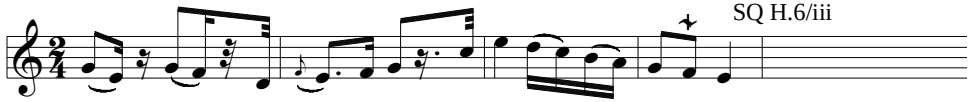
Ecossaise WoO 22

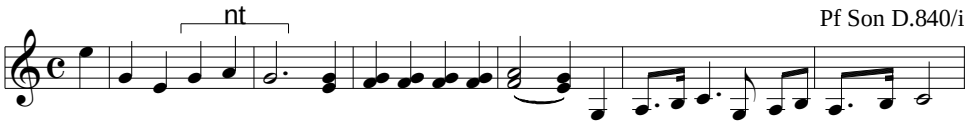


Entf K.384/#11, 24

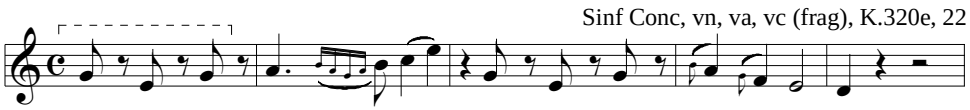


SQ H.6/iii

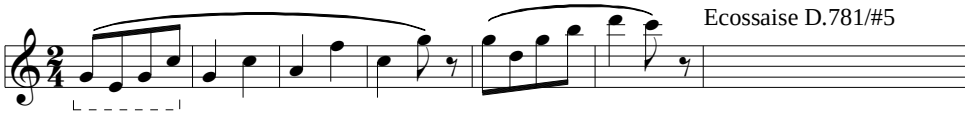




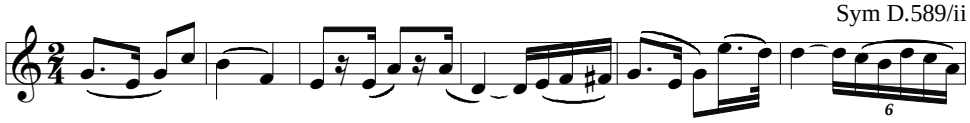
Pf Son D.840/i



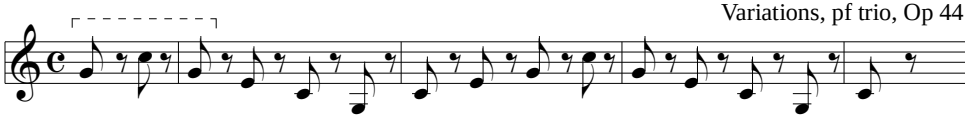
Sinf Conc, vn, va, vc (frag), K.320e, 22



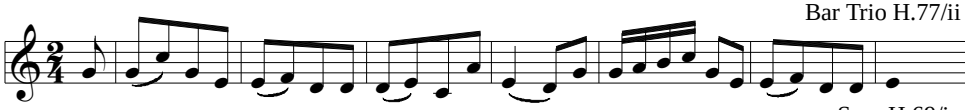
Ecossaise D.781/#5



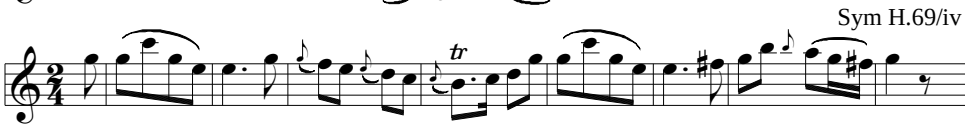
Sym D.589/ii



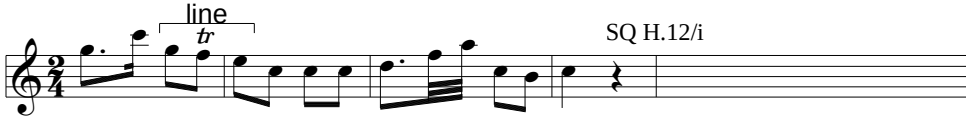
Variations, pf trio, Op 44



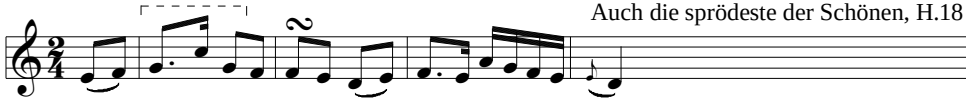
Bar Trio H.77/ii



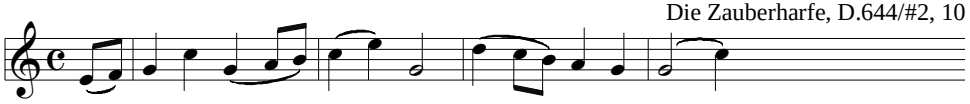
Sym H.69/iv



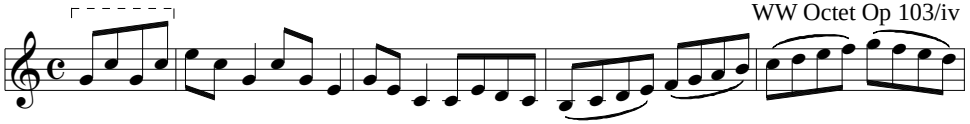
SQ H.12/i



Auch die sprödeste der Schönen, H.18



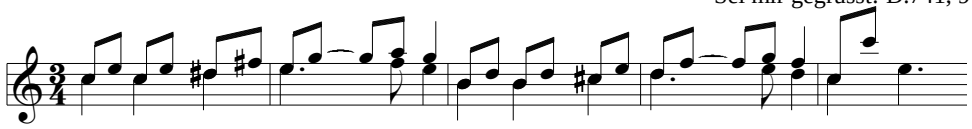
Die Zauberharfe, D.644/#2, 10



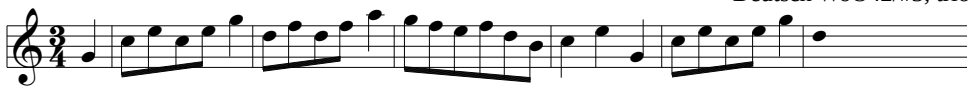
WW Octet Op 103/iv

(Z3^K, OSC, triple-metered)

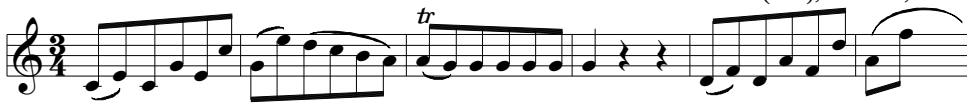
Sei mir gegrusst! D.741, 9



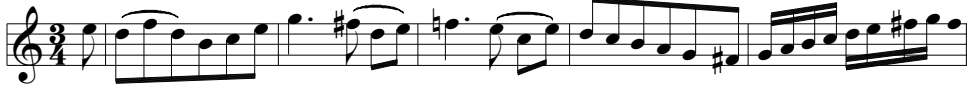
Deutsch WoO42/#3, trio



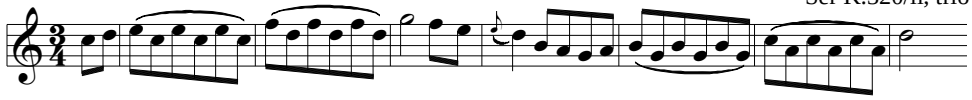
Str Trio (Div), K.563/v, trio 2



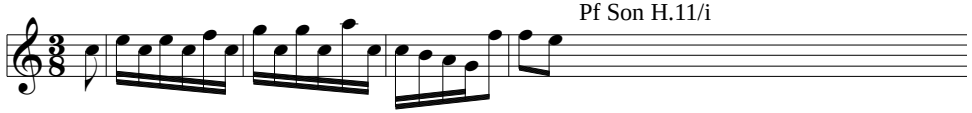
Pf Trio H.23/iii



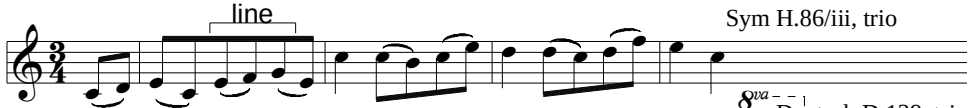
Ser K.320/ii, trio



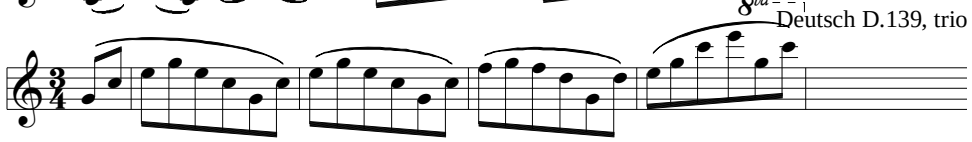
Pf Son H.11/i



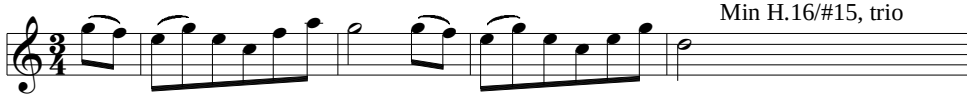
Sym H.86/iii, trio



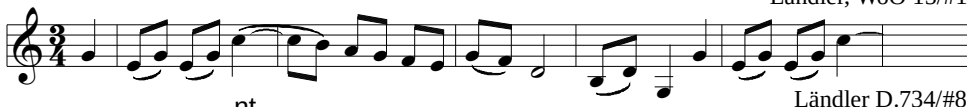
Deutsch D.139, trio



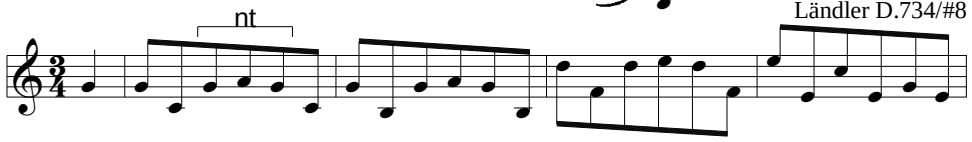
Min H.16/#15, trio



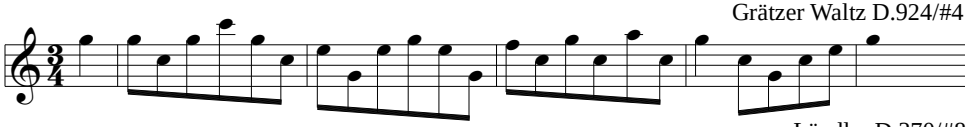
Ländler, WoO 15/#1



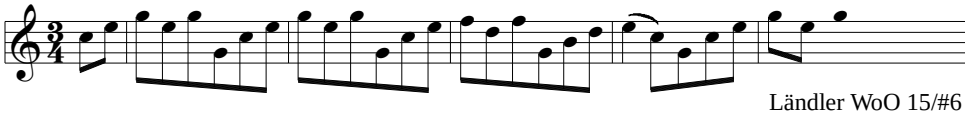
Ländler D.734/#8



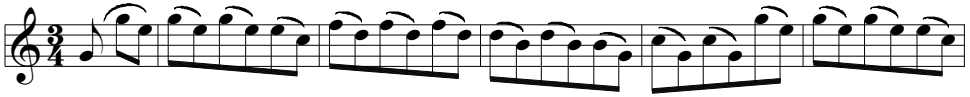
Grätzer Waltz D.924/#4



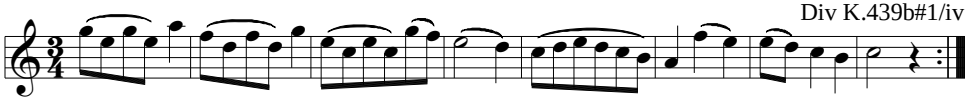
Ländler D.370/#8



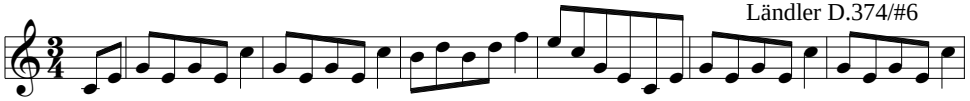
Ländler WoO 15/#6



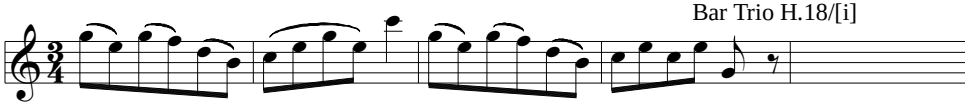
Div K.439b#1/iv



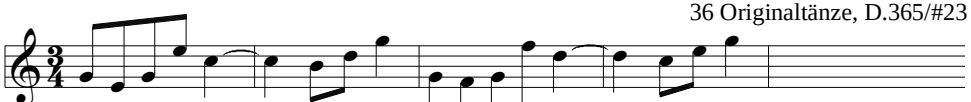
Ländler D.374/#6



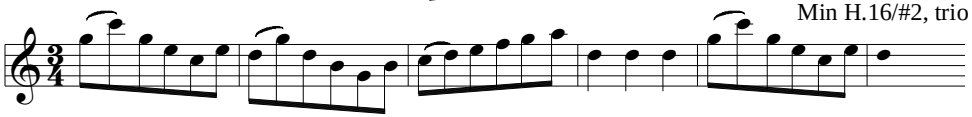
Bar Trio H.18/[i]



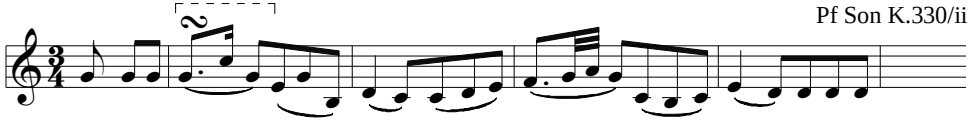
36 Originaltänze, D.365/#23



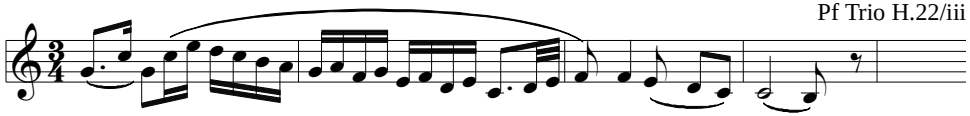
Min H.16/#2, trio



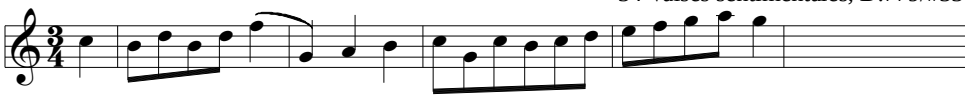
Pf Son K.330/ii



Pf Trio H.22/iii

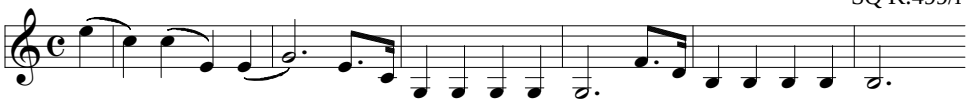


34 Valses sentimentales, D.779/#33

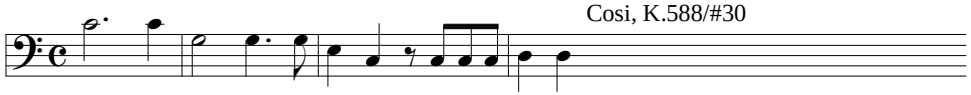


EX 15:
Z3^K, {RRSS}

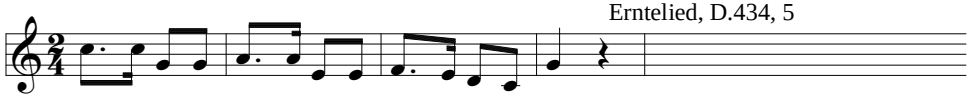
SQ K.499/i



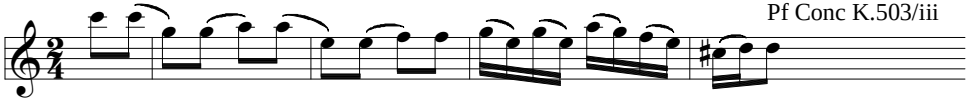
Cosi, K.588/#30



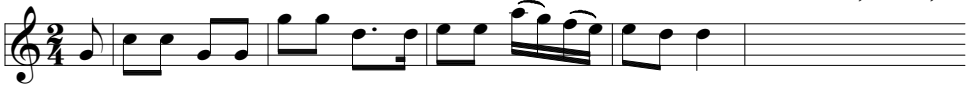
Erntelied, D.434, 5



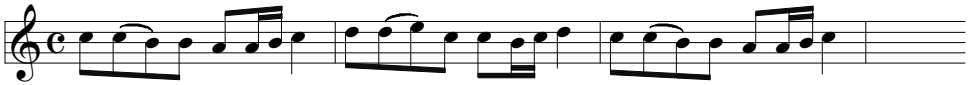
Pf Conc K.503/iii



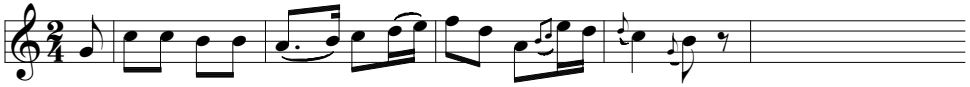
Der Wanderer an den Mond, D.870, 30



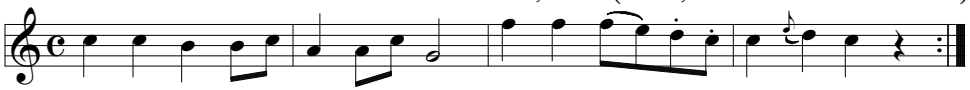
Im Frühling, D.882



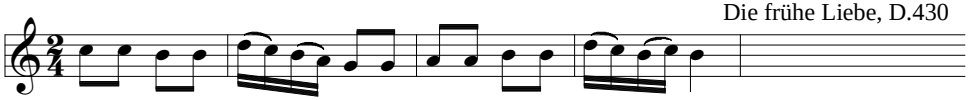
Der Graf von Gleichen, D.918/#5c



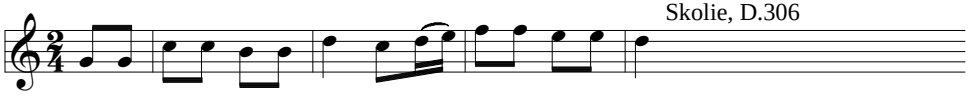
Pf Var K.455, thema (Gluck, *Unser dummel Pöbel meint*)



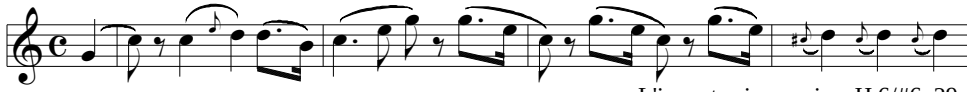
Die frühe Liebe, D.430



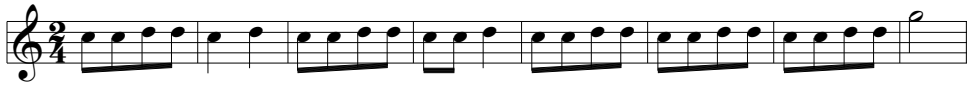
Skolie, D.306



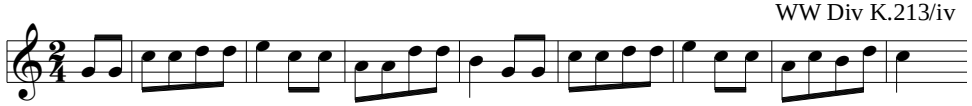
Vn Son K.376/iii



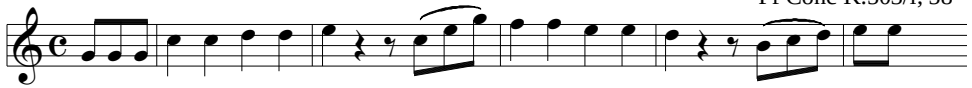
L'incontro improviso, H.6/#6, 29



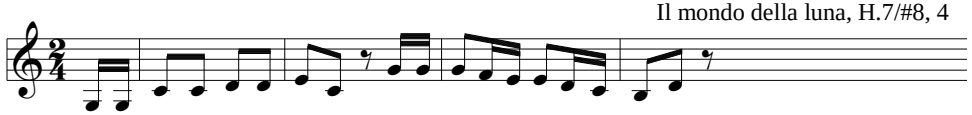
WW Div K.213/iv



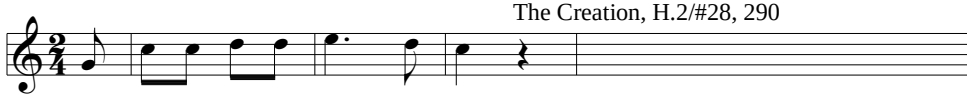
Pf Conc K.503/i, 58



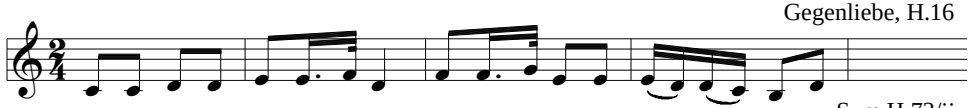
Il mondo della luna, H.7/#8, 4



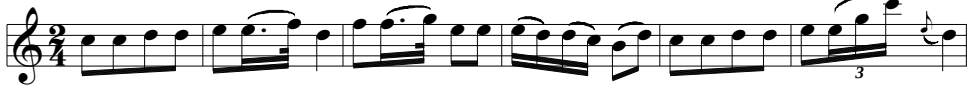
The Creation, H.2/#28, 290



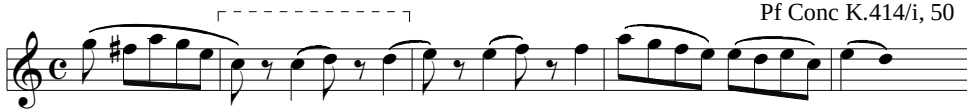
Gegenliebe, H.16



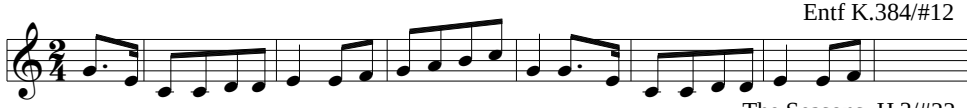
Sym H.73/ii



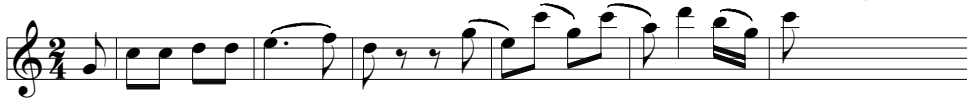
Pf Conc K.414/i, 50



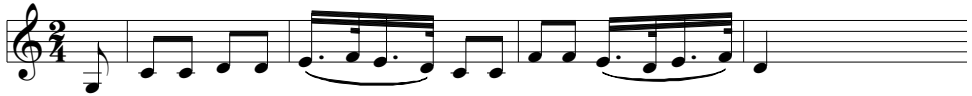
Entf K.384/#12



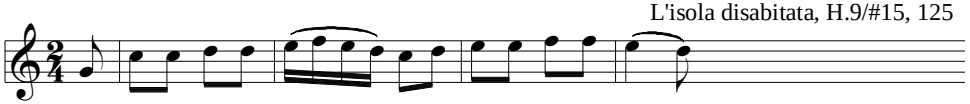
The Seasons, H.3/#22



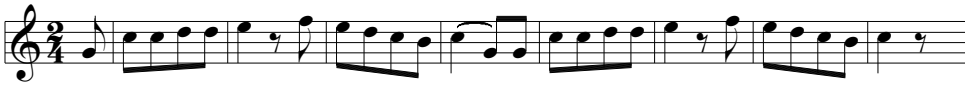
Zbfl K.620/#20



L'isola disabitata, H.9/#15, 125



Contradance K.269b/#3



Il mondo della luna, H.7/#55, 8

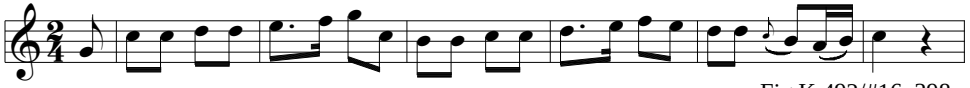
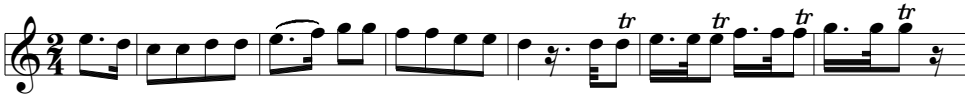
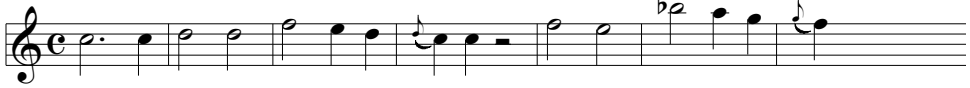


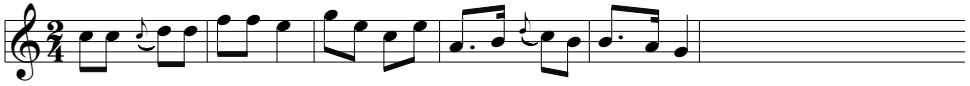
Fig K.492/#16, 398



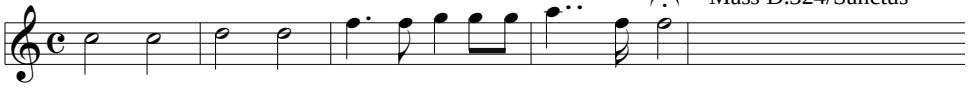
Shilric und Vinvela, D.293, 152



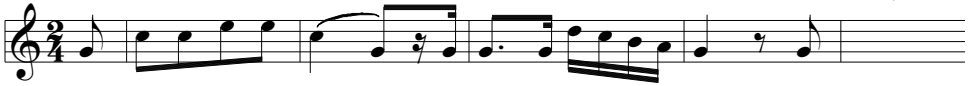
Alte Liebe rostet nie, D.477



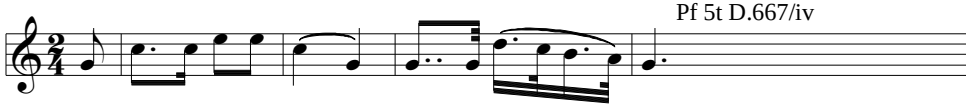
Mass D.324/Sanctus



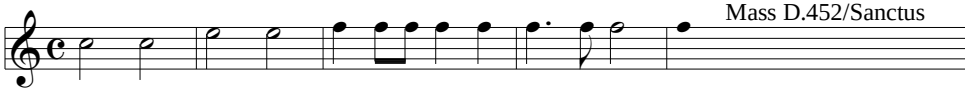
Die Forelle, D.550



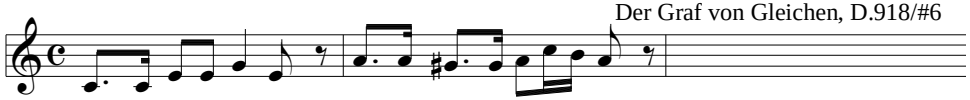
Pf 5t D.667/iv



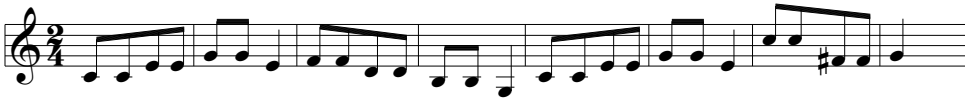
Mass D.452/Sanctus



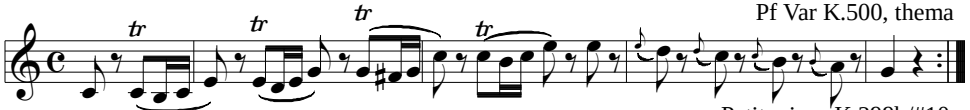
Der Graf von Gleichen, D.918/#6



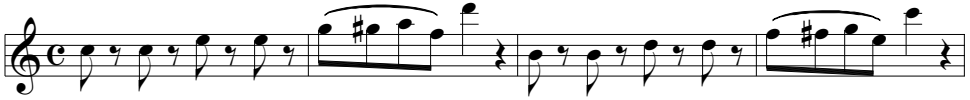
Sym H.94/ii



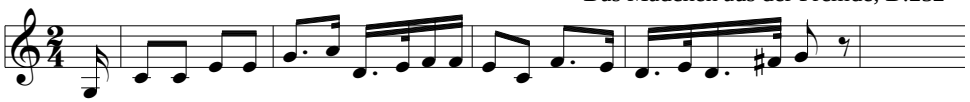
Pf Var K.500, thema



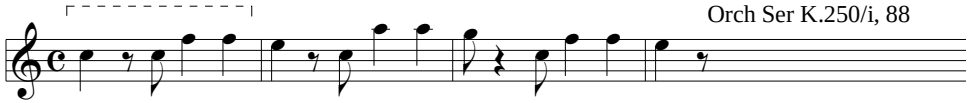
Petits riens K.299b/#10



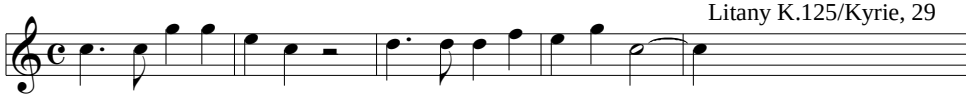
Das Mädchen aus der Fremde, D.252



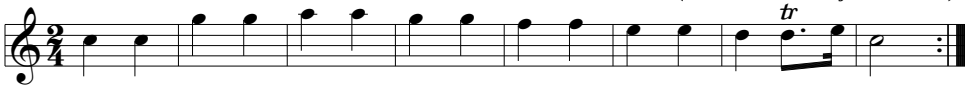
Orch Ser K.250/i, 88



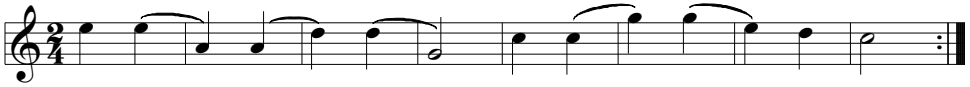
Litany K.125/Kyrie, 29



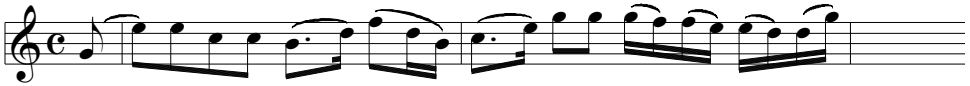
Pf Var K.265 ("Ah, vous dirai-je Maman")



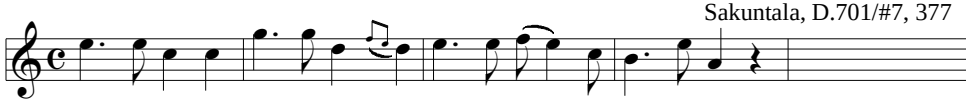
Ecossaise D.299/#12



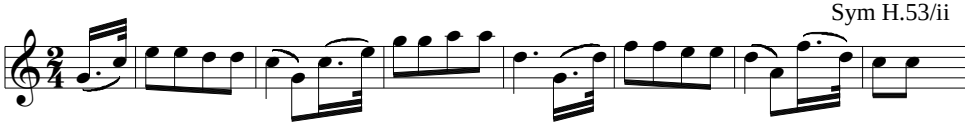
SQ H.66/i, 32



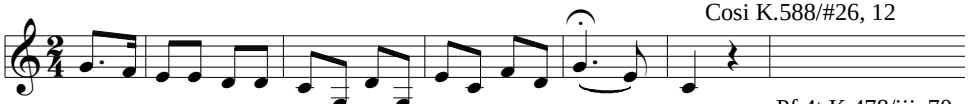
Sakuntala, D.701/#7, 377



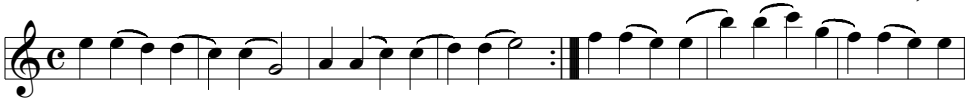
Sym H.53/ii



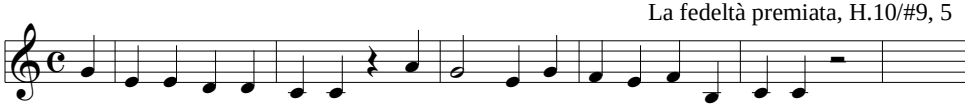
Cosi K.588/#26, 12



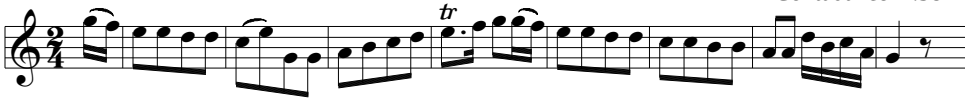
Pf 4t K.478/iii, 70



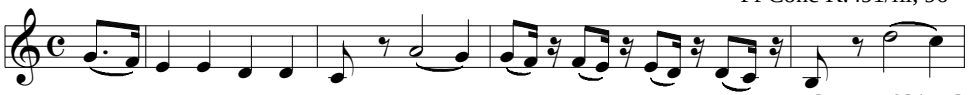
La fedeltà premiata, H.10/#9, 5



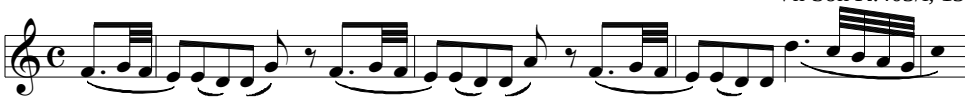
Contadance K.587



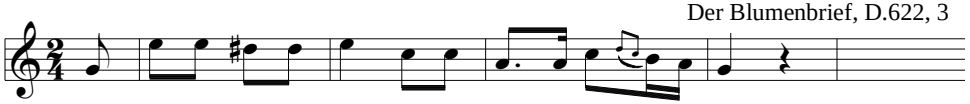
Pf Conc K.491/iii, 96



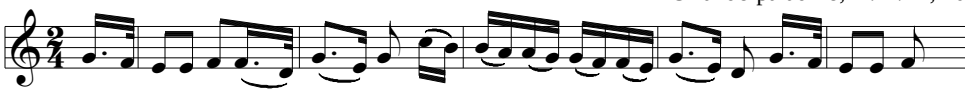
Vn Son K.403/i, 13



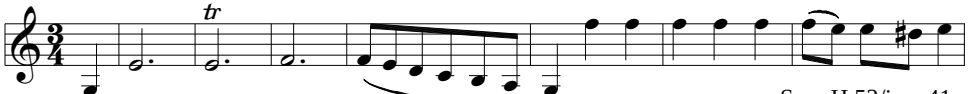
Der Blumenbrief, D.622, 3



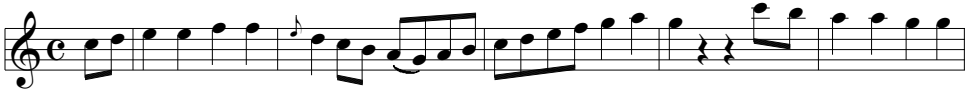
Orlando paladino, H.11/#4, 10



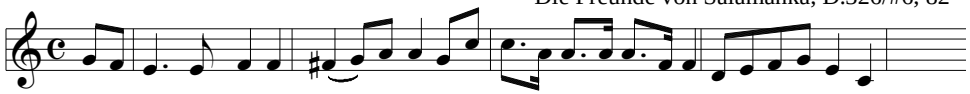
Str trio mvt, Hess 28



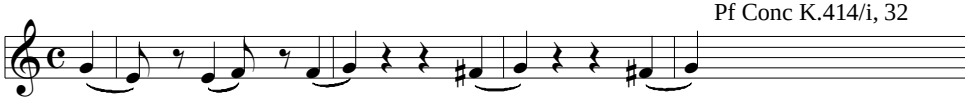
Sym H.53/ivc, 41



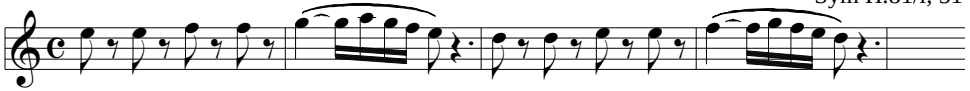
Die Freunde von Salamanka, D.326/#6, 82



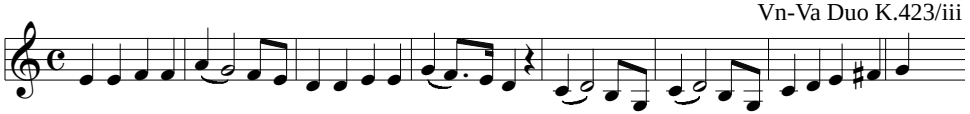
Pf Conc K.414/i, 32

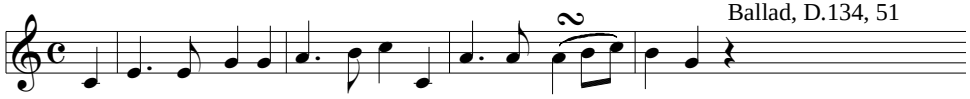


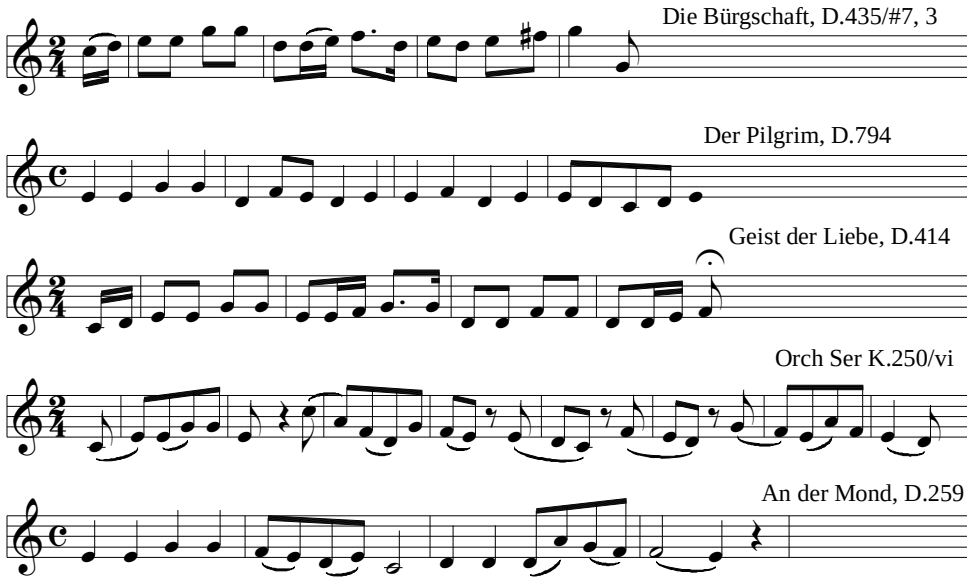
Sym H.81/i, 51

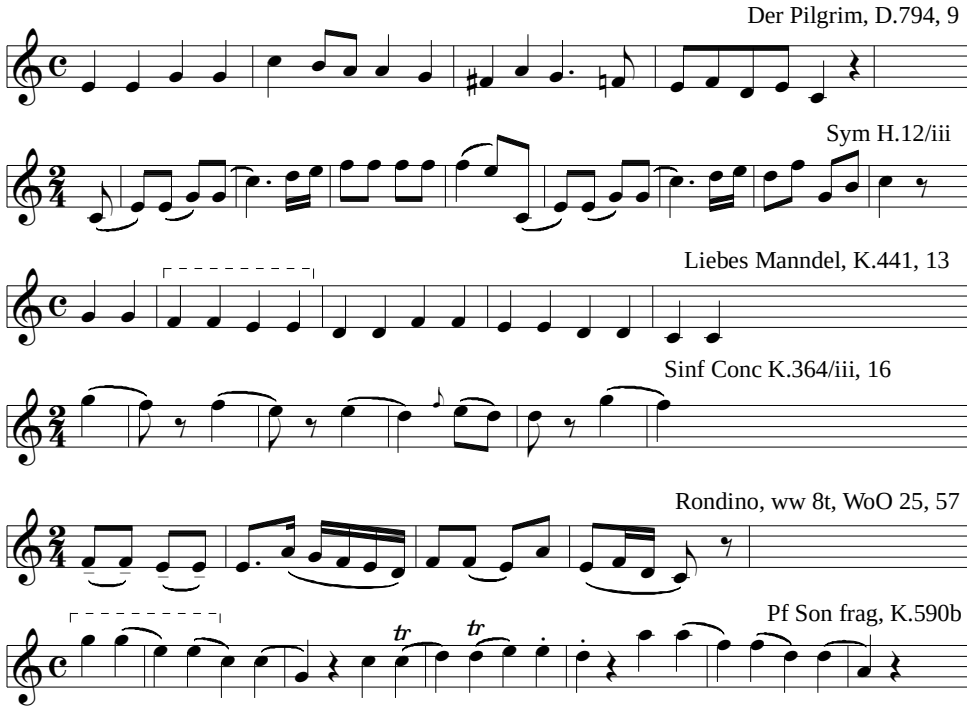


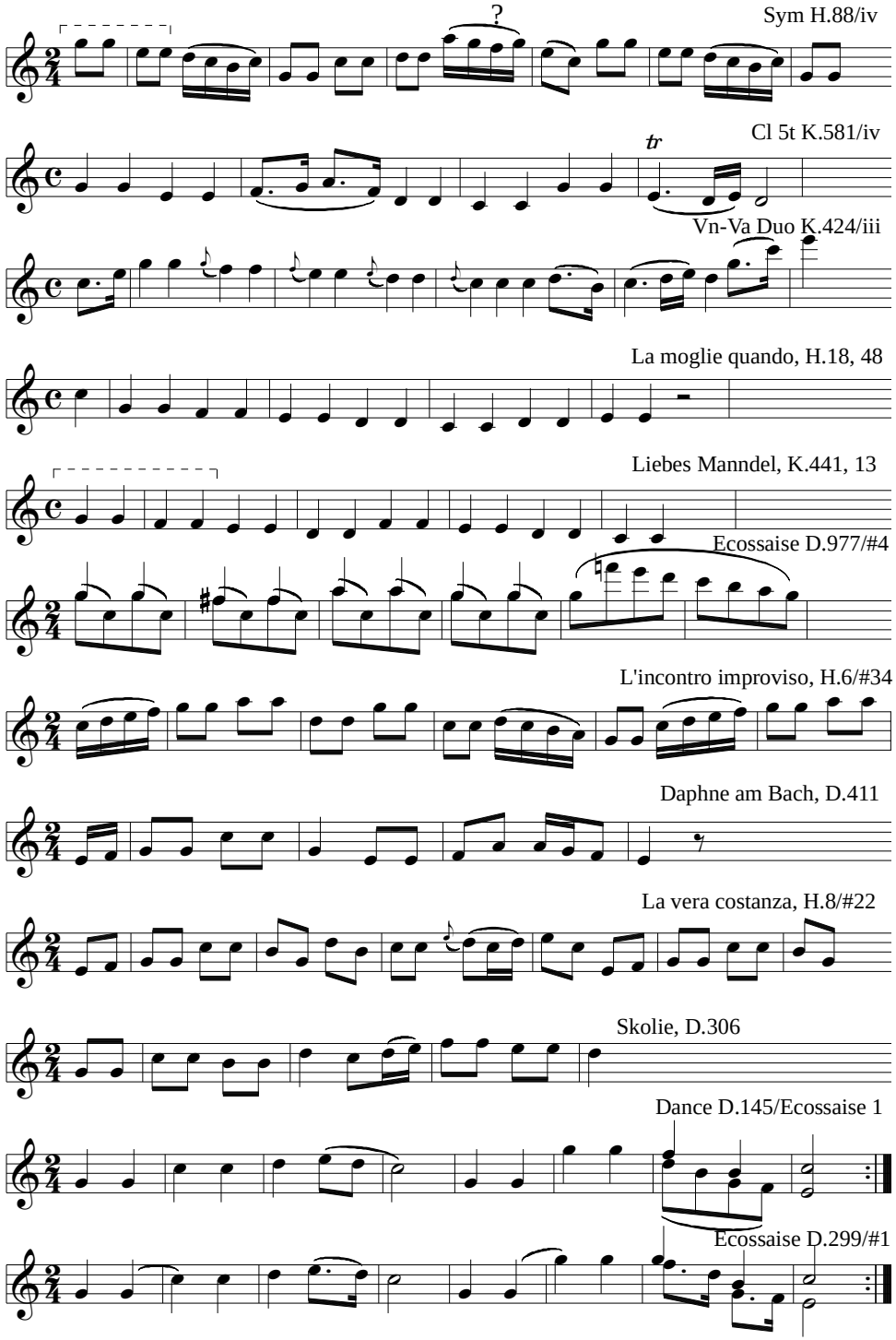
Vn-Va Duo K.423/iii




Ballad, D.134, 51


Die Bürgschaft, D.435/#7, 3
Der Pilgrim, D.794
Geist der Liebe, D.414
Orch Ser K.250/vi
An der Mond, D.259


Der Pilgrim, D.794, 9
Sym H.12/iii
Liebes Manndel, K.441, 13
Sinf Conc K.364/iii, 16
Rondino, ww 8t, WoO 25, 57
Pf Son frag, K.590b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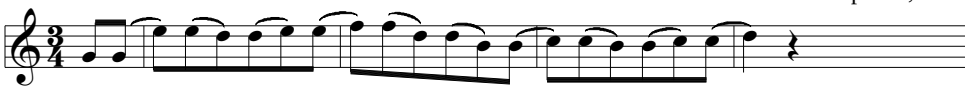
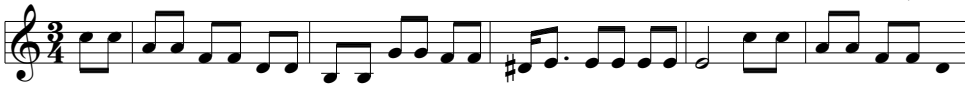
Dance D.145/Ecossaise 1
Ecossaise D.299/#1

Z3^K, {RRSS}, triple-metered

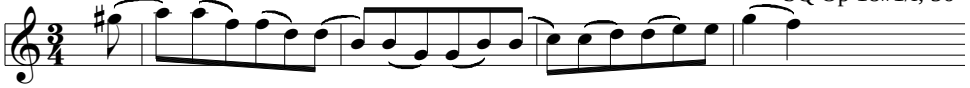
Serenade Op 8/iii, trio



Min K.176/#15, trio

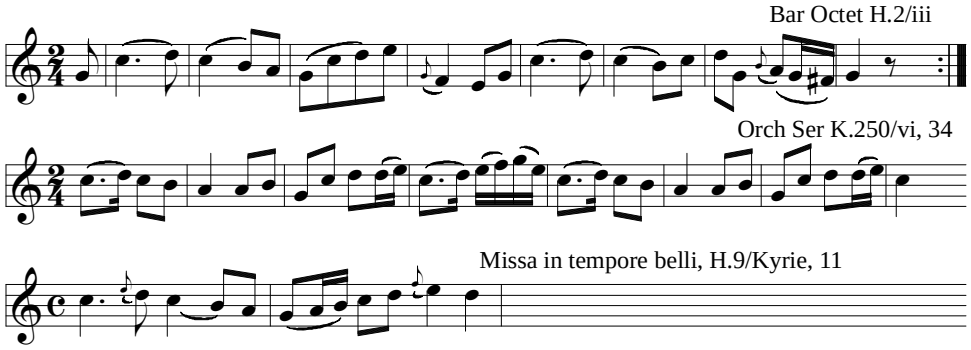


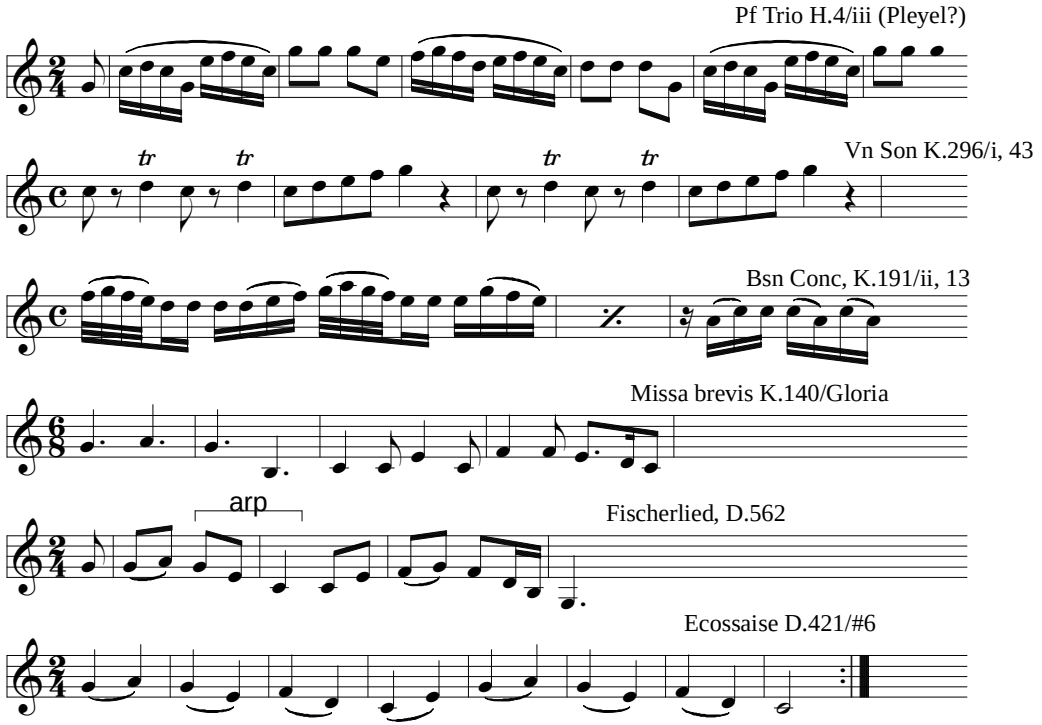
SQ Op 18#1/i, 56



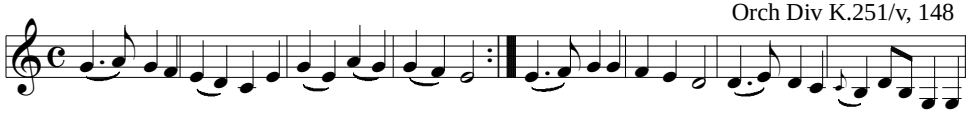
EX 16:
Z3^K, NT

Z3^K, upper whole-step NT:

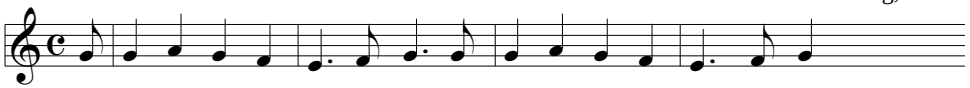




Orch Div K.251/v, 148



Die Täuschung, D.230



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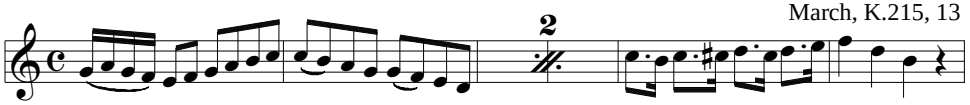
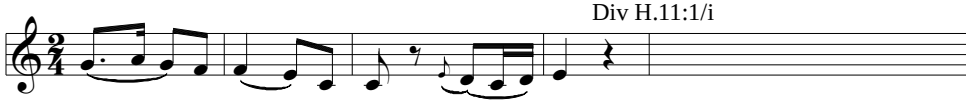
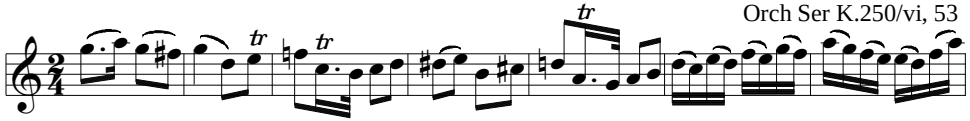


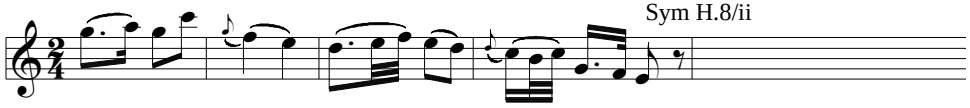
Div H.11:1/i



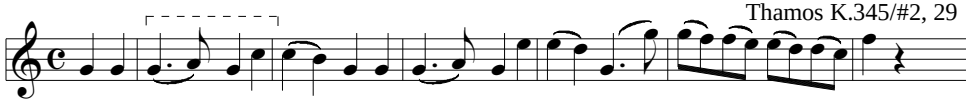
Orch Ser K.250/vi, 53



Sym H.8/ii



Thamos K.345/#2, 29



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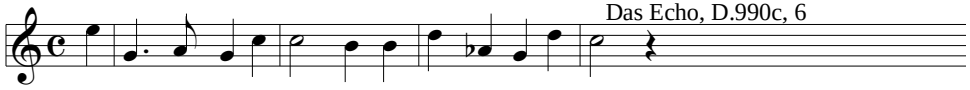
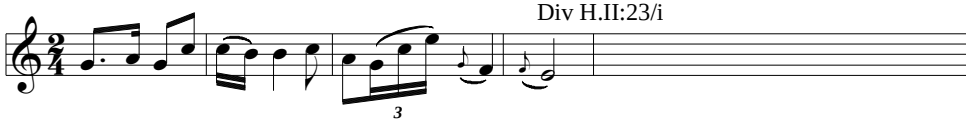


Div H.II:23/i



Z3^K, other NT configurations:

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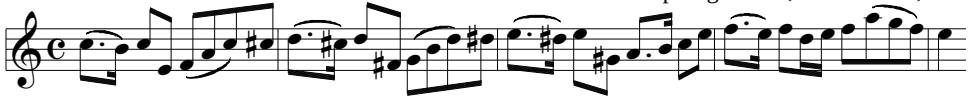
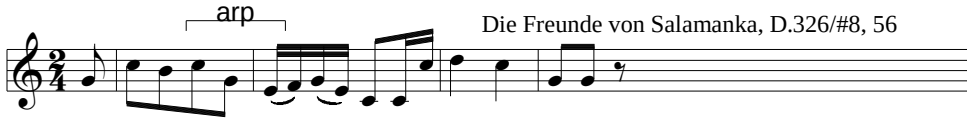


arp

Die Freunde von Salamanka, D.326/#8, 56



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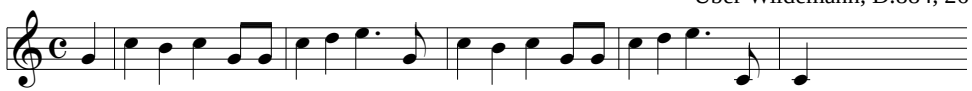

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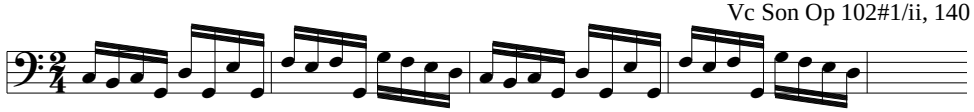
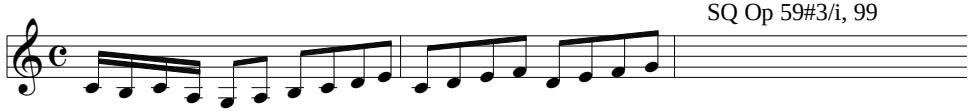
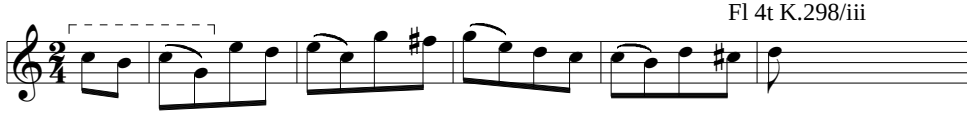


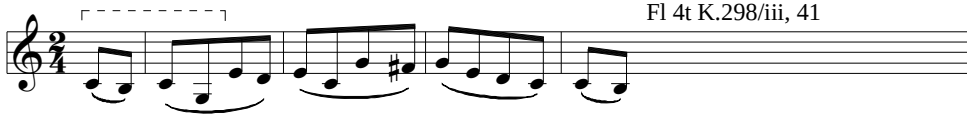
SQ Op 59#3/i, 99



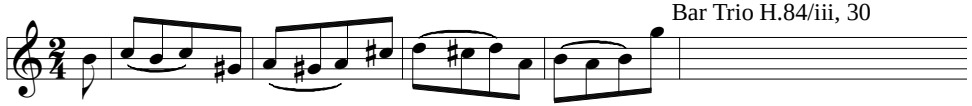
Fl 4t K.298/iii



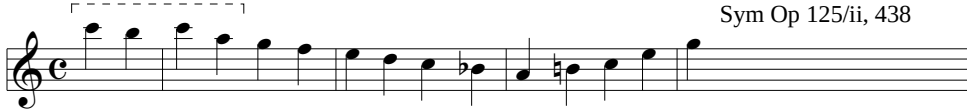
Fl 4t K.298/iii, 41



Bar Trio H.84/iii, 30



Sym Op 125/ii, 438



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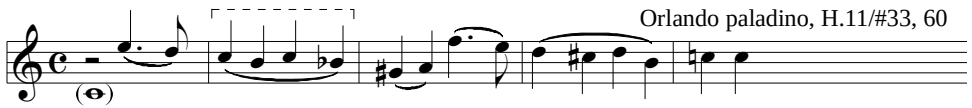
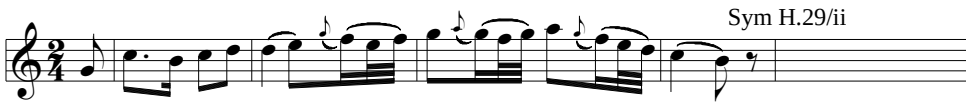
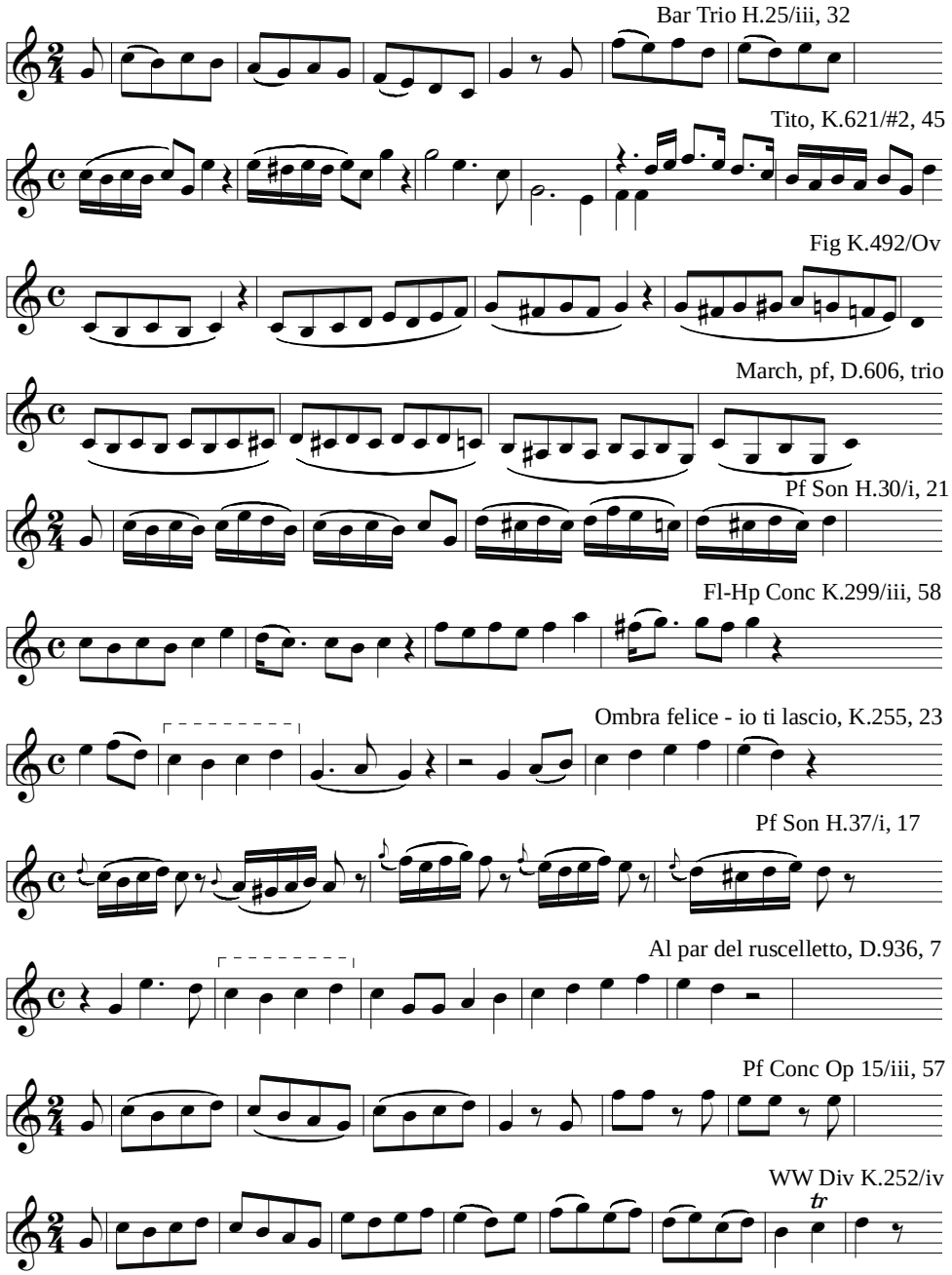



Sym H.29/ii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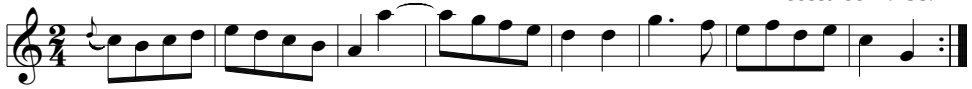
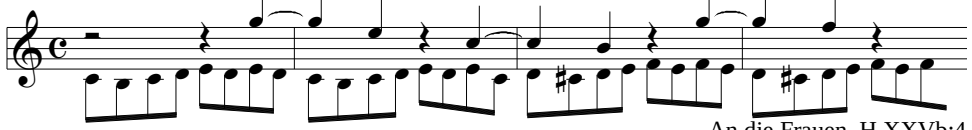
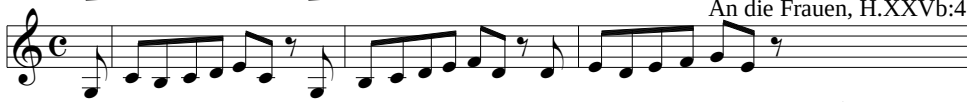


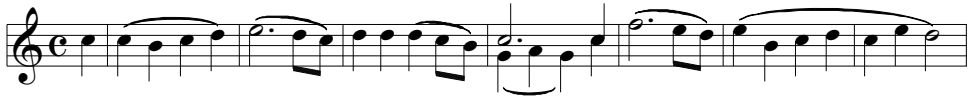
Sym K.297/iii



An die Frauen, H.XXVb:4



Pf Son D.960/i



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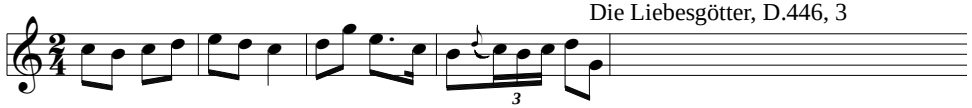
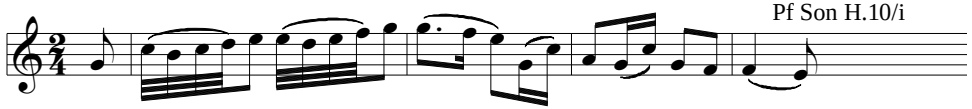


Pf Son H.10/i



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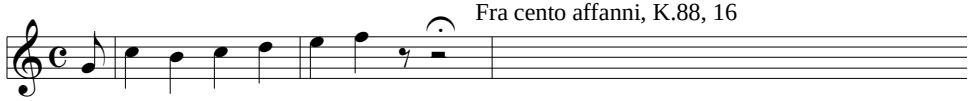
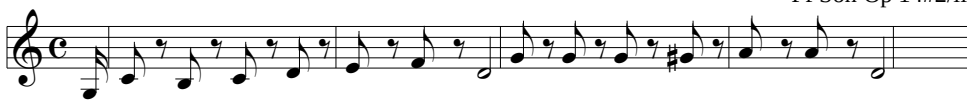


Pf Son Op 14#2/ii



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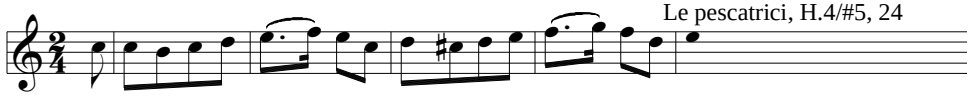

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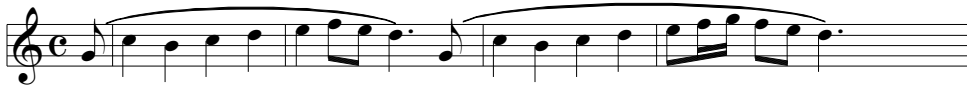
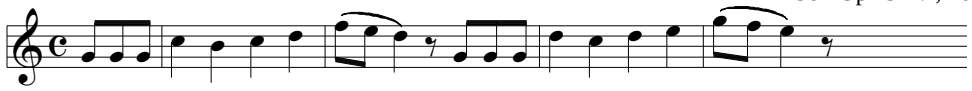
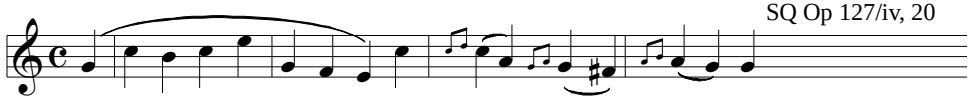


Pf Son Op 49#2/i, 20



SQ Op 127/iv, 20



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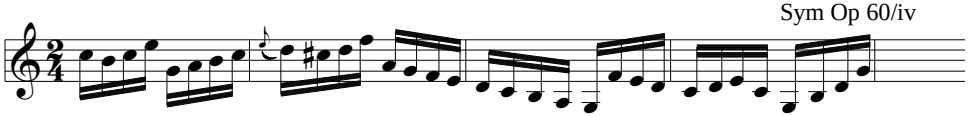

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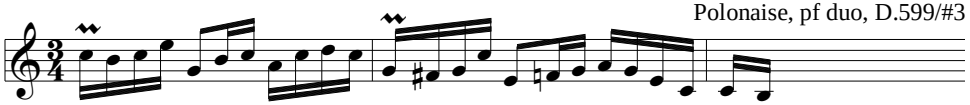

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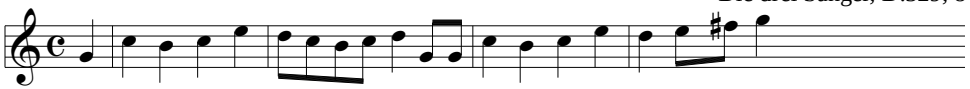
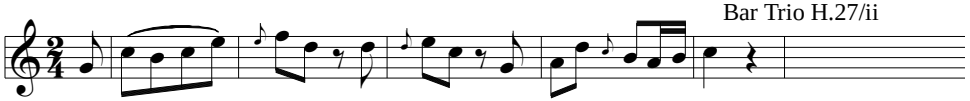
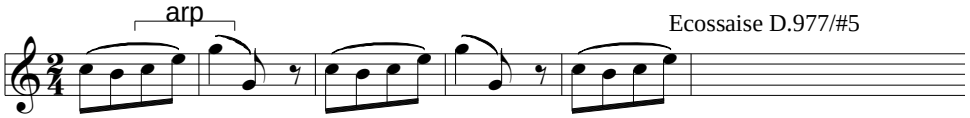


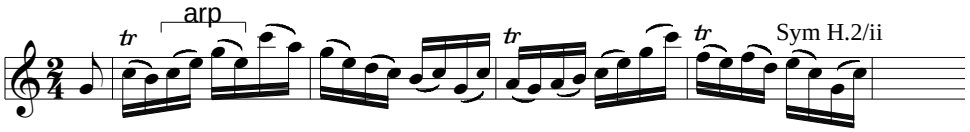
Bar Trio H.27/ii



Ecossaise D.977/#5



Sym H.2/ii



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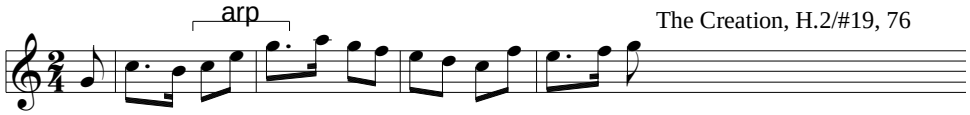
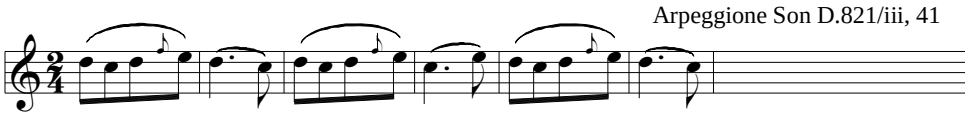
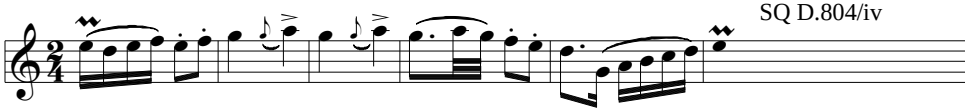


Arpeggione Son D.821/iii, 41



SQ D.804/iv



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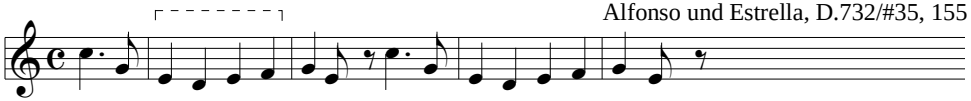
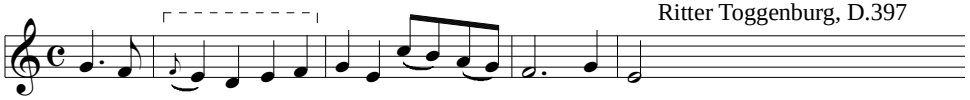
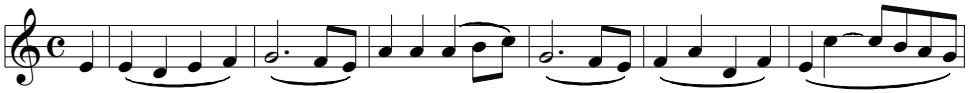


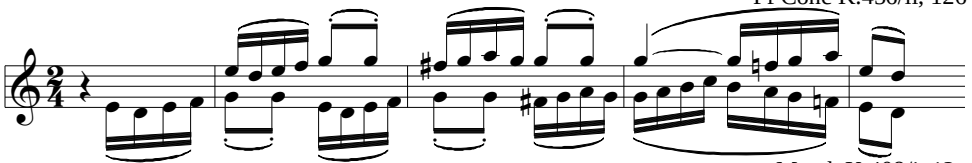
Ritter Toggenburg, D.397



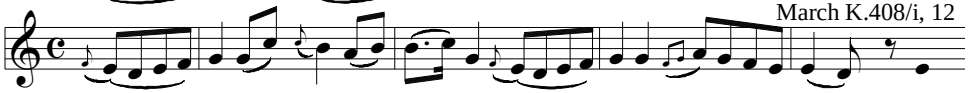
Pf Son D.960/i, 19



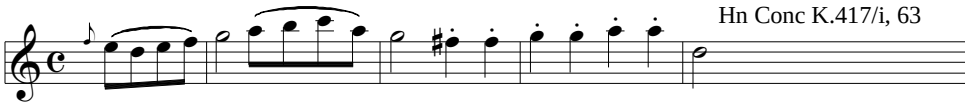
Pf Conc K.456/ii, 126



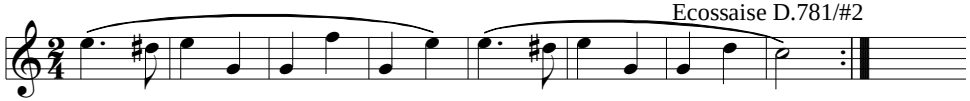
March K.408/i, 12



Hn Conc K.417/i, 63

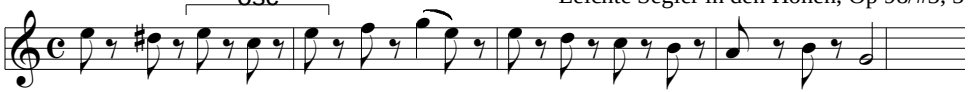


Ecossaise D.781/#2

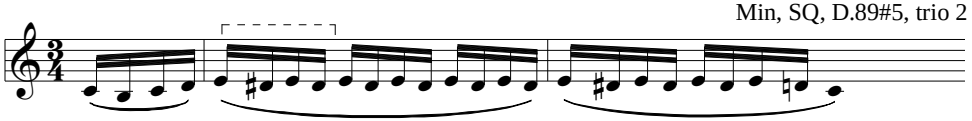


osc

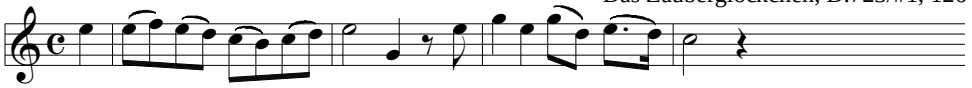
Leichte Segler in den Höhen, Op 98/#3, 5



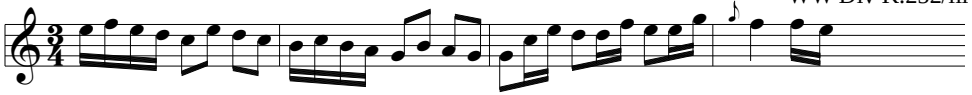
Min, SQ, D.89#5, trio 2



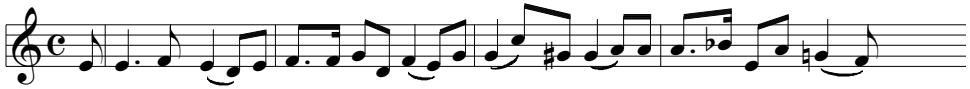
Das Zauberglöckchen, D.723/#1, 126



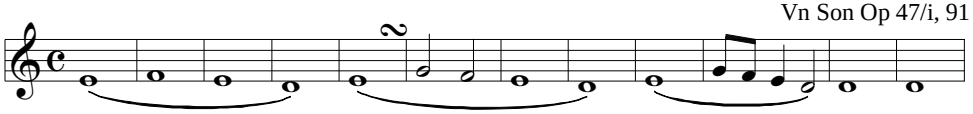
WW Div K.252/iii



Lied der Mignon ("Heiss mich nicht reden"), D.877/ii, 25

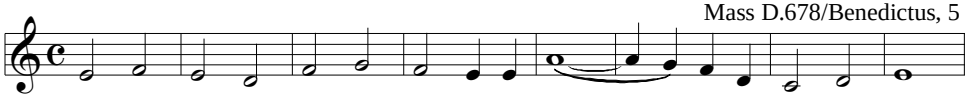


Vn Son Op 47/i, 91

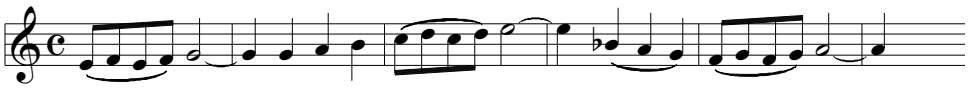


Str Trio Op 3/iii, trio

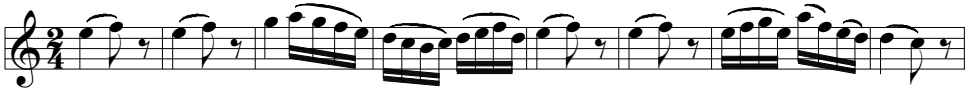
Mass D.678/Benedictus, 5



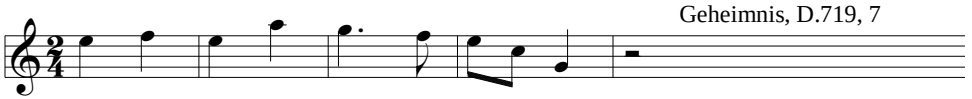
Claudine von Villa bella, D.239/Ov, 64



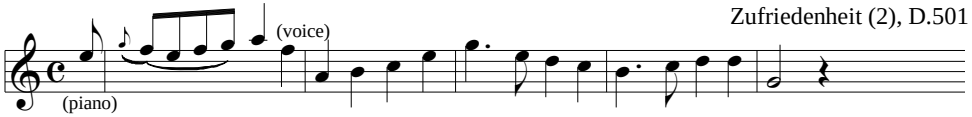
WW Div K.213/ii



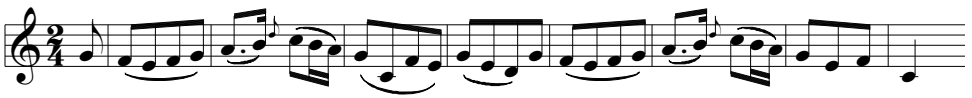
Geheimnis, D.719, 7



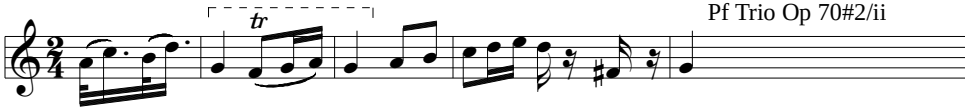
Zufriedenheit (2), D.501



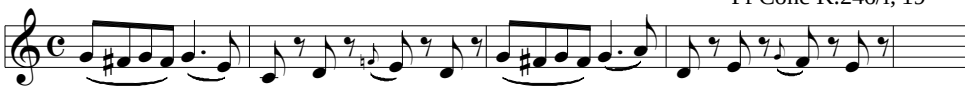
WW Div K.439b#3/v



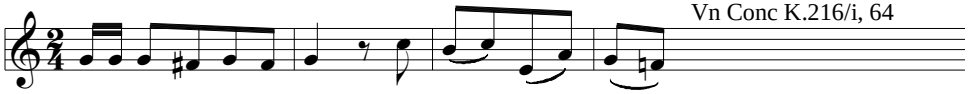
Pf Trio Op 70#2/ii



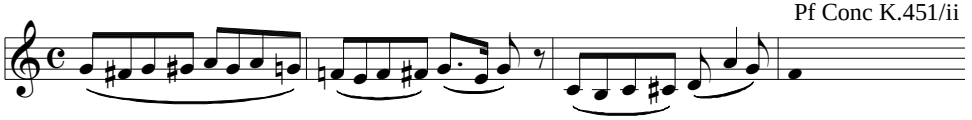
Pf Conc K.246/i, 19



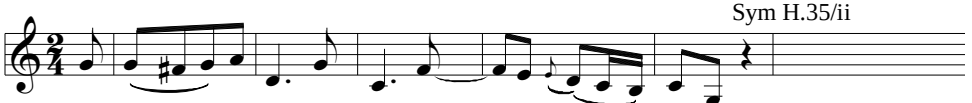
Vn Conc K.216/i, 64



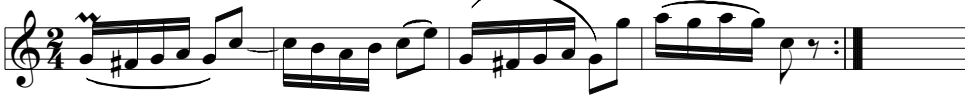
Pf Conc K.451/ii



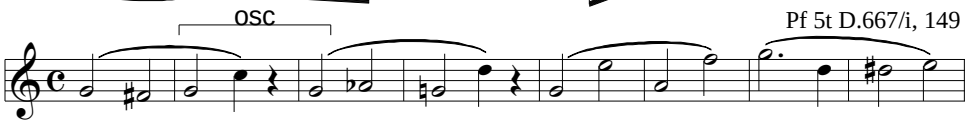
Sym H.35/ii

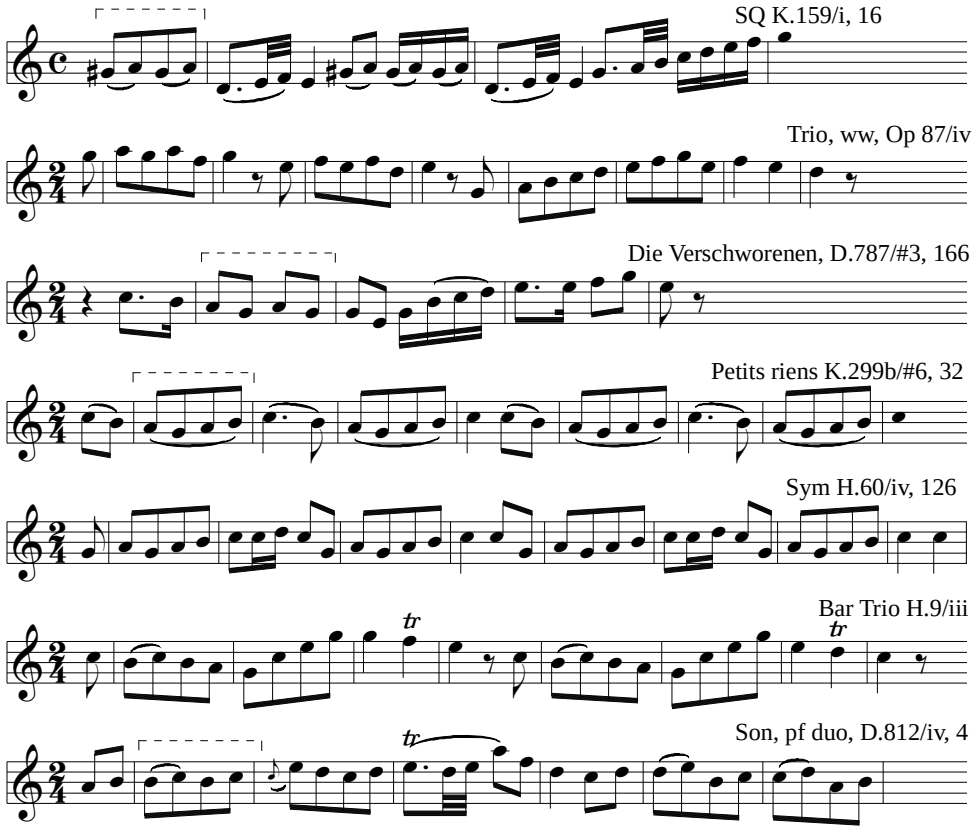


38 Dances/Ecossaise 9

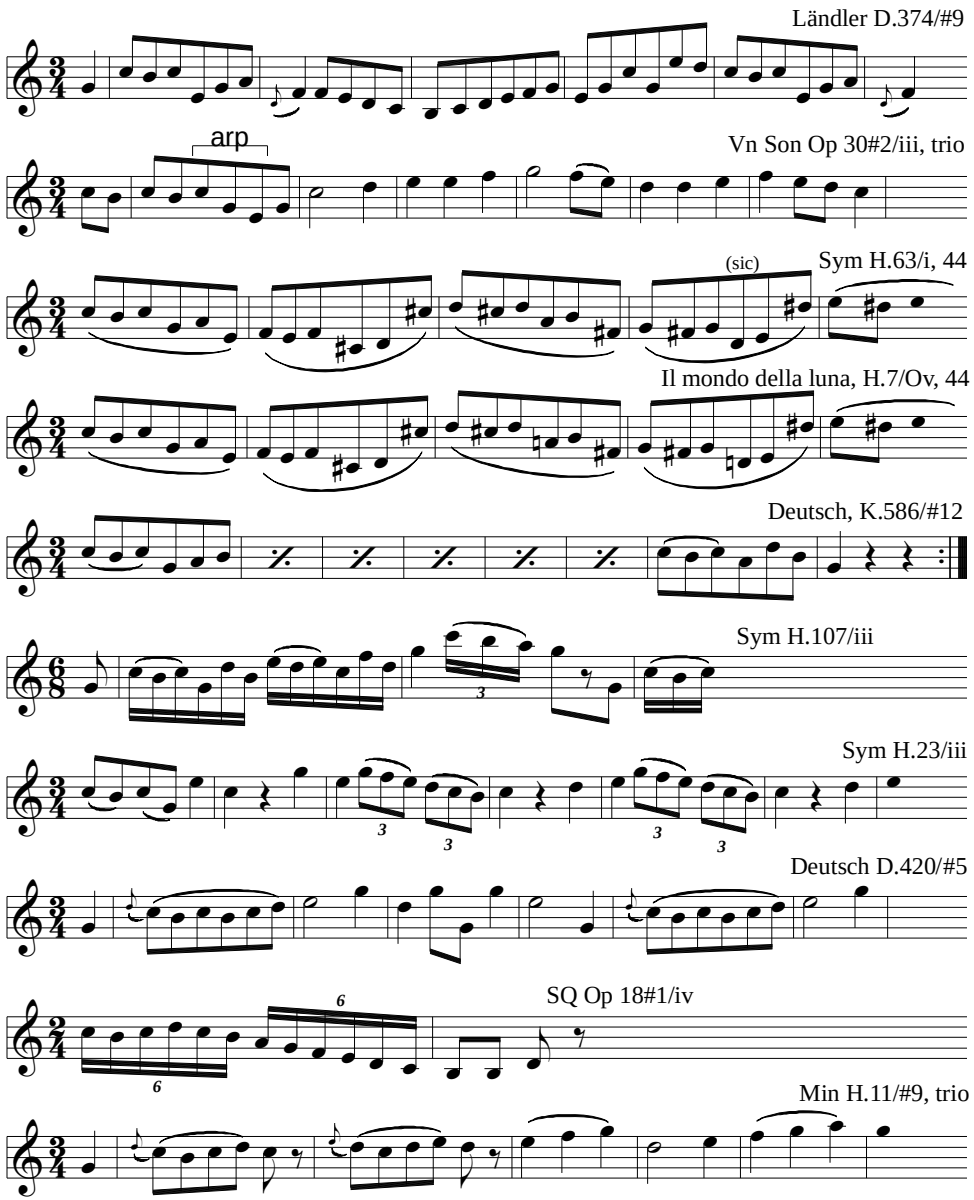


Pf 5t D.667/i, 149

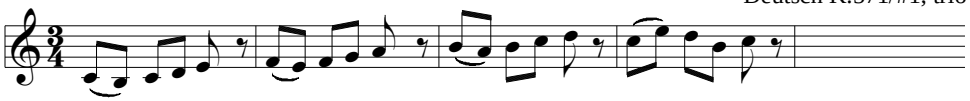



SQ K.159/i, 16
Trio, ww, Op 87/iv
Die Verschworenen, D.787/#3, 166
Petits riens K.299b/#6, 32
Sym H.60/iv, 126
Bar Trio H.9/iii
Son, pf duo, D.812/iv, 4

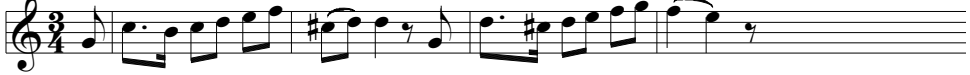
Z3^K, NT, triple-metered



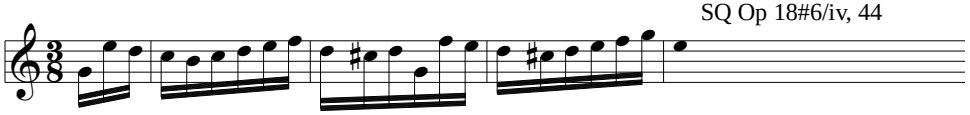
Deutsch K.571/#1, trio



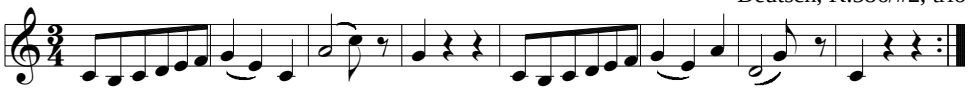
Bald wehen uns des Frühlings Lüfte, H.47, 2



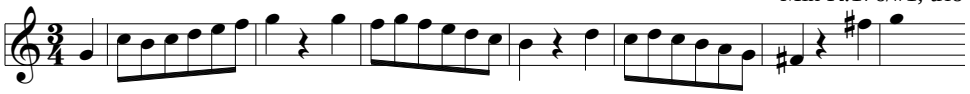
SQ Op 18#6/iv, 44



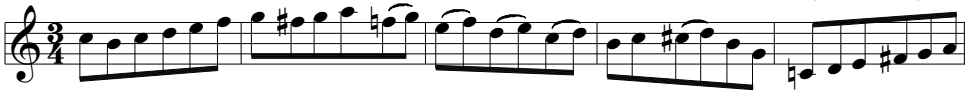
Deutsch, K.586/#2, trio



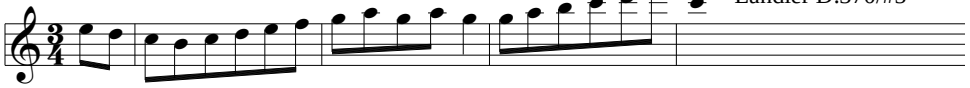
Min K.176/#1, trio



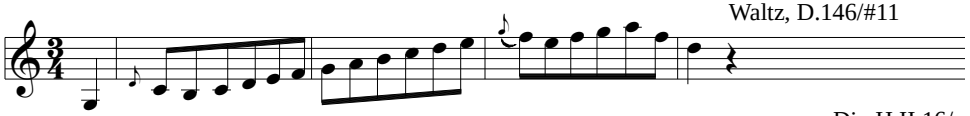
Deutsch, K.586/#6, trio



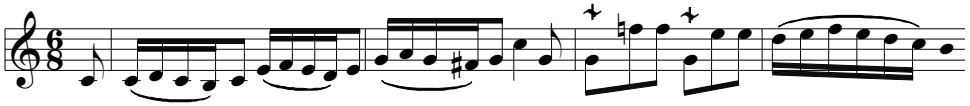
Ländler D.370/#5



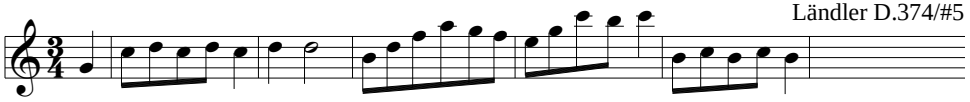
Waltz, D.146/#11



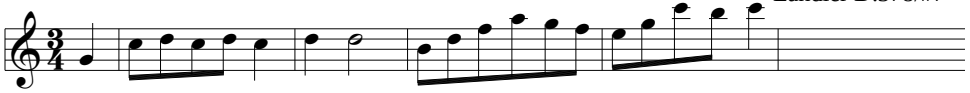
Div H.II:16/v



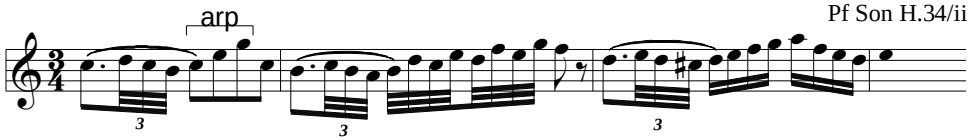
Ländler D.374/#5

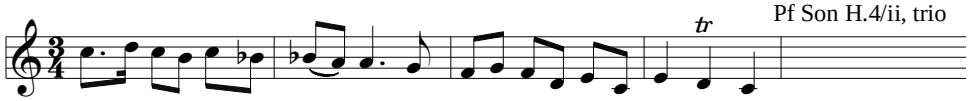


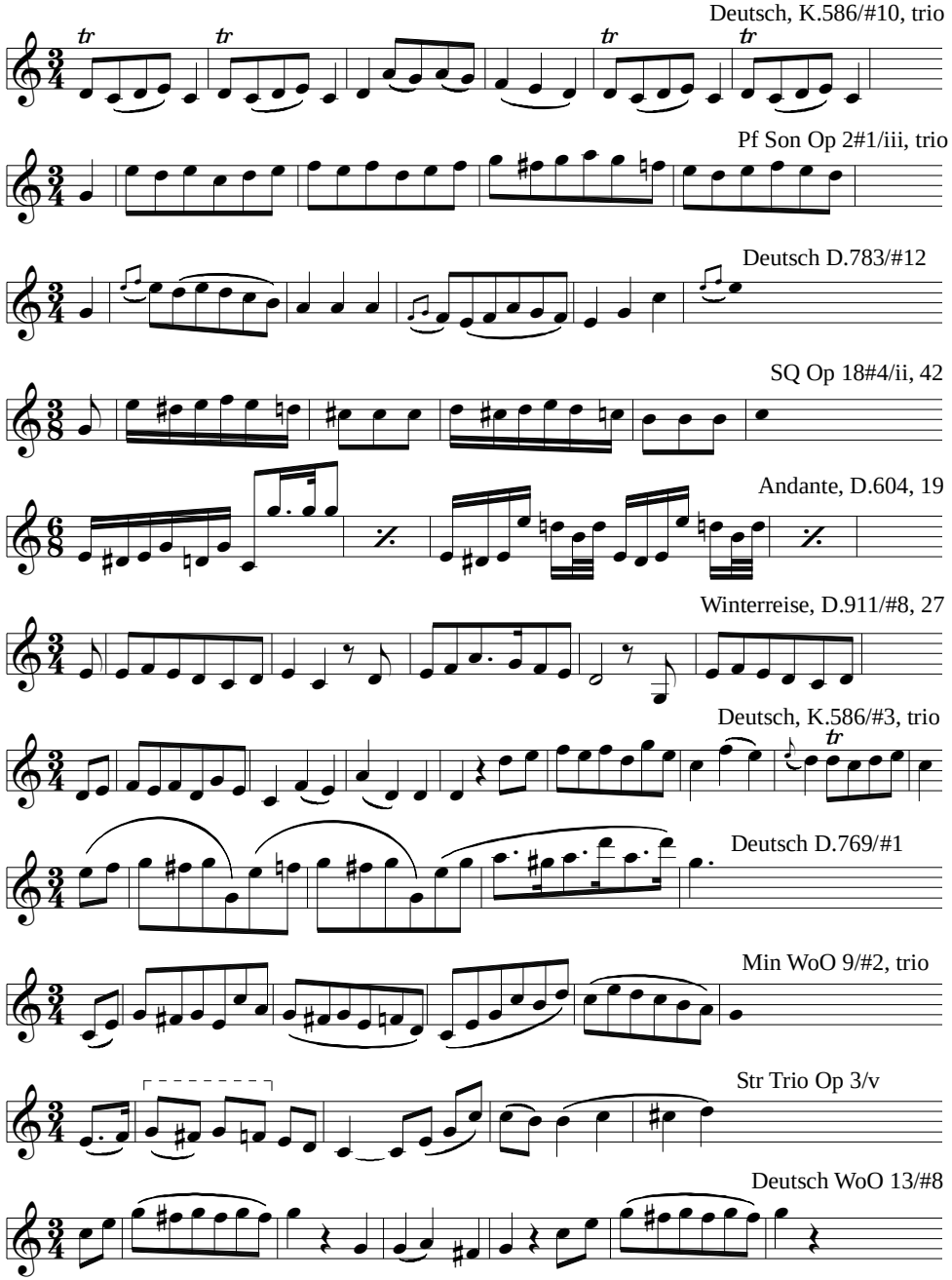
Ländler D.378/#7



Pf Son H.34/ii




Pf Son H.4/ii, trio


Deutsch, K.586/#10, trio
Pf Son Op 2#1/iii, trio
Deutsch D.783/#12
SQ Op 18#4/ii, 42
Andante, D.604, 19
Winterreise, D.911/#8, 27
Deutsch, K.586/#3, trio
Deutsch D.769/#1
Min WoO 9/#2, trio
Str Trio Op 3/v
Deutsch WoO 13/#8

Sym H.98/iii, trio

Min, WoO 33/#5, trio

12 Wiener Deutsche, D.128/#8

36 Originaltänze, D.365/#35

arp

Ländler D.374/#2

arp

Ländler D.378/#2

Min H.3/#4, trio

Deutsch WoO 13/#6, trio

Sym H.81/iii, trio

tr

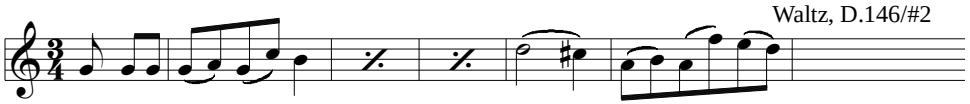
Regina coeli, K.127/Quia, 14

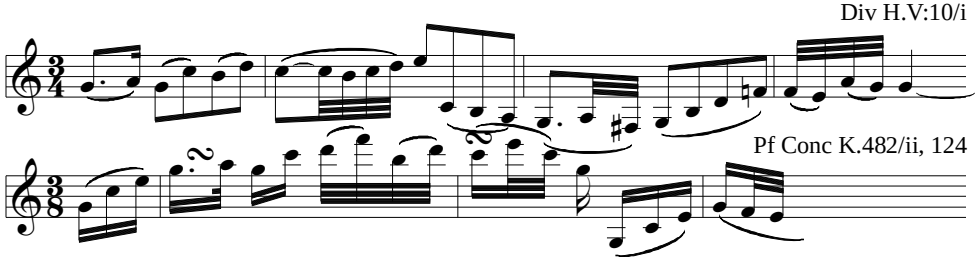
osc

Waltz, D.146/#20, trio

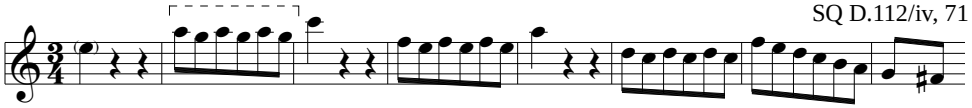
osc

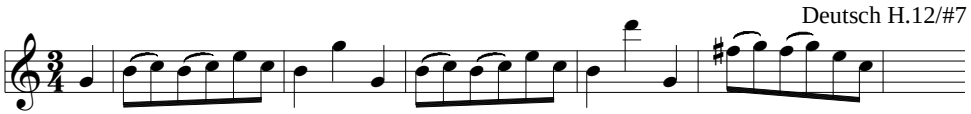
34 Valses sentimentales, D.779/#3

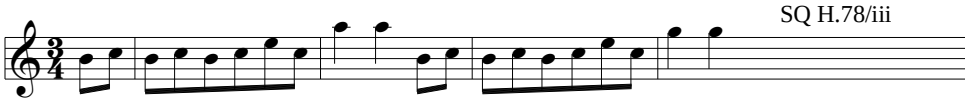

Waltz, D.146/#2


Div H.V:10/i

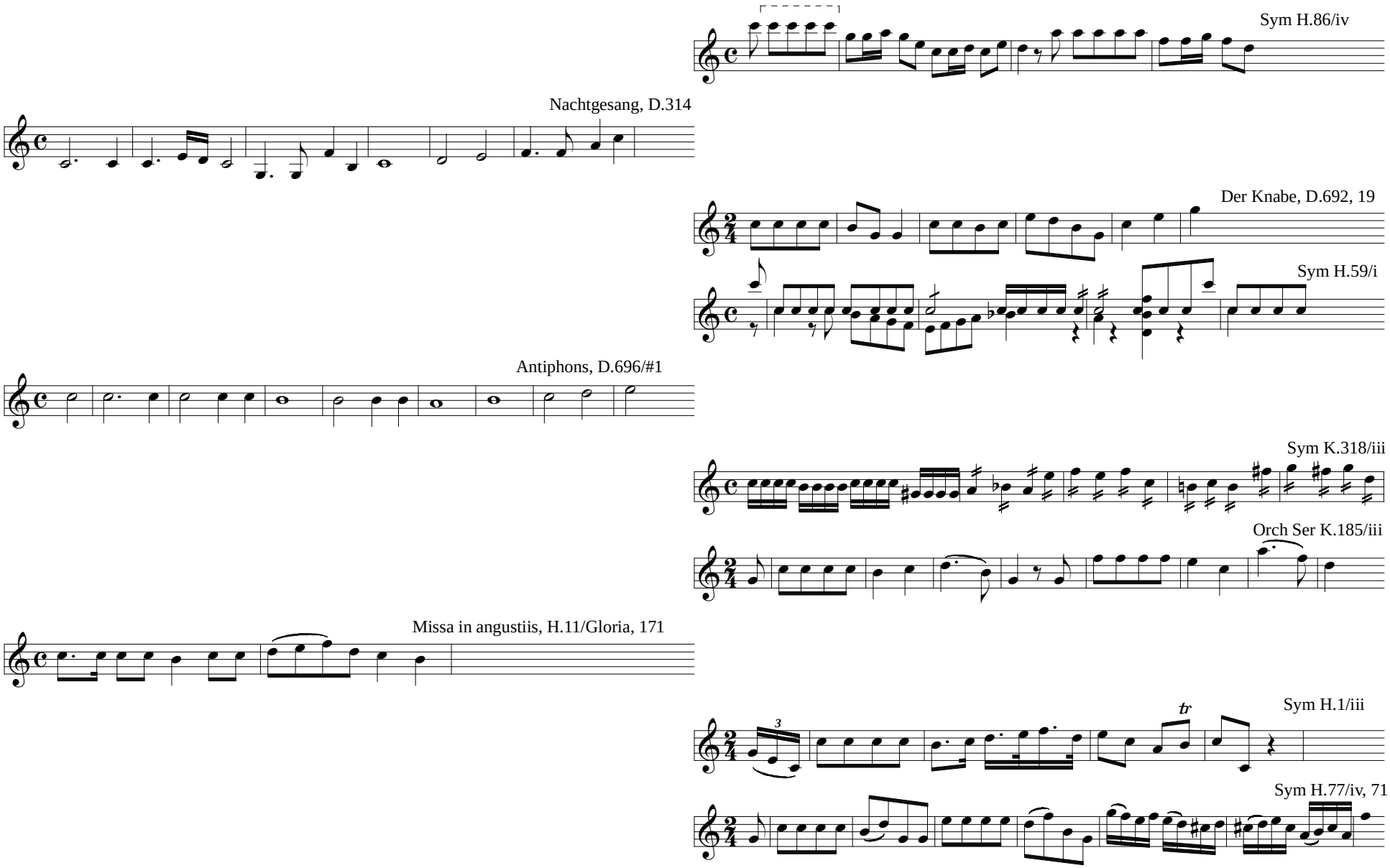
Pf Conc K.482/ii, 124


SQ D.112/iv, 71

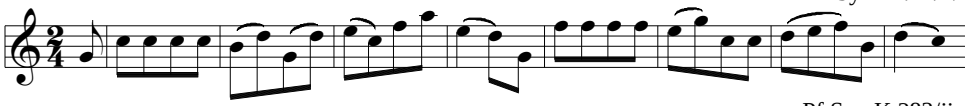

Deutsch H.12/#7


SQ H.78/iii

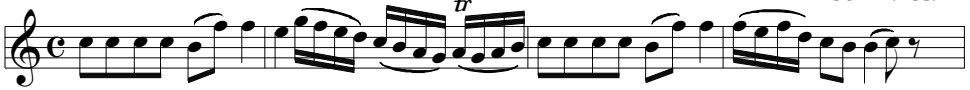
EX 17.1:
Z3^K, {RRRR}



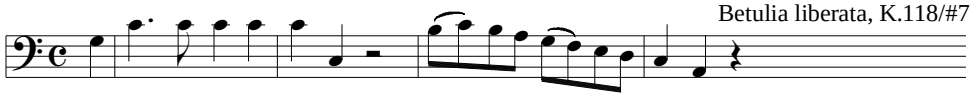
Sym H.77/iv



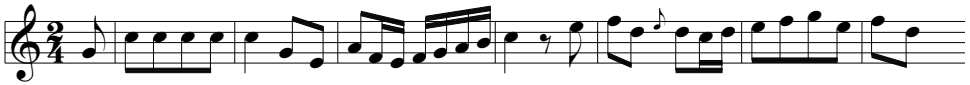
Pf Son K.283/ii



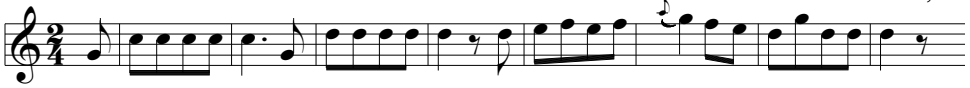
Betulia liberata, K.118/#7



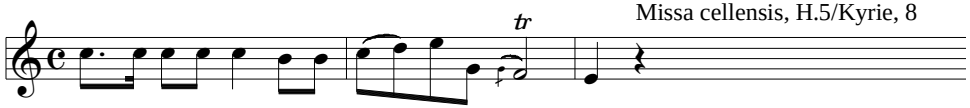
Bar Trio H.14/ii



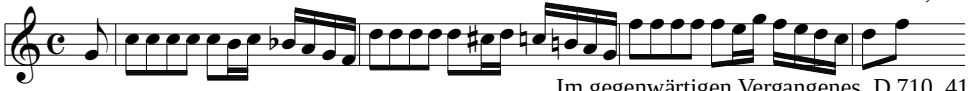
WW Div K.186/v, 52



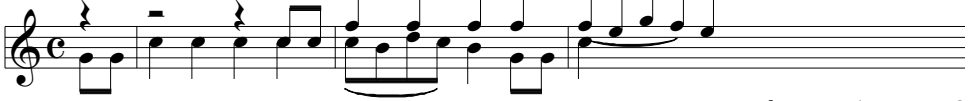
Missa cellensis, H.5/Kyrie, 8



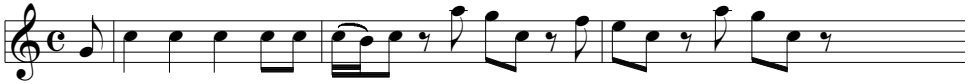
Bar Trio H.62/i, 14



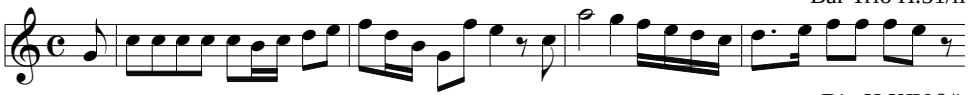
Im gegenwärtigen Vergangenes, D.710, 41



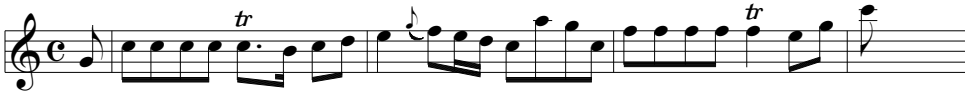
Regina coeli, K.127/Regina, 19



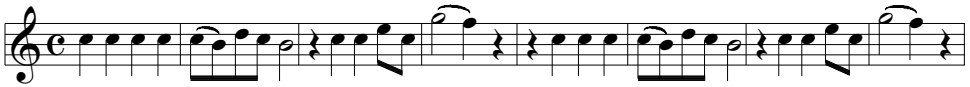
Bar Trio H.51/ii



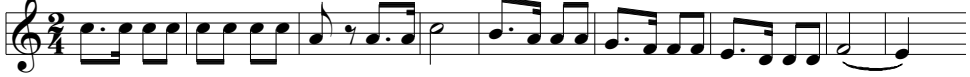
Div H.XIV:9/i



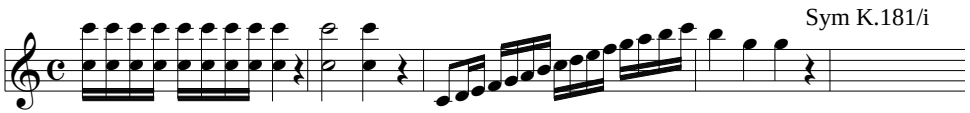
Pf Conc K.175/iii, 23



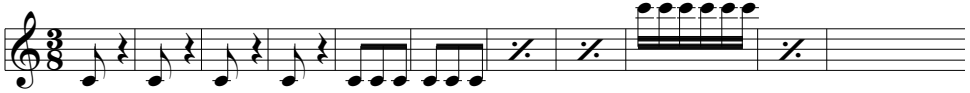
Sym D.589/iv, 180



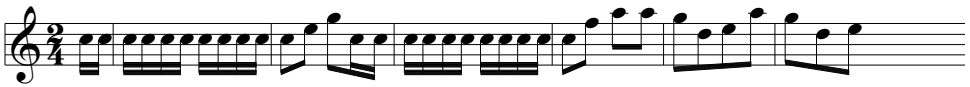
Sym K.181/i



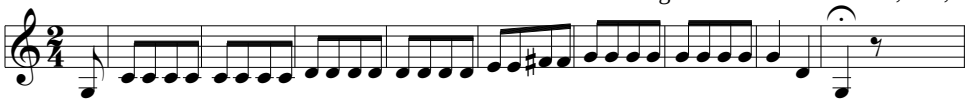
Orch Ser K.250/viii, 17



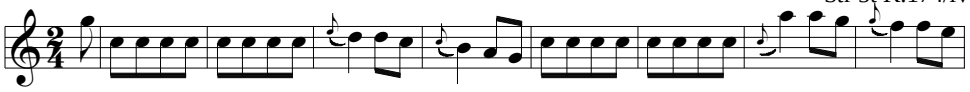
Pf Trio Op 1#2/iv



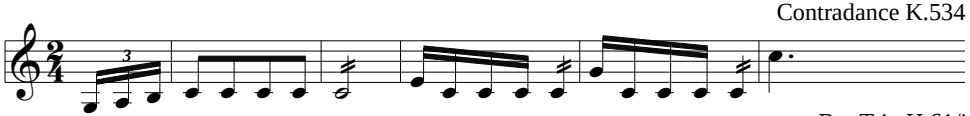
Eine sehr gewöhnliche Geschichte, H.4, 8



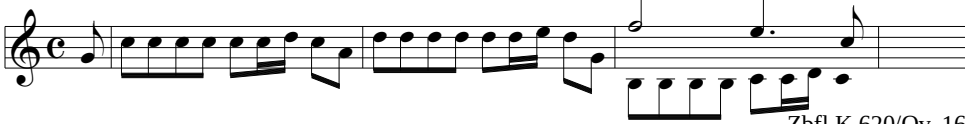
Str 5t K.174/iv



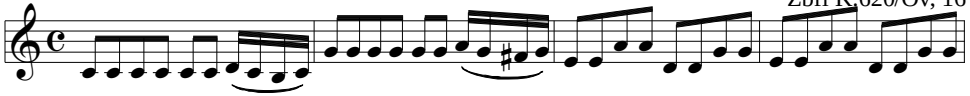
Contradance K.534



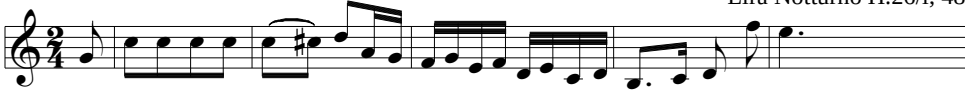
Bar Trio H.61/i



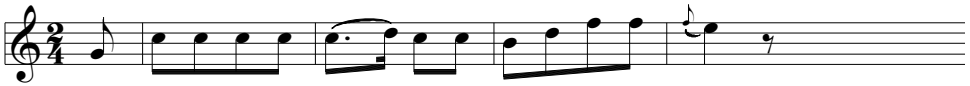
Zbfl K.620/Ov, 16



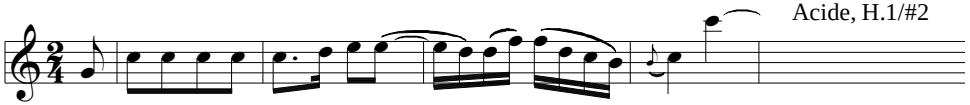
Lira Notturno H.26/i, 48



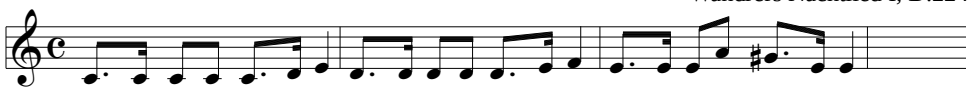
La vera costanza, H.8/#2, 176



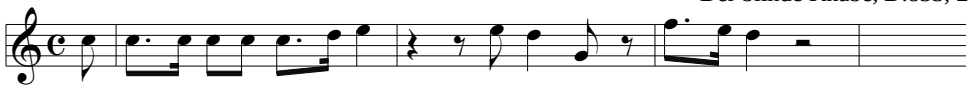
Acide, H.1/#2



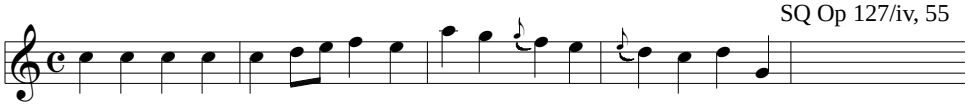
Wandrers Nachtlied I, D.224



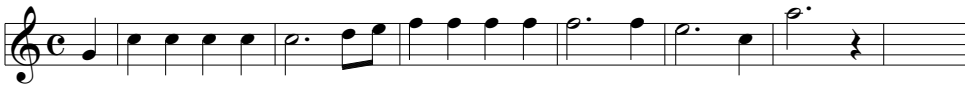
Der blinde Knabe, D.833, 2



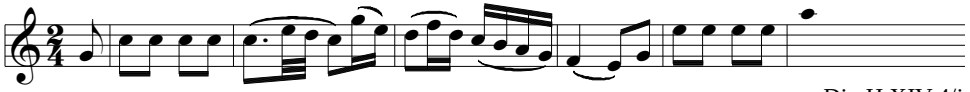
SQ Op 127/iv, 55



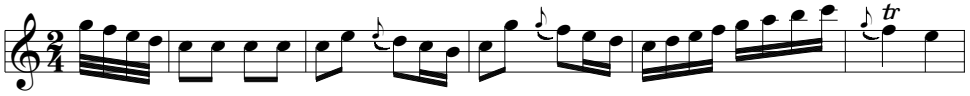
The Creation, H.2/#3, 96



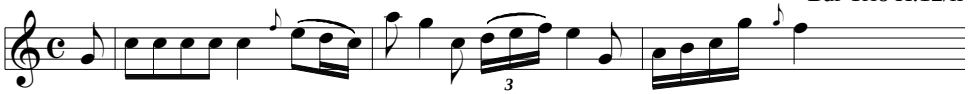
Duo, vn-va, H.3/i



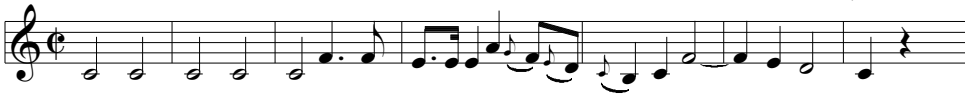
Div H.XIV:4/i



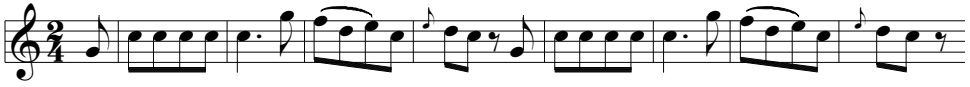
Bar Trio H.12/ii



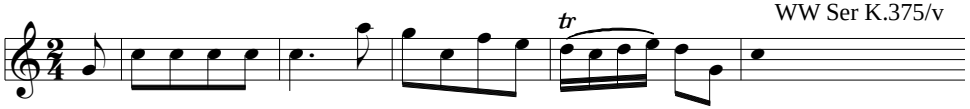
Mass in hon. BVM, H.4/Gloria



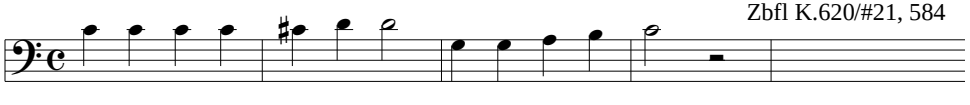
Bar Octet H.1/i



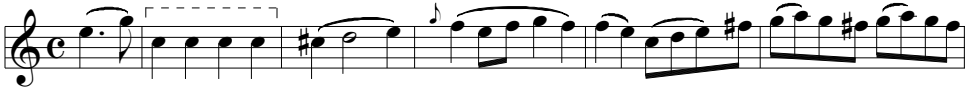
WW Ser K.375/v



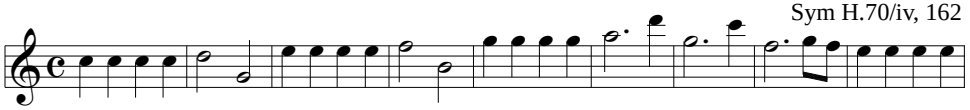
Zbfl K.620/#21, 584



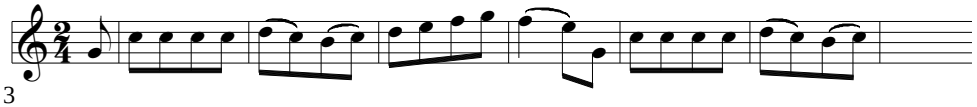
Schspl K.486/#4, 40



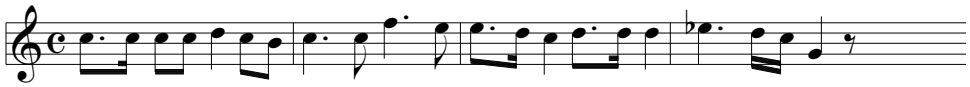
Sym H.70/iv, 162



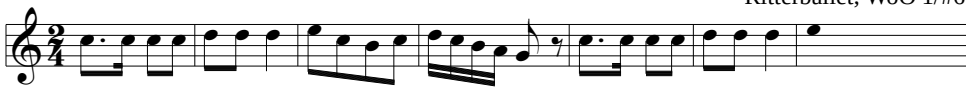
Bar Trio H.31/ii



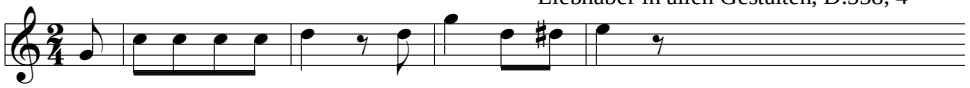
Wanderers Nachtlied, D.768, 3



Ritterballet, WoO 1/#6

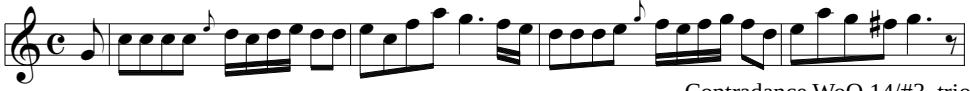


Liebhaber in allen Gestalten, D.558, 4

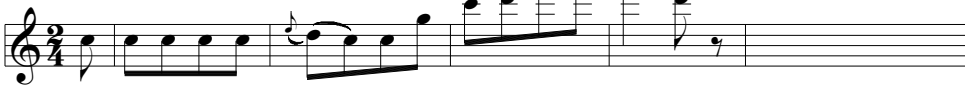


DG K.527/#13, 454 (pt 2, 182)

The Seasons, H.3/#36

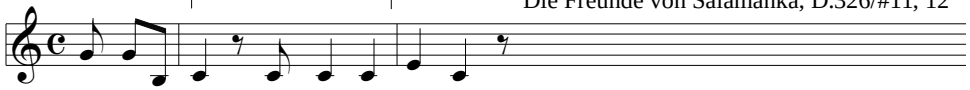


Contradance WoO 14/#3, trio

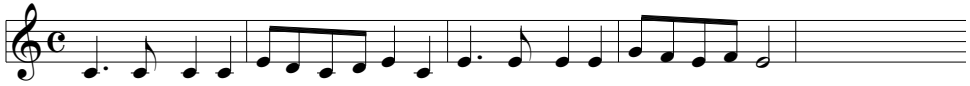


OSC

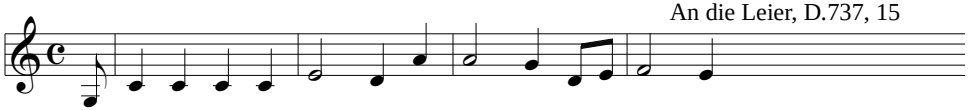
Die Freunde von Salamanka, D.326/#11, 12



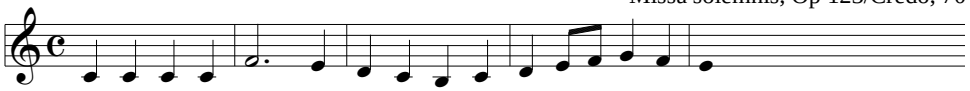
Der Gott und der Bajadere, D.254



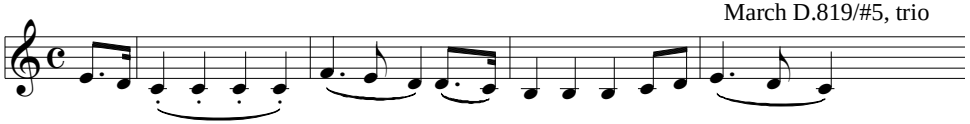
An die Leier, D.737, 15



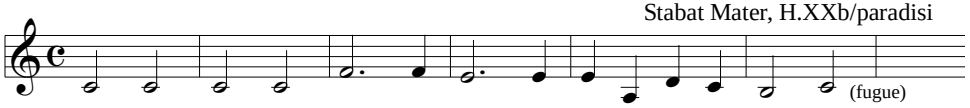
Missa solemnis, Op 123/Credo, 70



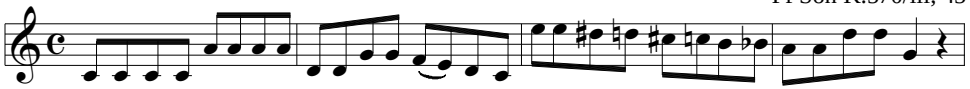
March D.819/#5, trio



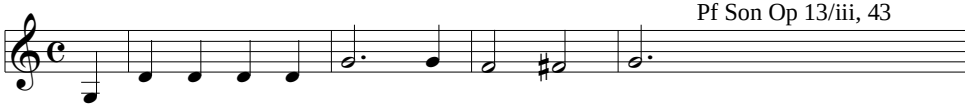
Stabat Mater, H.XXb/paradisi



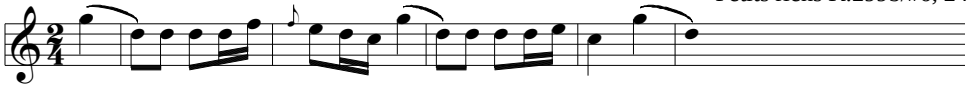
Pf Son K.570/iii, 45



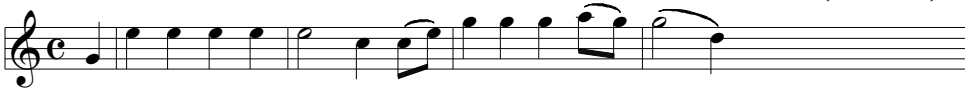
Pf Son Op 13/iii, 43



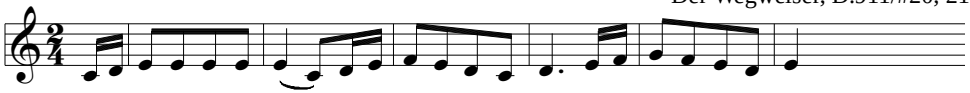
Petits riens K.299b/#6, 24



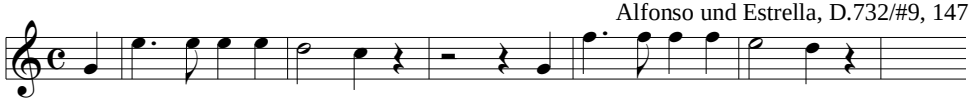
Der Graf von Gleichen, D.918/#2, 99



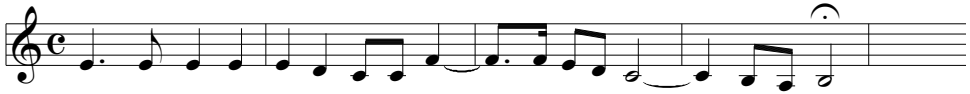
Der Wegweiser, D.911/#20, 21



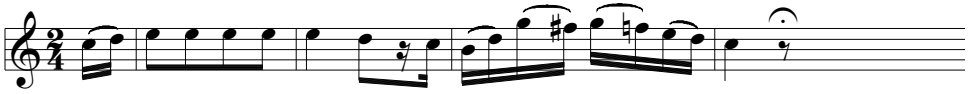
Alfonso und Estrella, D.732/#9, 147



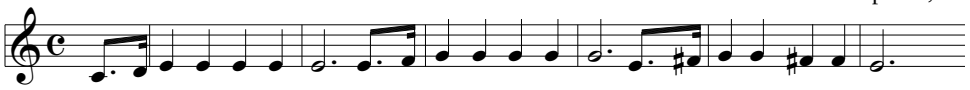
Kyrie, K.196a



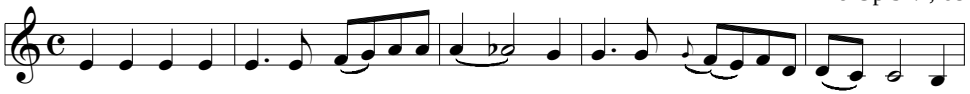
Der Blumen Schmerz, D.731, 46



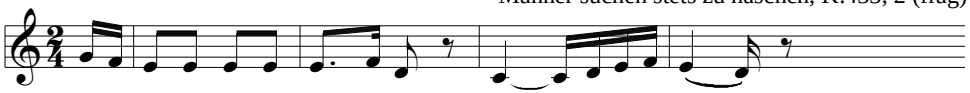
Hn Son Op 17/i, 30



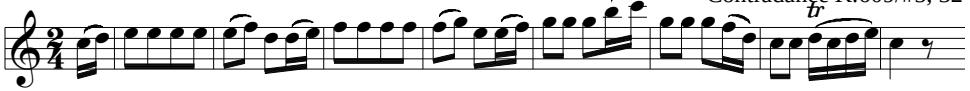
Pf Trio Op 97/i, 68



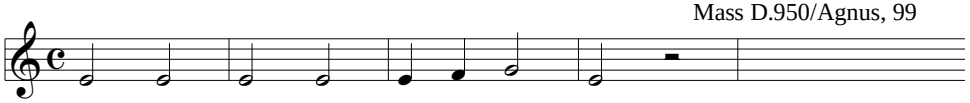
Männer suchen stets zu naschen, K.433, 2 (frag)



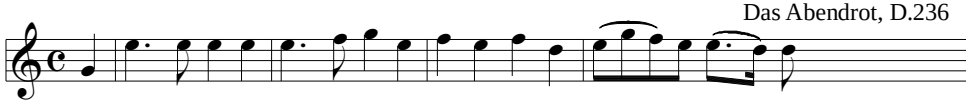
Contradance K.609/#5, 32



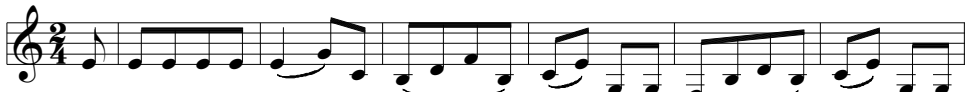
Mass D.950/Agnus, 99



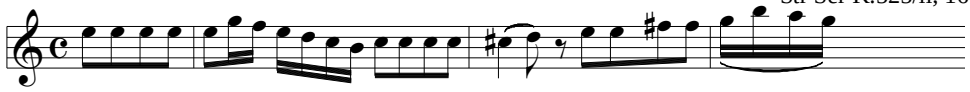
Das Abendrot, D.236



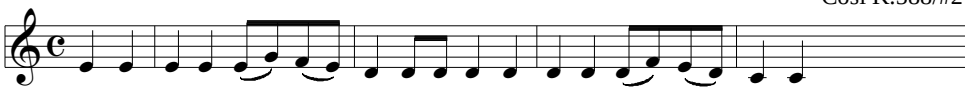
Pf Son H.52/iii



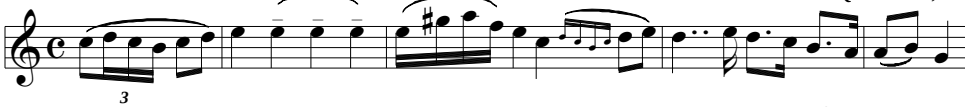
Str Ser K.525/ii, 16



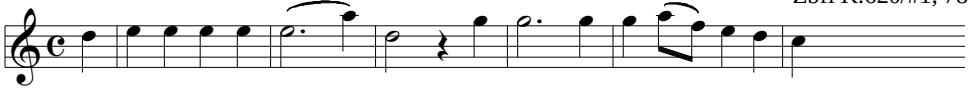
Cosi K.588/#2



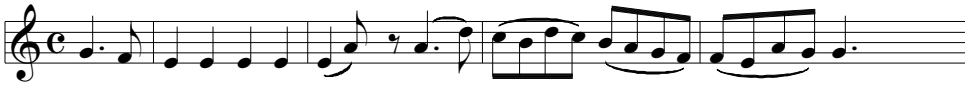
SQ K.428/i, 40



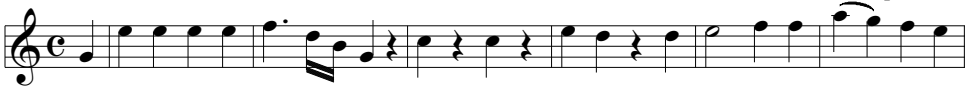
Zbfl K.620/#1, 78



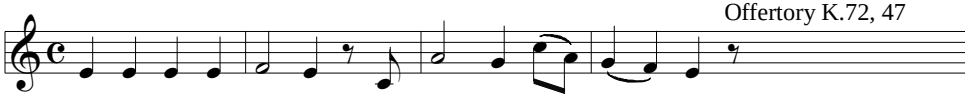
Church Son K.278, 32



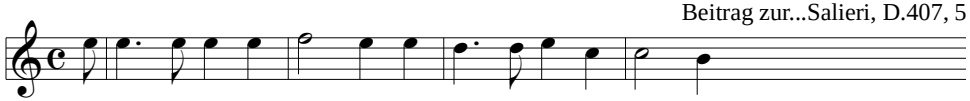
Adelaide, Op 46, 69



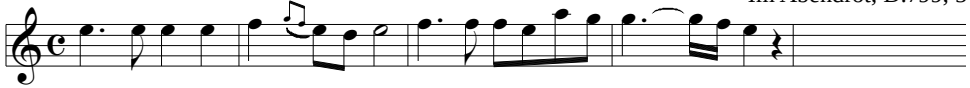
Offertory K.72, 47



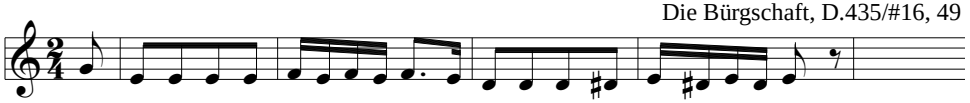
Beitrag zur...Salieri, D.407, 5



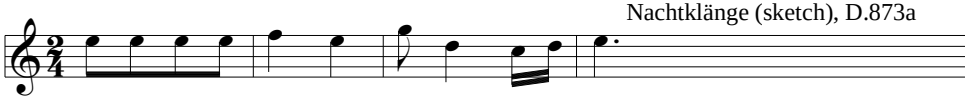
Im Abendrot, D.799, 5



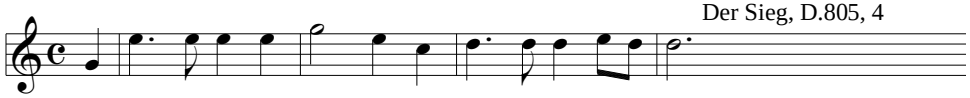
Die Bürgschaft, D.435/#16, 49



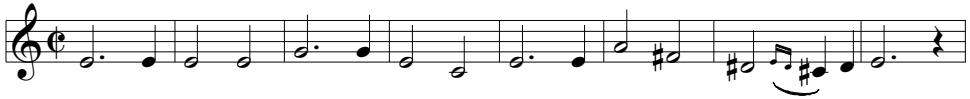
Nachtklänge (sketch), D.873a



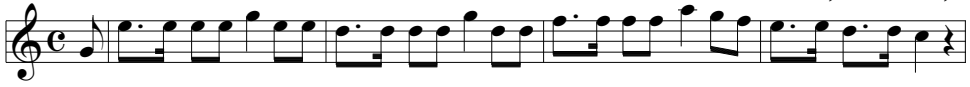
Der Sieg, D.805, 4



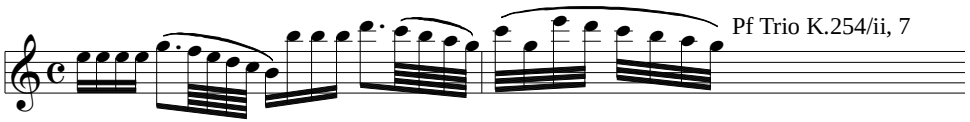
Meeres Stille, D.216



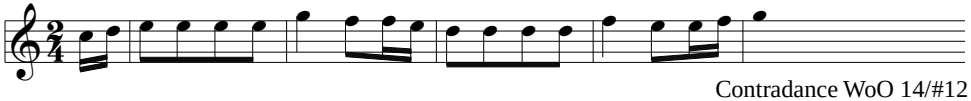
Alfonso und Estrella, D.732/#35, 2



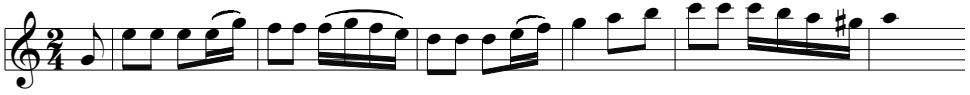
Pf Trio K.254/ii, 7



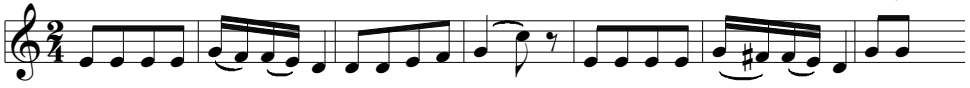
Sakuntala, D.701/#10, 12



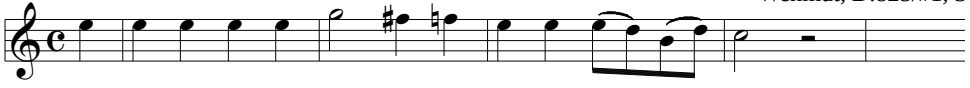
Contradance WoO 14/#12



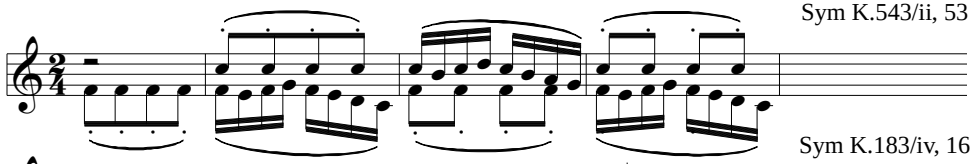
Heidenröslein, D.257



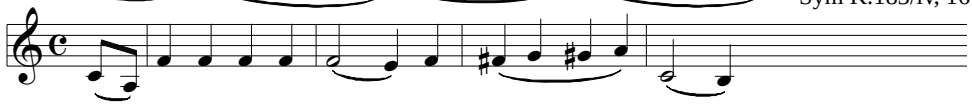
Wehmut, D.825/#1, 3



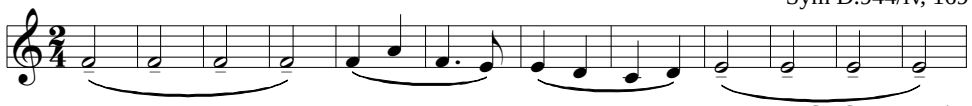
Sym K.543/ii, 53



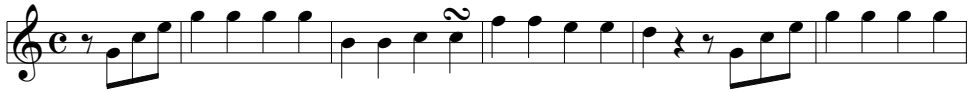
Sym K.183/iv, 16



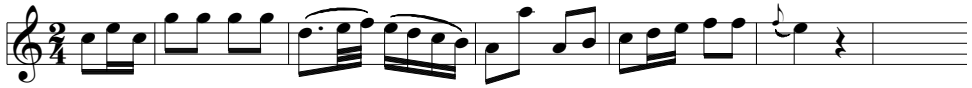
Sym D.944/iv, 169



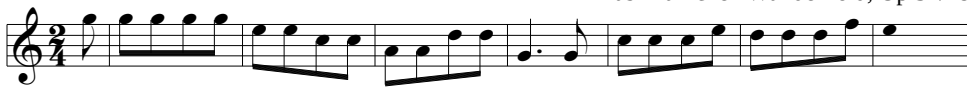
Str Ser K.525/iv



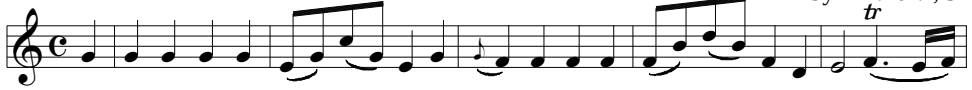
La marchesa, H.XXX:1/#2



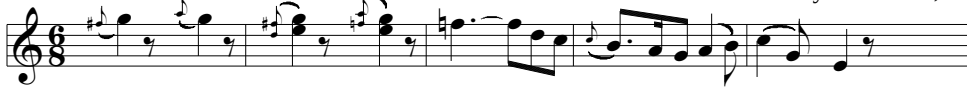
Das Blümchen Wunderhold, Op 52/#8



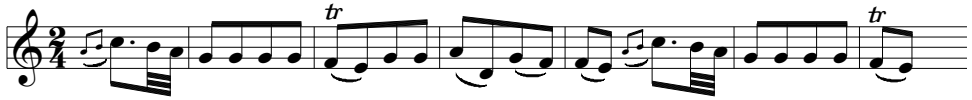
Sym K.201/i, 32



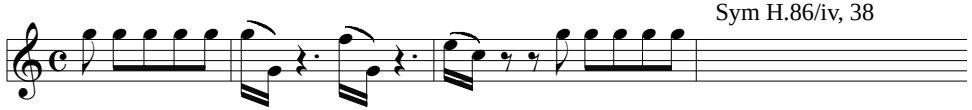
Sym K.201/iv, 34



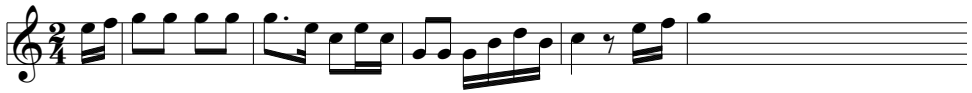
WW Div K.186/v



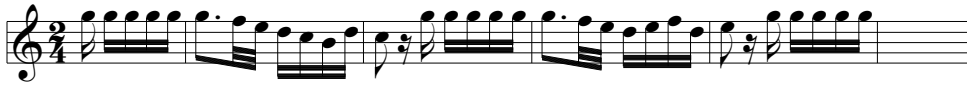
Sym H.86/iv, 38

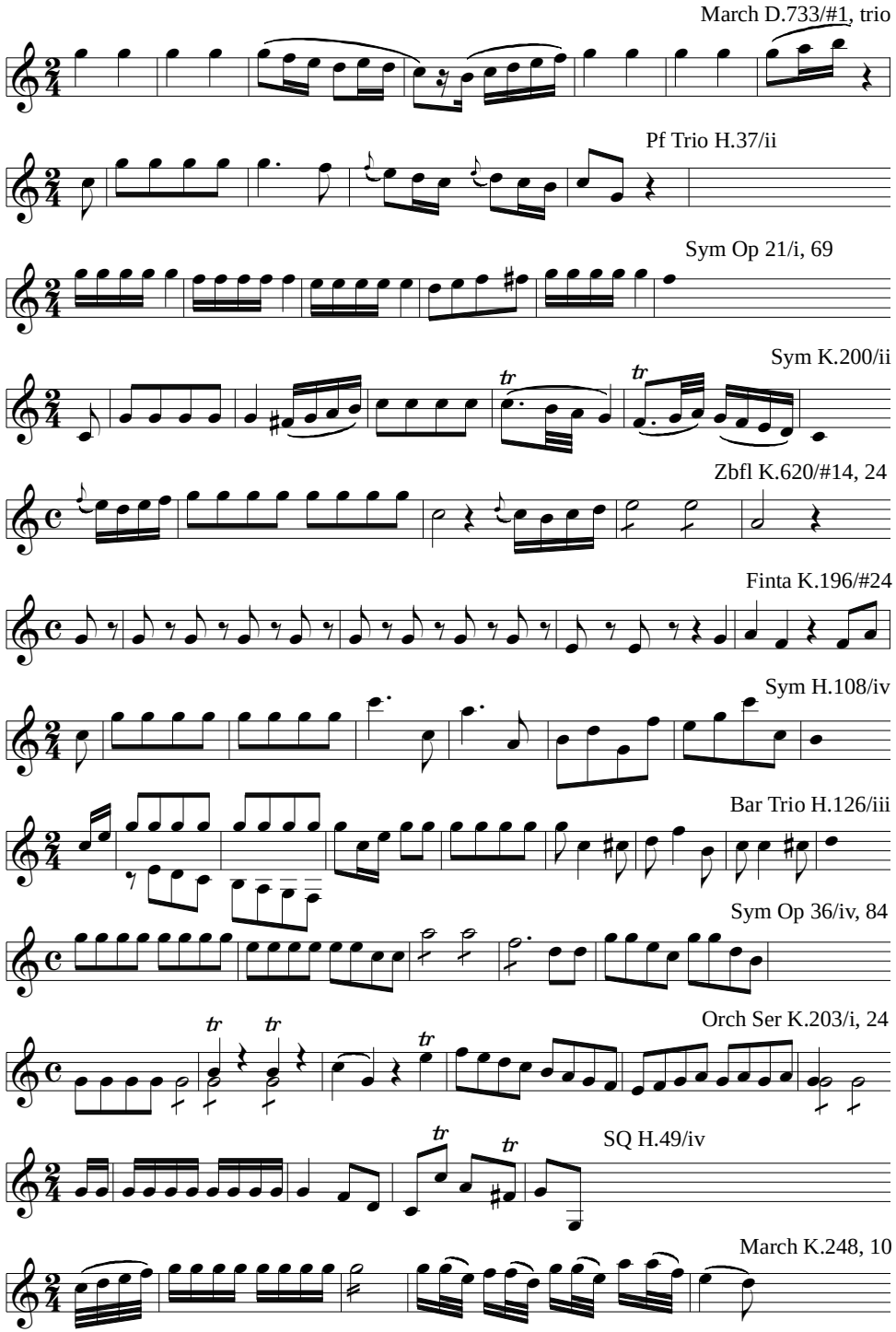


Wohin, D.795/#2, 2

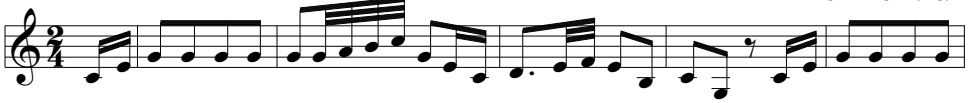


Pf Son K.281/i, 17

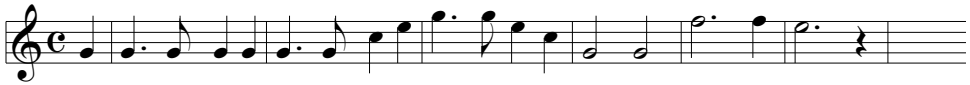



March D.733/#1, trio
Pf Trio H.37/ii
Sym Op 21/i, 69
Sym K.200/ii
Zbfl K.620/#14, 24
Finta K.196/#24
Sym H.108/iv
Bar Trio H.126/iii
Sym Op 36/iv, 84
Orch Ser K.203/i, 24
SQ H.49/iv
March K.248, 10

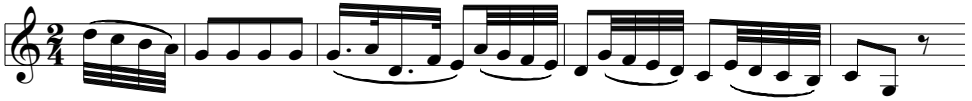
Bar Trio H.70/ii



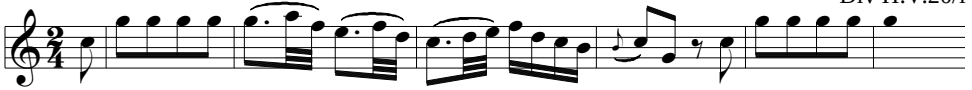
Tarpeja Triumphal March, WoO 2a



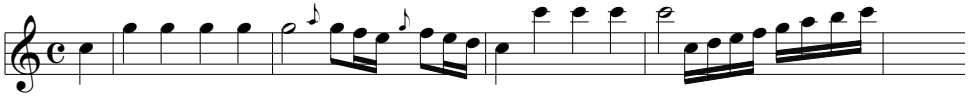
Pf Son H.3/ii



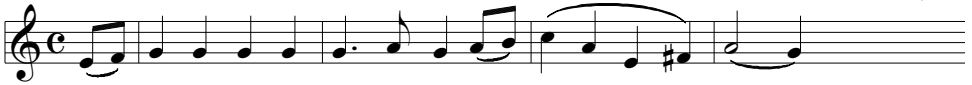
Div H.V:20/i



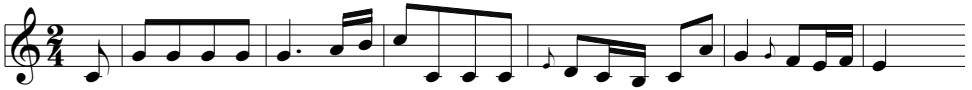
Lucio Silla K.135/#20



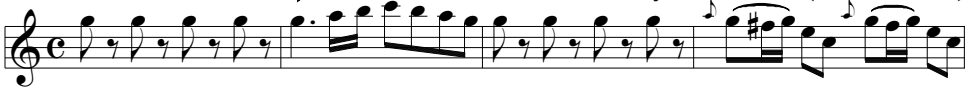
Sinf Conc K.297b/i, 47



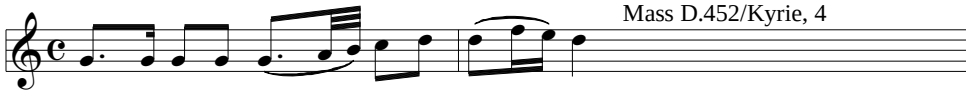
Bar Trio H.108/iii



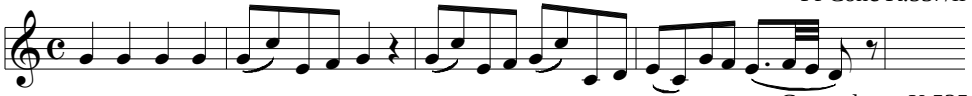
Sym K.318/i, 33 (= K.318/iii, 14)



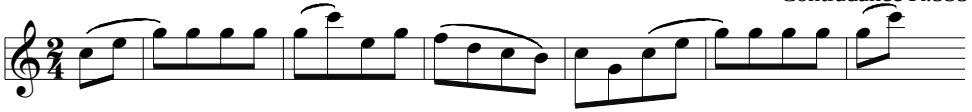
Mass D.452/Kyrie, 4



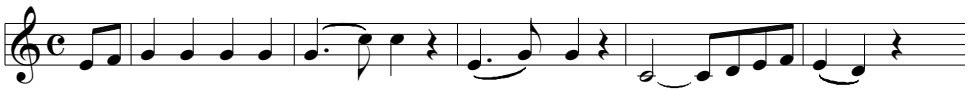
Pf Conc K.537/ii



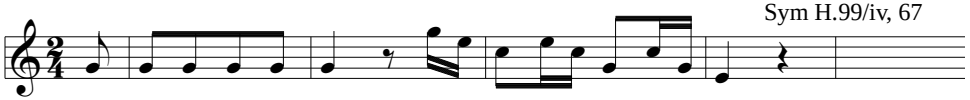
Contradance K.535



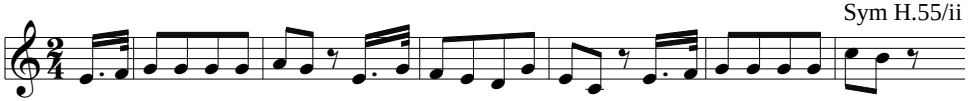
An Chloe, K.524, 6



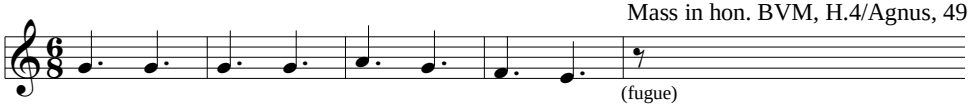
Sym H.99/iv, 67



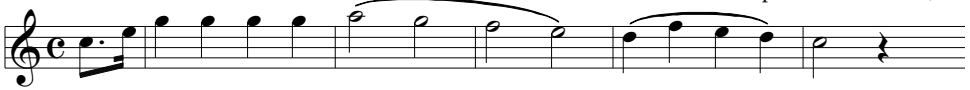
Sym H.55/ii



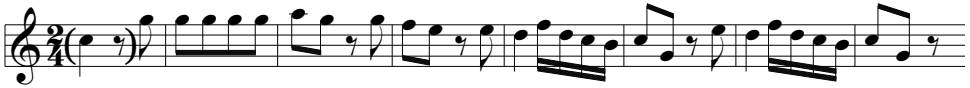
Mass in hon. BVM, H.4/Agnus, 49



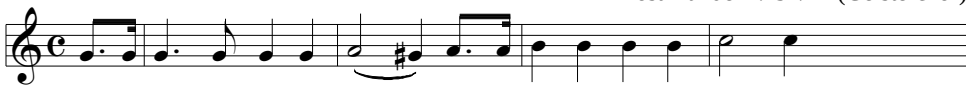
Pf Impromtu D.899/#1, 41



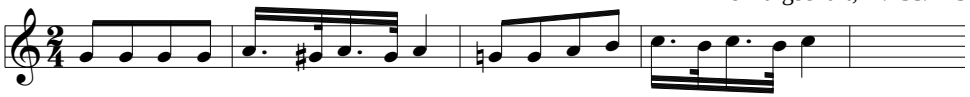
Div H.XIV:1/iii



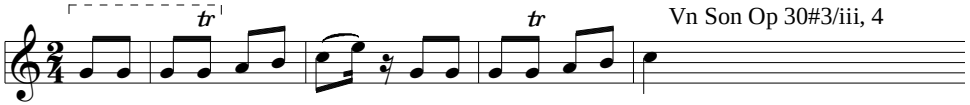
Rosamunde D.797/#4 (Geisterchor)



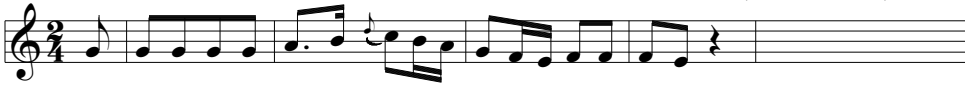
Die Bürgschaft, D.435/#13



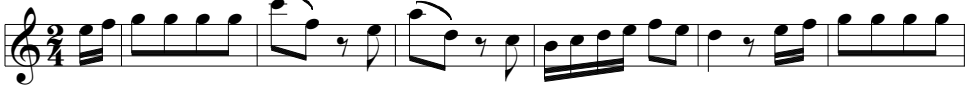
Vn Son Op 30#3/iii, 4



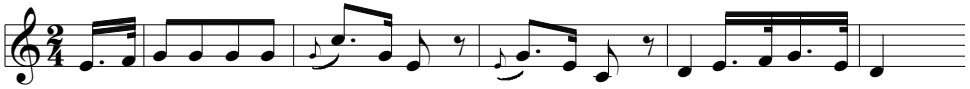
La marchesa, H.XXX:1/#8, 14



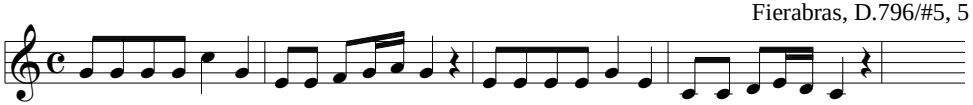
London Trio H.1/iii



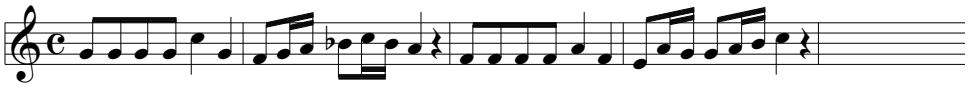
Vn-Pf Sonatine D.384/ii

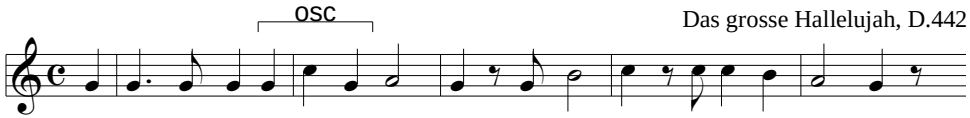


Fierabras, D.796/#5, 5



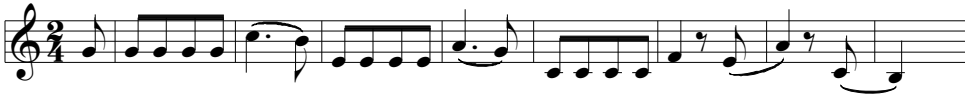
Fierabras, D.796/#5



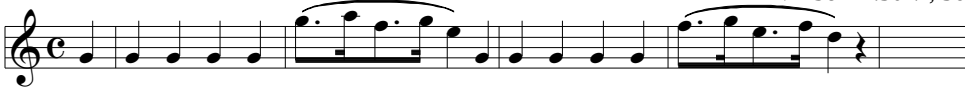


Das grosse Hallelujah, D.442

Pf Son K.279/iii, 22

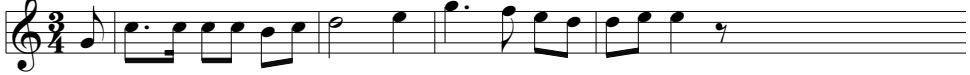


Vn Son K.304/i, 36

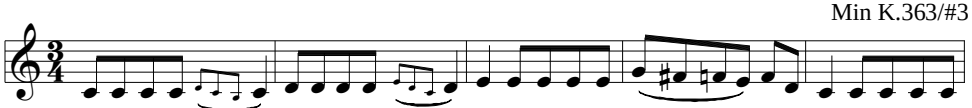


Z3+K, {RRRR}, triple-metered

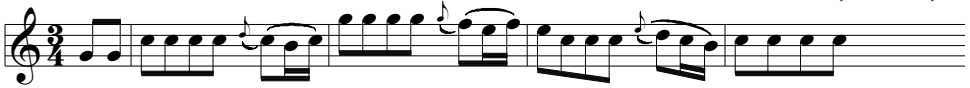
Fierabras, D.796/#19, 153



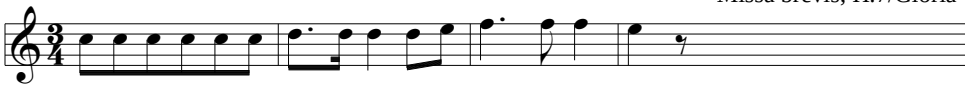
Min K.363/#3



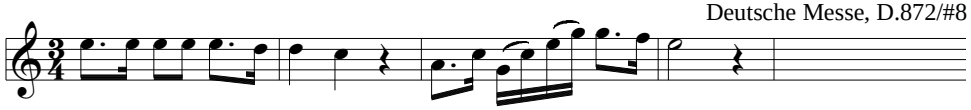
Il mondo della luna, H.7/#22, 32



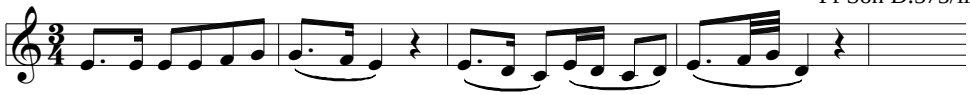
Missa brevis, H.7/Gloria



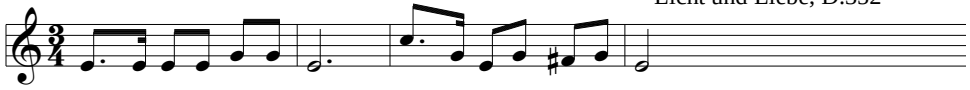
Deutsche Messe, D.872/#8

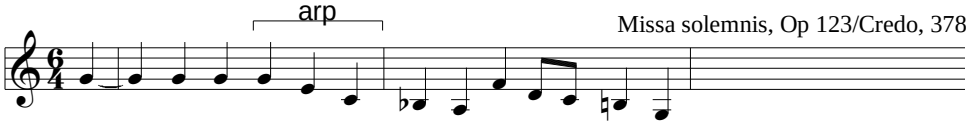


Pf Son D.575/ii



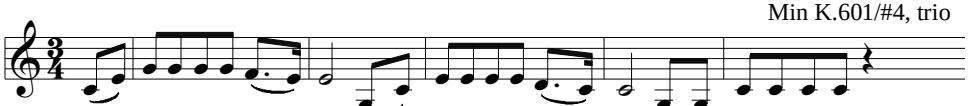
Licht und Liebe, D.352



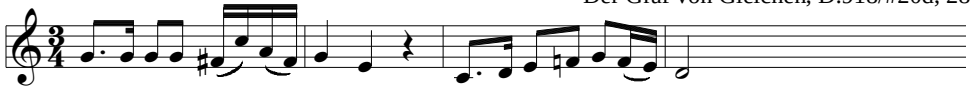


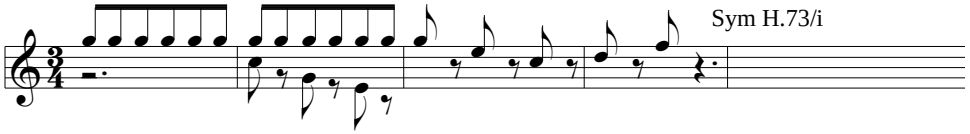
Missa solemnis, Op 123/Credo, 378

Min K.601/#4, trio

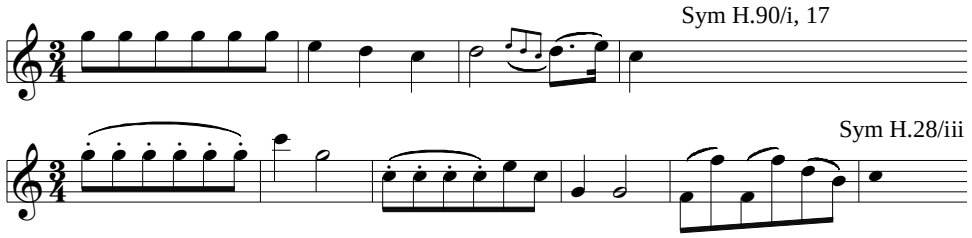


Der Graf von Gleichen, D.918/#20d, 28



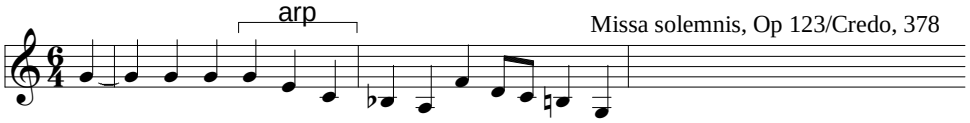


Sym H.73/i

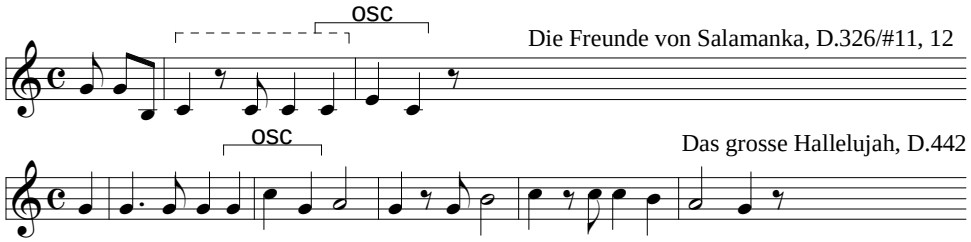

Sym H.90/i, 17
Sym H.28/iii

EX 17.2

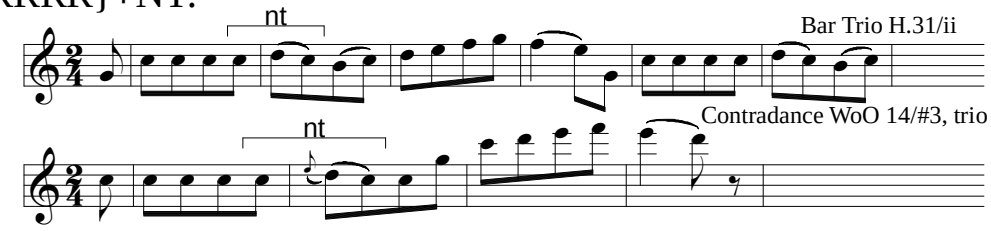
Z3^K, {RRRR}+ARP:

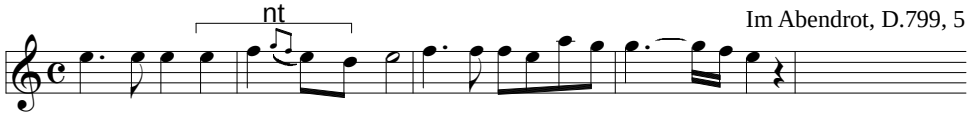


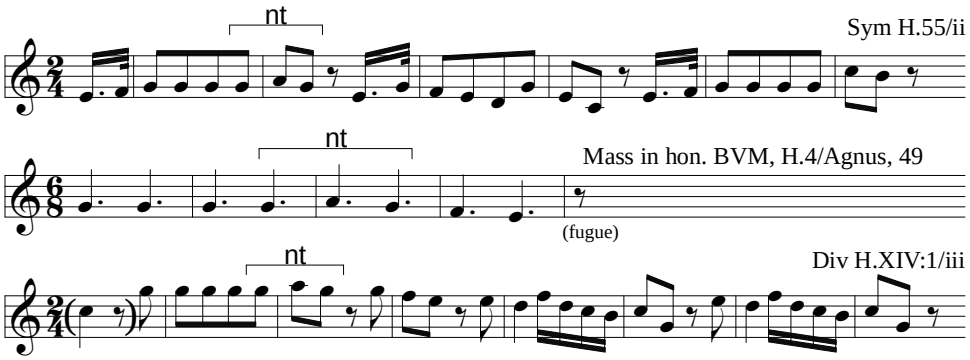
Z3^K, {RRRR}+OSC:

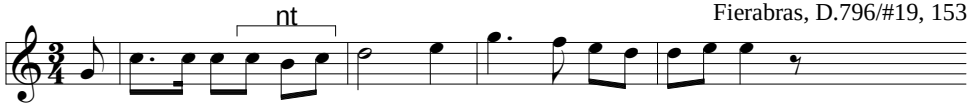


Z3^K, {RRRR}+NT:

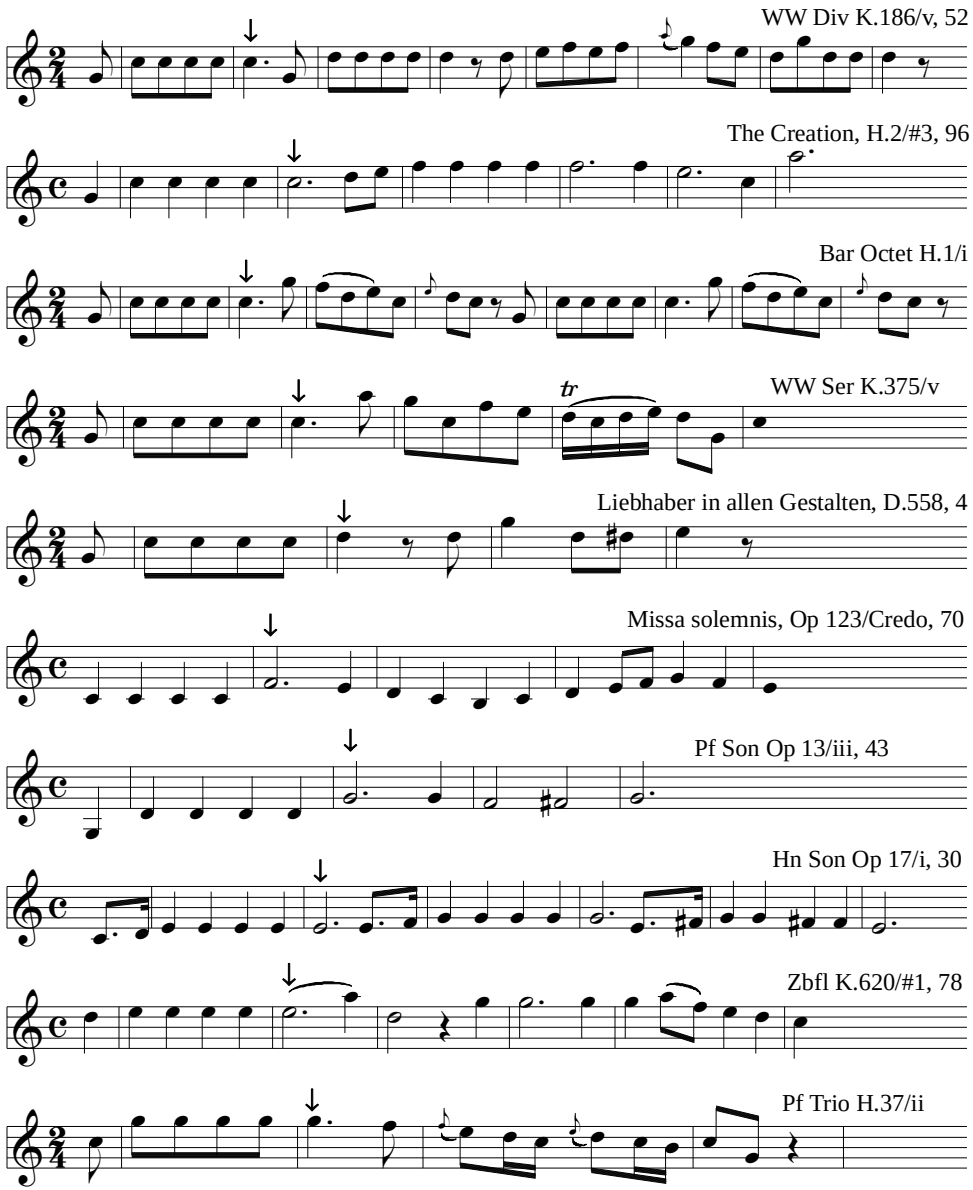


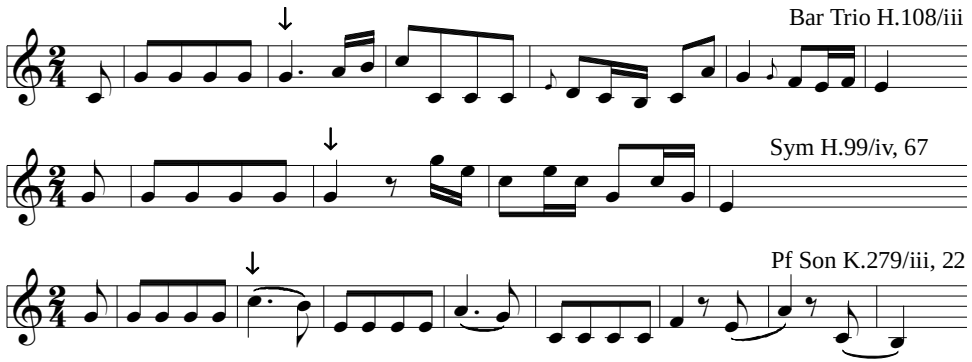




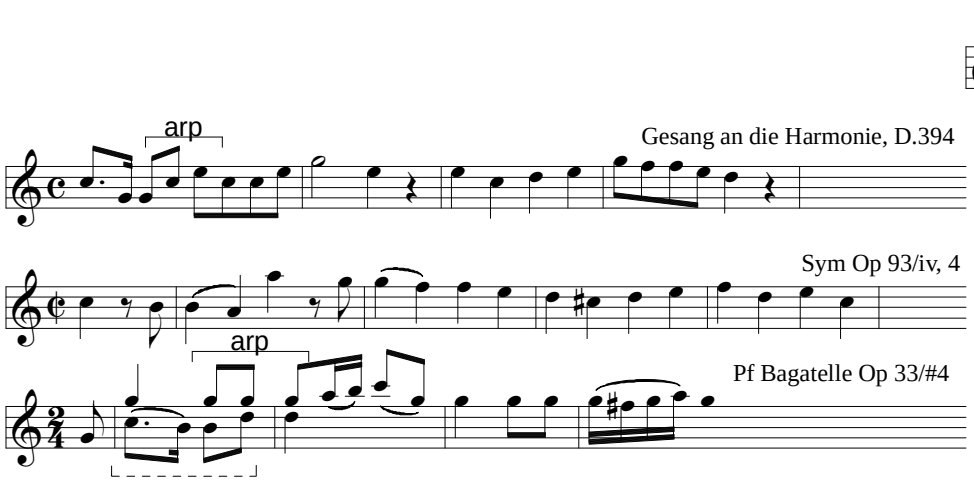


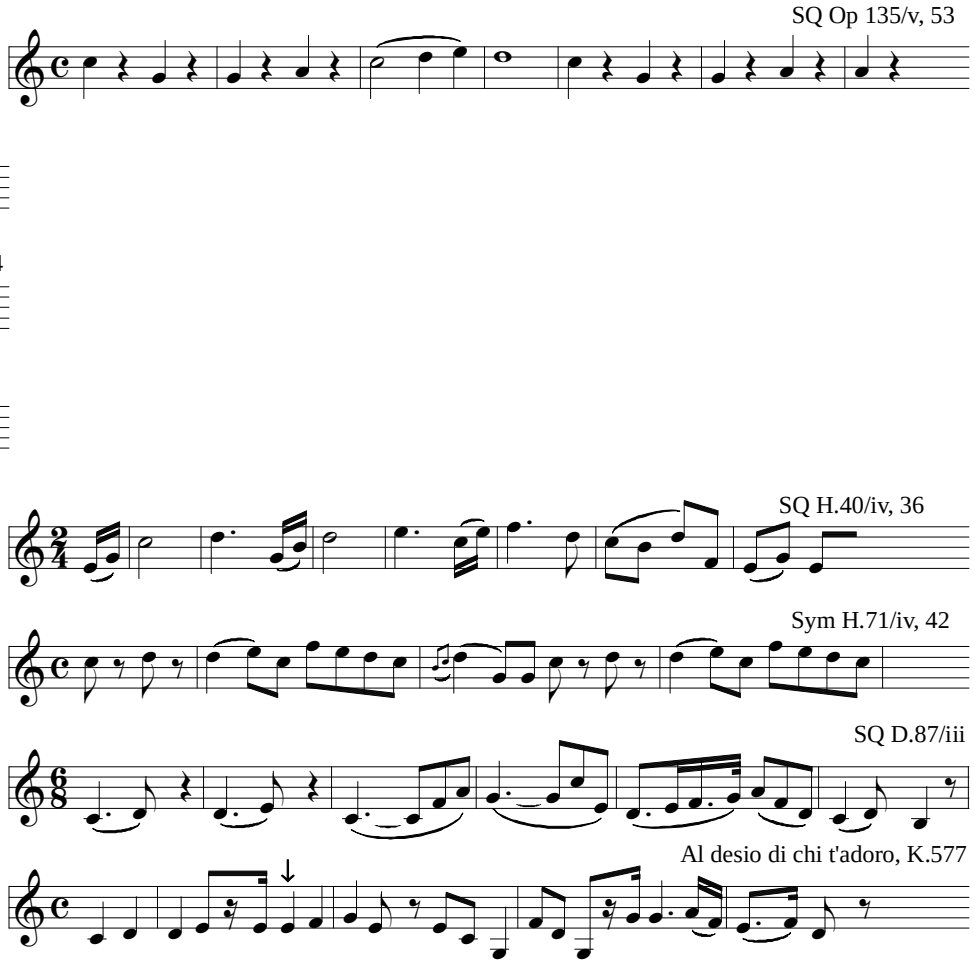
Z3^K, {RRRR}, beats 6-7 suppressed:

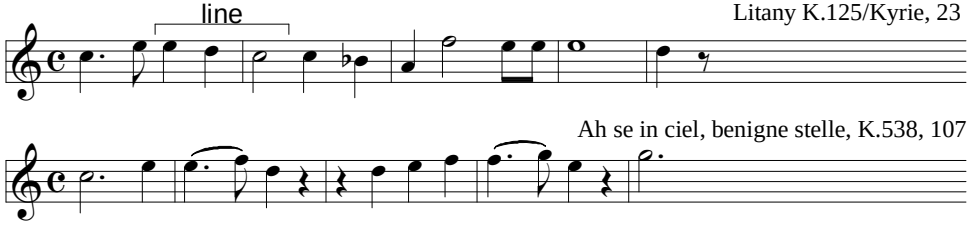



Bar Trio H.108/iii
Sym H.99/iv, 67
Pf Son K.279/iii, 22

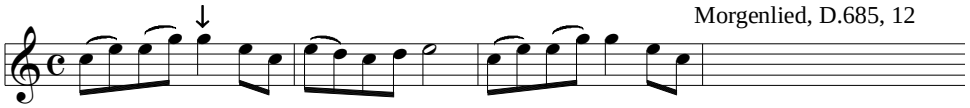
EX 18.1:
Z3^K, {-RR-}


arp
Gesang an die Harmonie, D.394
Sym Op 93/iv, 4
arp
Pf Bagatelle Op 33/#4

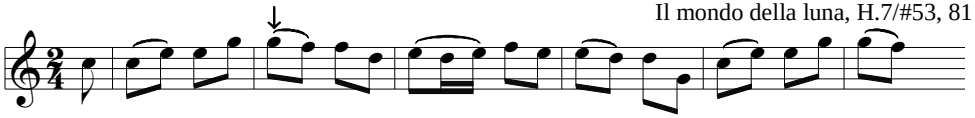

SQ Op 135/v, 53
SQ H.40/iv, 36
Sym H.71/iv, 42
SQ D.87/iii
Al desio di chi t'adoro, K.577


line
Litany K.125/Kyrie, 23
Ah se in ciel, benigne stelle, K.538, 107

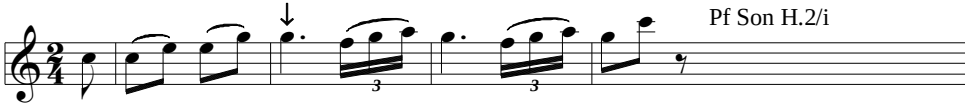
Morgenlied, D.685, 12



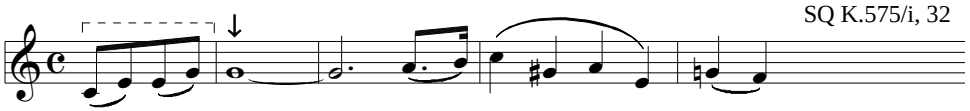
Il mondo della luna, H.7/#53, 81



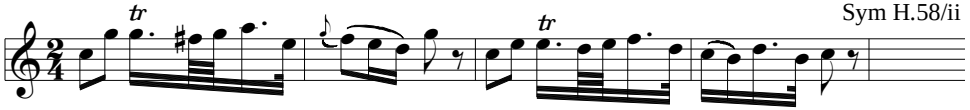
Pf Son H.2/i



SQ K.575/i, 32

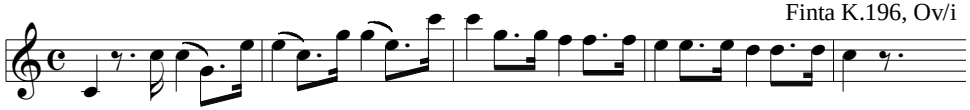


Sym H.58/ii

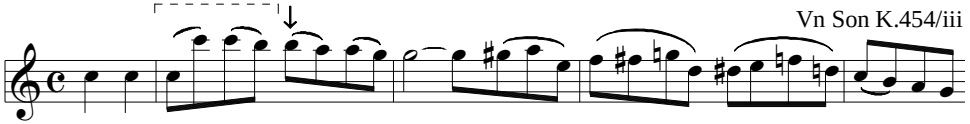


SQ Op 95/iii, trio

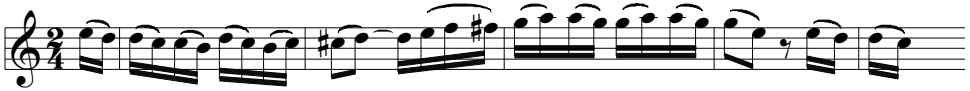
Finta K.196, Ov/i



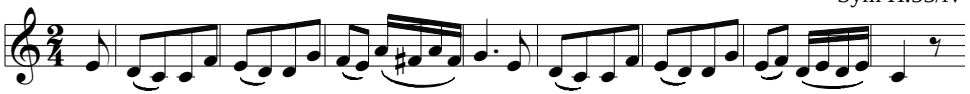
Vn Son K.454/iii



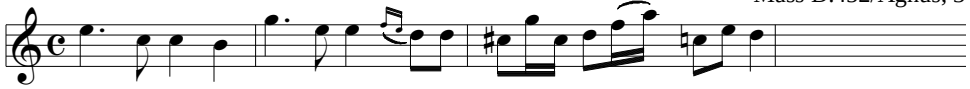
Concertstück, vn & orch, D.345, 26



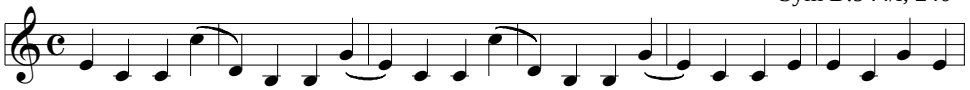
Sym H.55/iv



Mass D.452/Agnus, 3

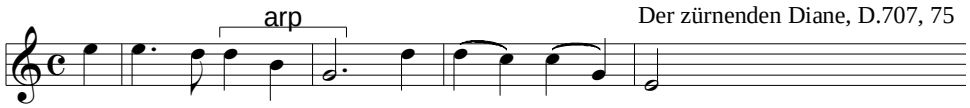


Sym D.944/i, 240

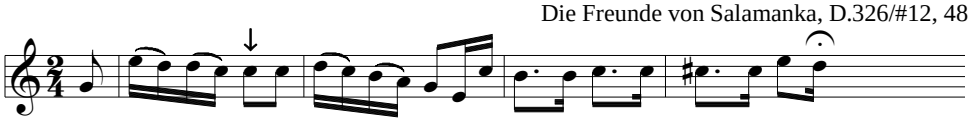


arp

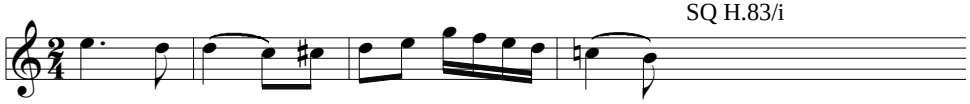
Der zürnenden Diane, D.707, 75



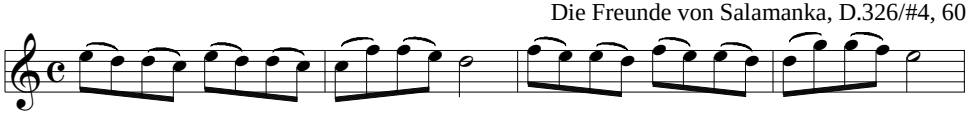
Die Freunde von Salamanka, D.326/#12, 48



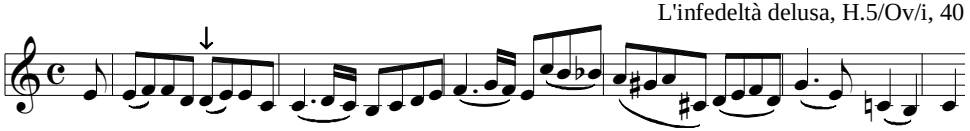
SQ H.83/i



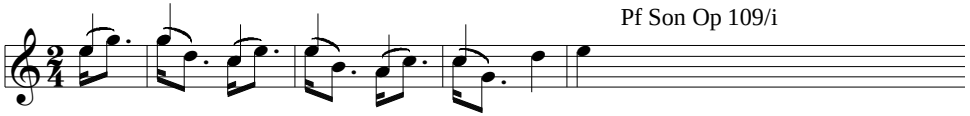
Die Freunde von Salamanka, D.326/#4, 60



L'infedeltà delusa, H.5/Ov/i, 40

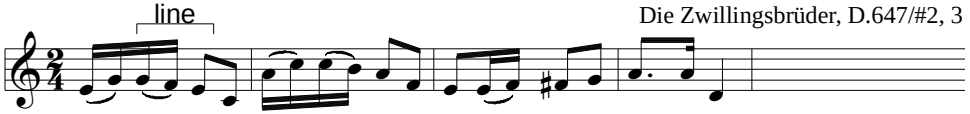


Pf Son Op 109/i



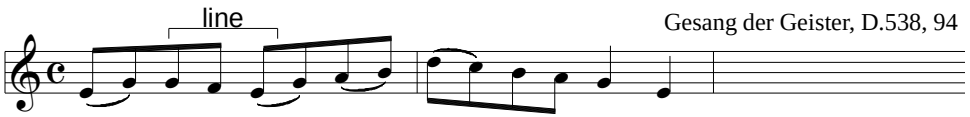
line

Die Zwillingsbrüder, D.647/#2, 3

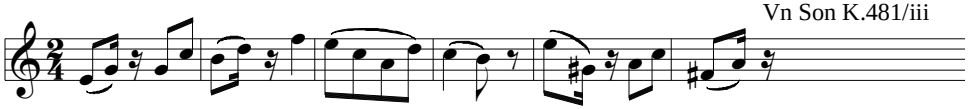


line

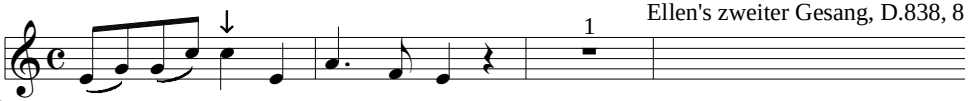
Gesang der Geister, D.538, 94



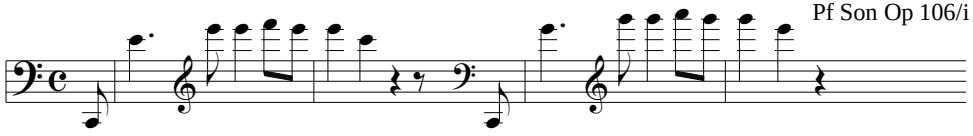
Vn Son K.481/iii



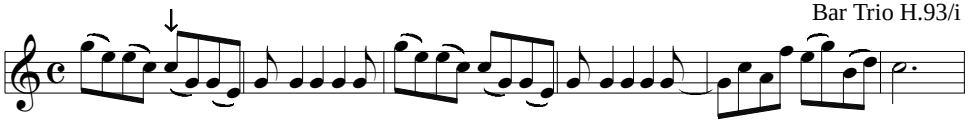
Ellen's zweiter Gesang, D.838, 8



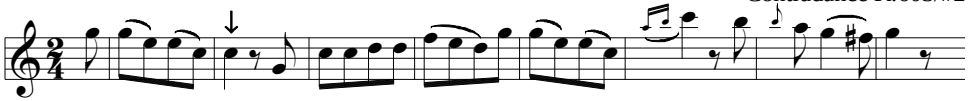
Pf Son Op 106/i



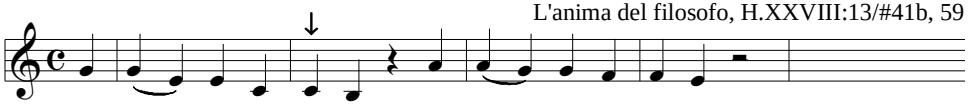
Bar Trio H.93/i



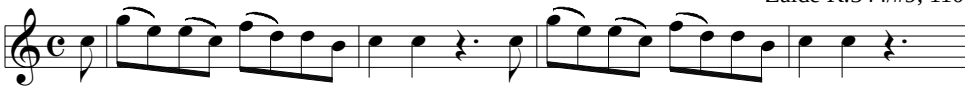
Contradance K.603/#2



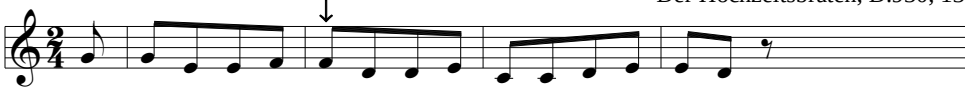
L'anima del filosofo, H.XXVIII:13/#41b, 59



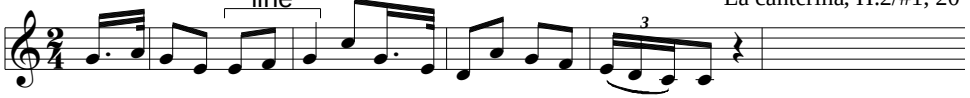
Zaide K.344/#9, 110



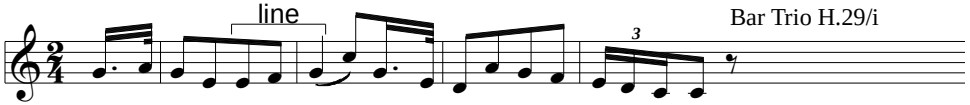
Der Hochzeitsbraten, D.930, 13



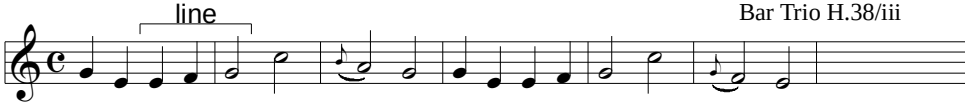
La canterina, H.2/#1, 20



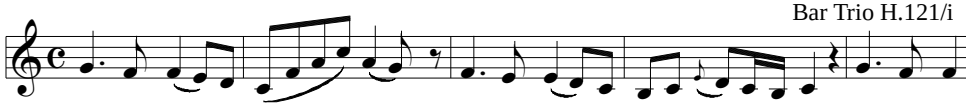
Bar Trio H.29/i



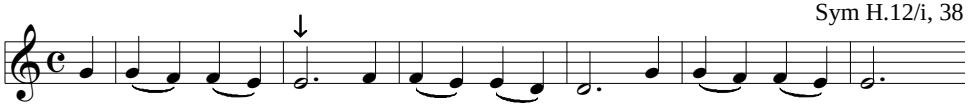
Bar Trio H.38/iii



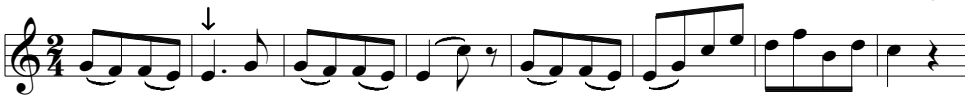
Bar Trio H.121/i



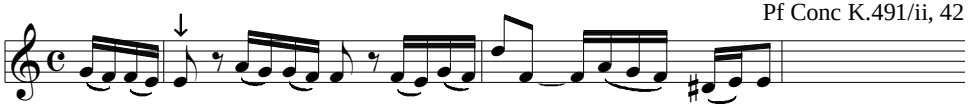
Sym H.12/i, 38



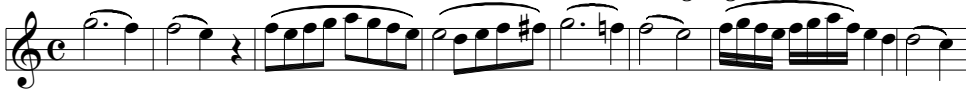
Contradance K.462/#6, 17



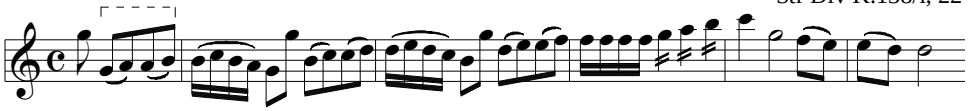
Pf Conc K.491/ii, 42



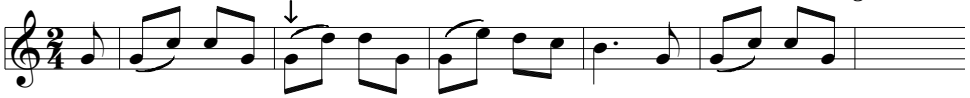
Adagio, glass-harmonica, K.617a



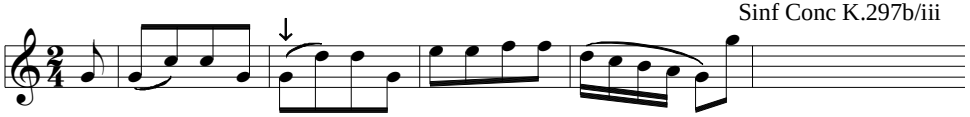
Str Div K.138/i, 22



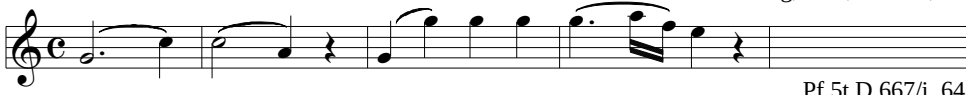
Die Nachtigall, D.724



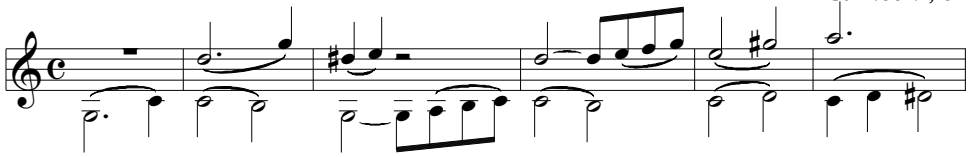
Sinf Conc K.297b/iii



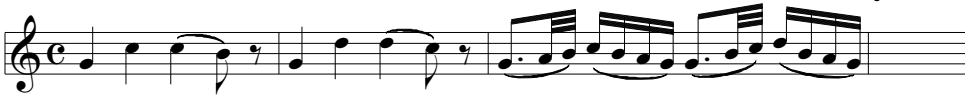
Rondo frag, cl 5t, K.581a, 30



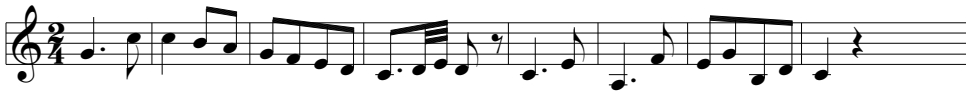
Pf 5t D.667/i, 64



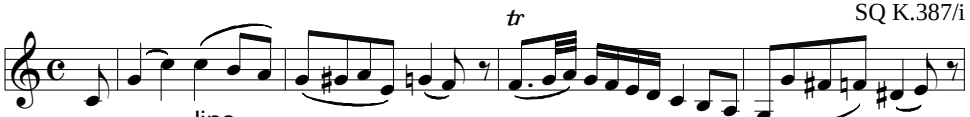
SQ K.172/ii



Bar Trio H.119/iii

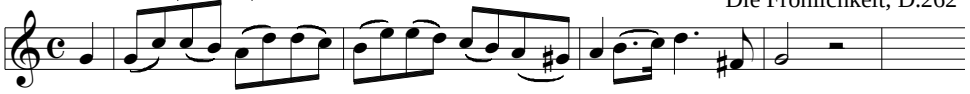


SQ K.387/i

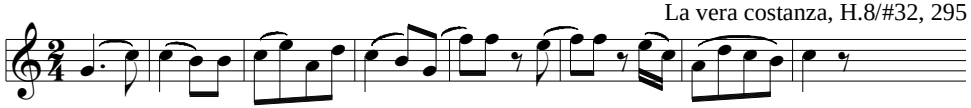


line

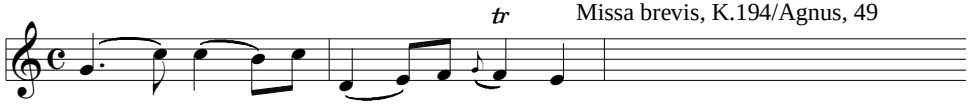
Die Fröhlichkeit, D.262



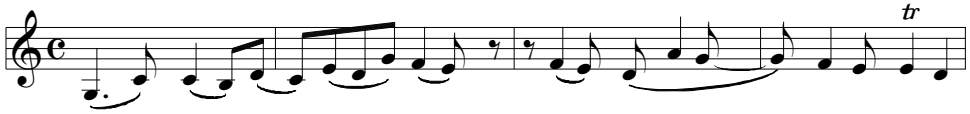
La vera costanza, H.8/#32, 295

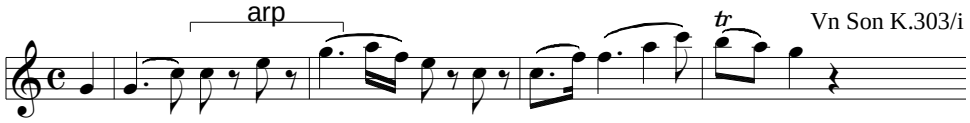


Missa brevis, K.194/Agnus, 49

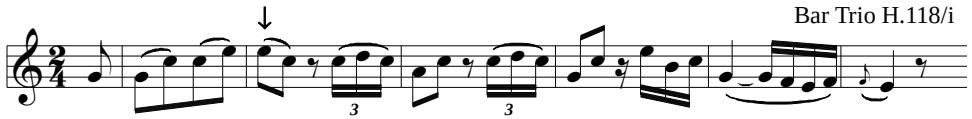


Orch Div K.205/i

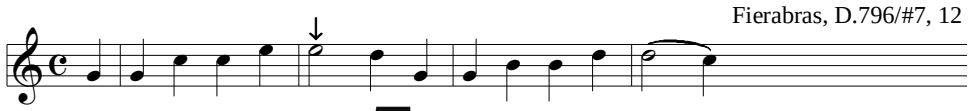




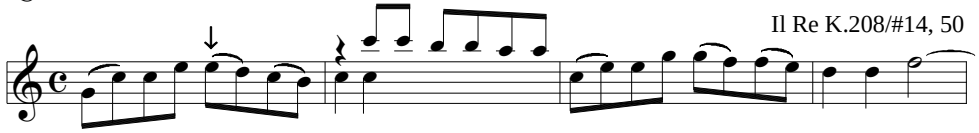
Vn Son K.303/i



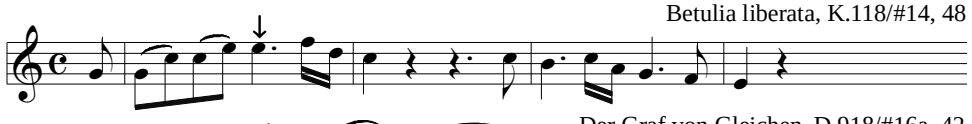
Bar Trio H.118/i



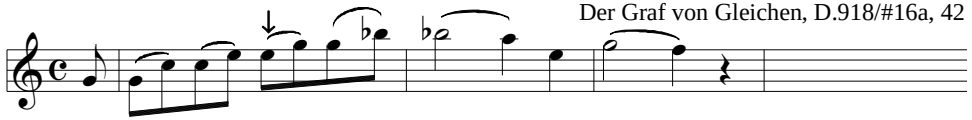
Fierabras, D.796/#7, 12



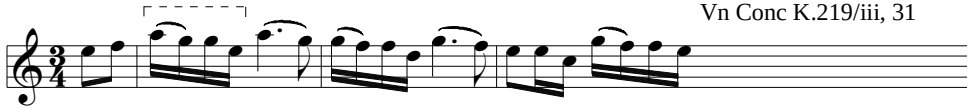
Il Re K.208/#14, 50



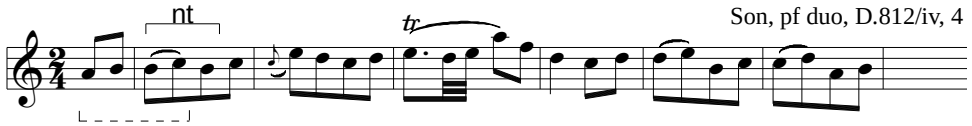
Betulia liberata, K.118/#14, 48



Der Graf von Gleichen, D.918/#16a, 42

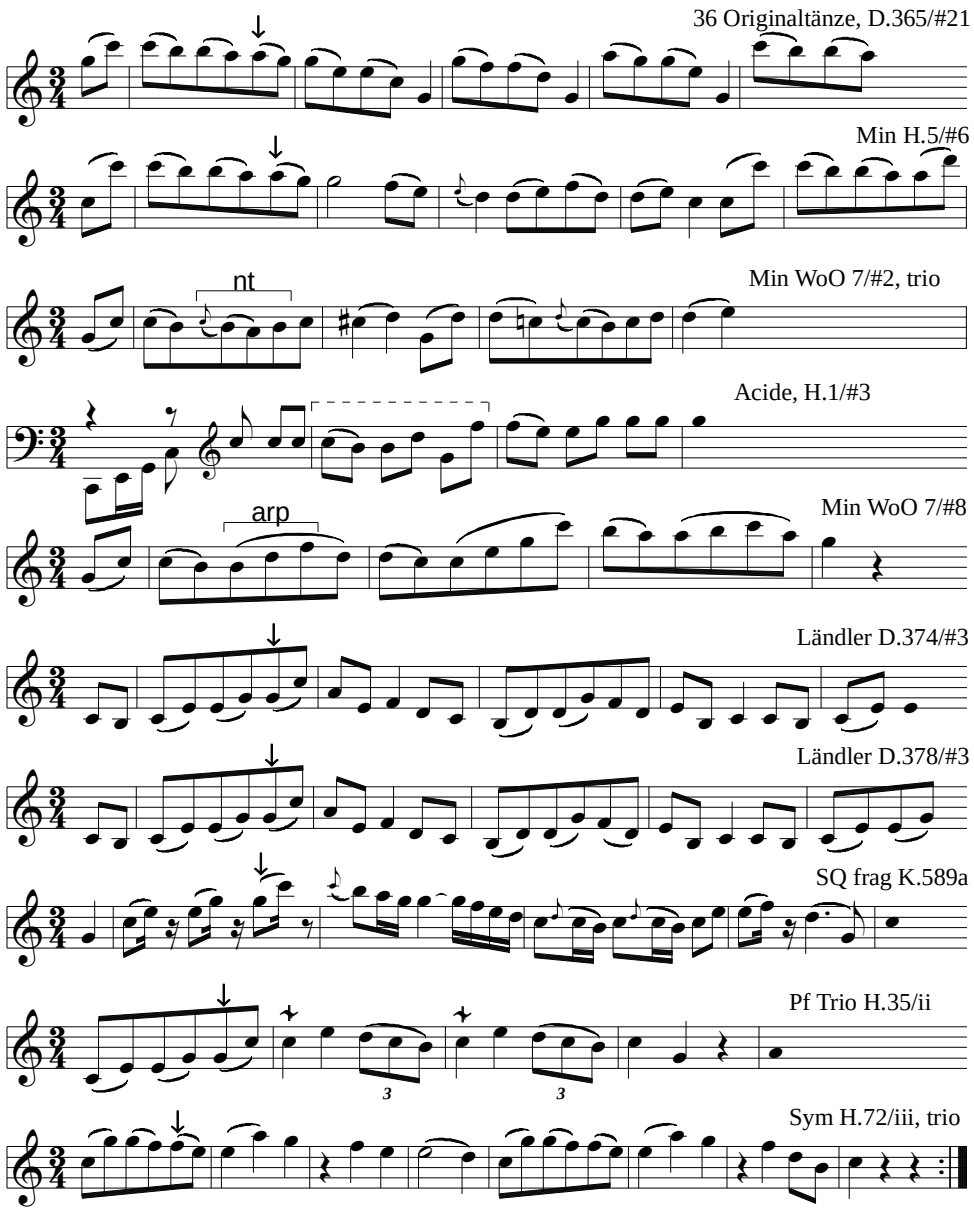


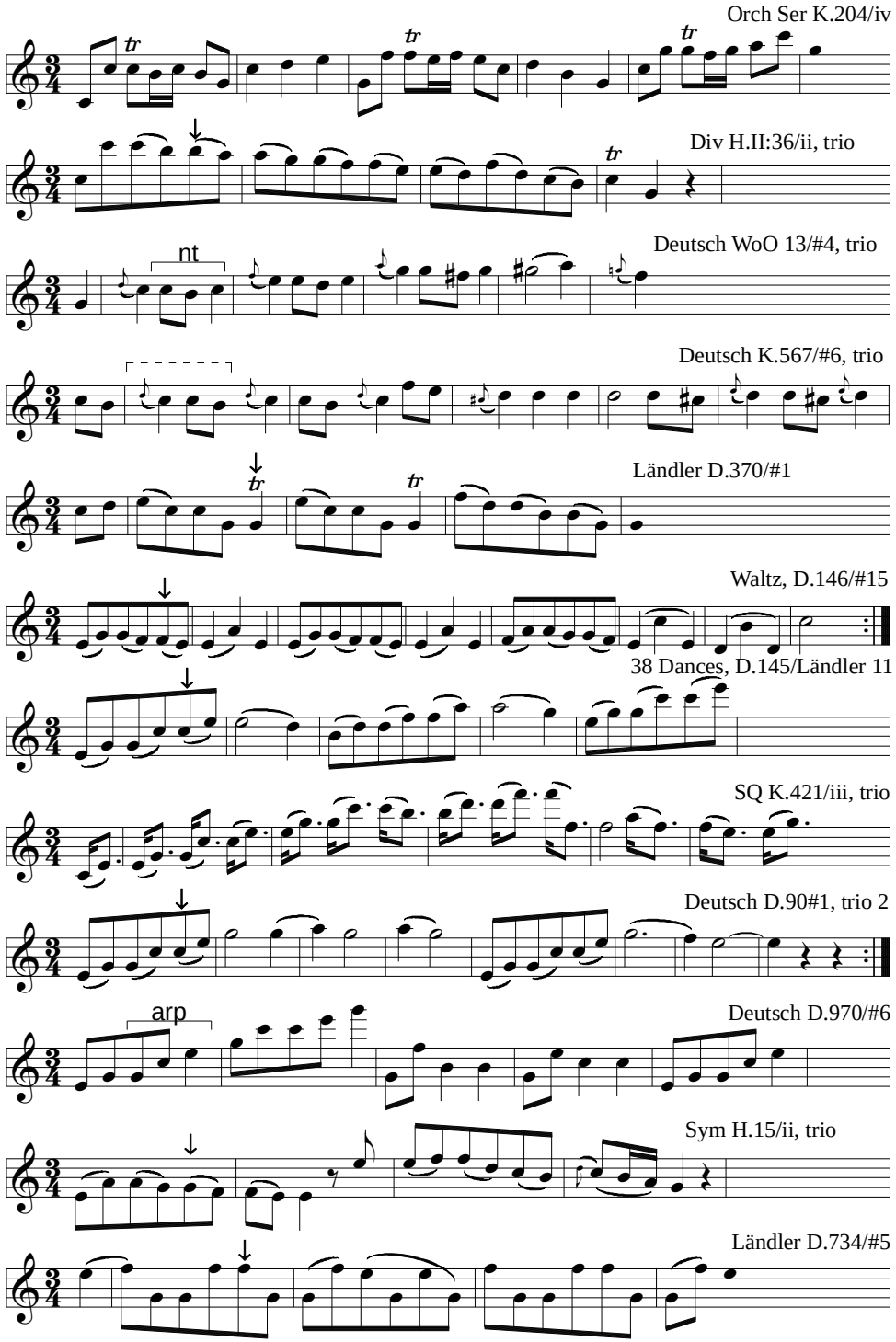
Vn Conc K.219/iii, 31

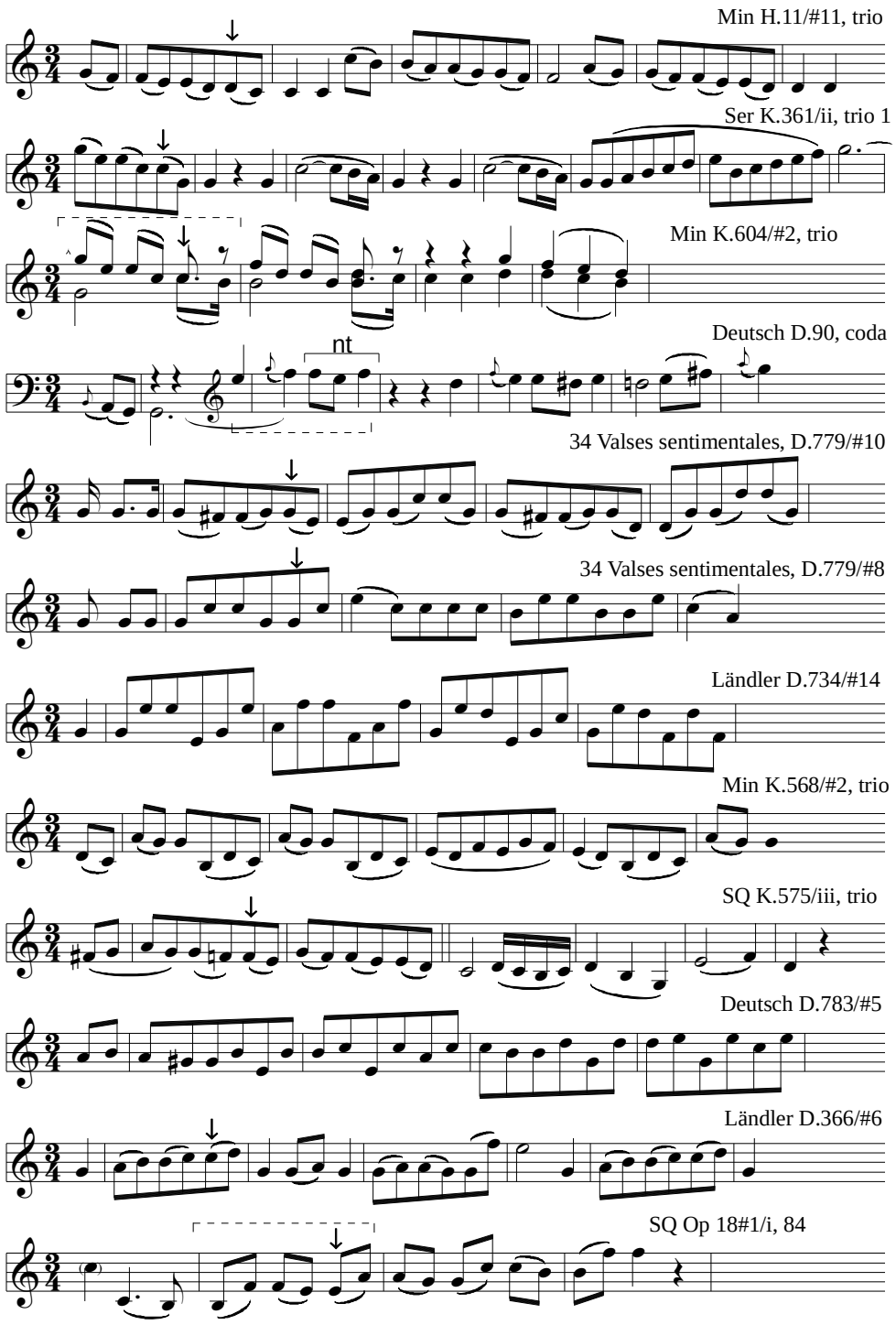


Son, pf duo, D.812/iv, 4

(Z3^K, {-RR-}, triple-metered)

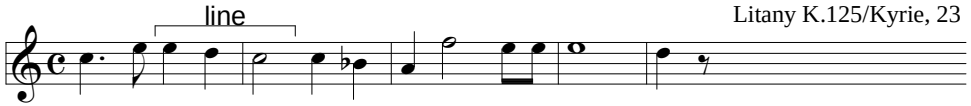



Orch Ser K.204/iv
Div H.II:36/ii, trio
nt
Deutsch WoO 13/#4, trio
Deutsch K.567/#6, trio
Ländler D.370/#1
Waltz, D.146/#15
38 Dances, D.145/Ländler 11
SQ K.421/iii, trio
Deutsch D.90#1, trio 2
arp
Deutsch D.970/#6
Sym H.15/ii, trio
Ländler D.734/#5

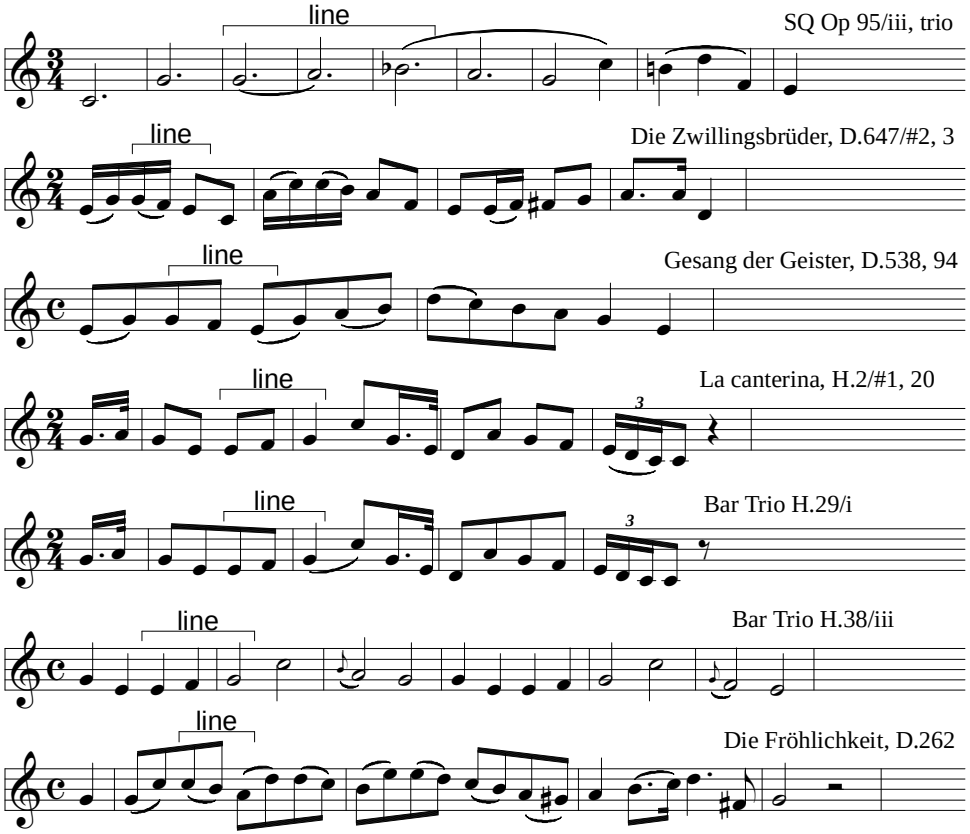

Min H.11/#11, trio
Ser K.361/ii, trio 1
Min K.604/#2, trio
Deutsch D.90, coda
nt
34 Valses sentimentales, D.779/#10
34 Valses sentimentales, D.779/#8
Ländler D.734/#14
Min K.568/#2, trio
SQ K.575/iii, trio
Deutsch D.783/#5
Ländler D.366/#6
SQ Op 18#1/i, 84

EX 18.2

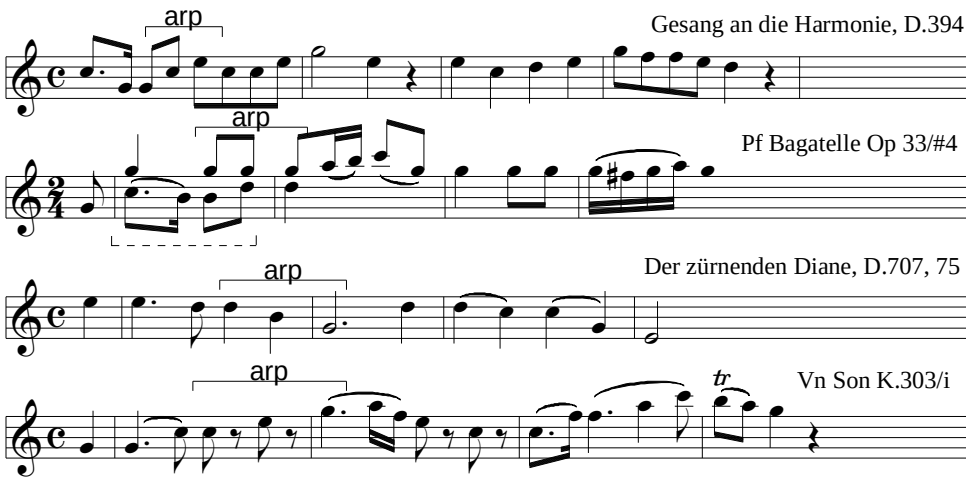
Z3^K, {-RR-}+L

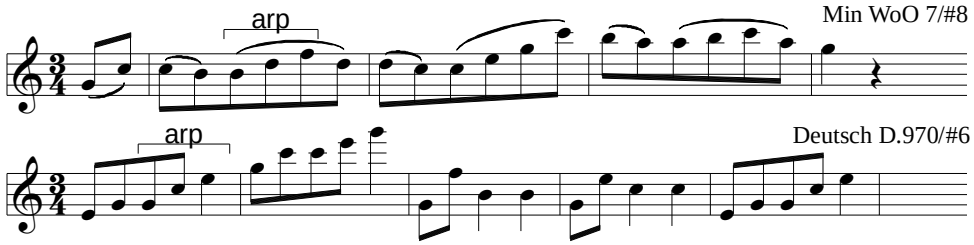


Litany K.125/Kyrie, 23

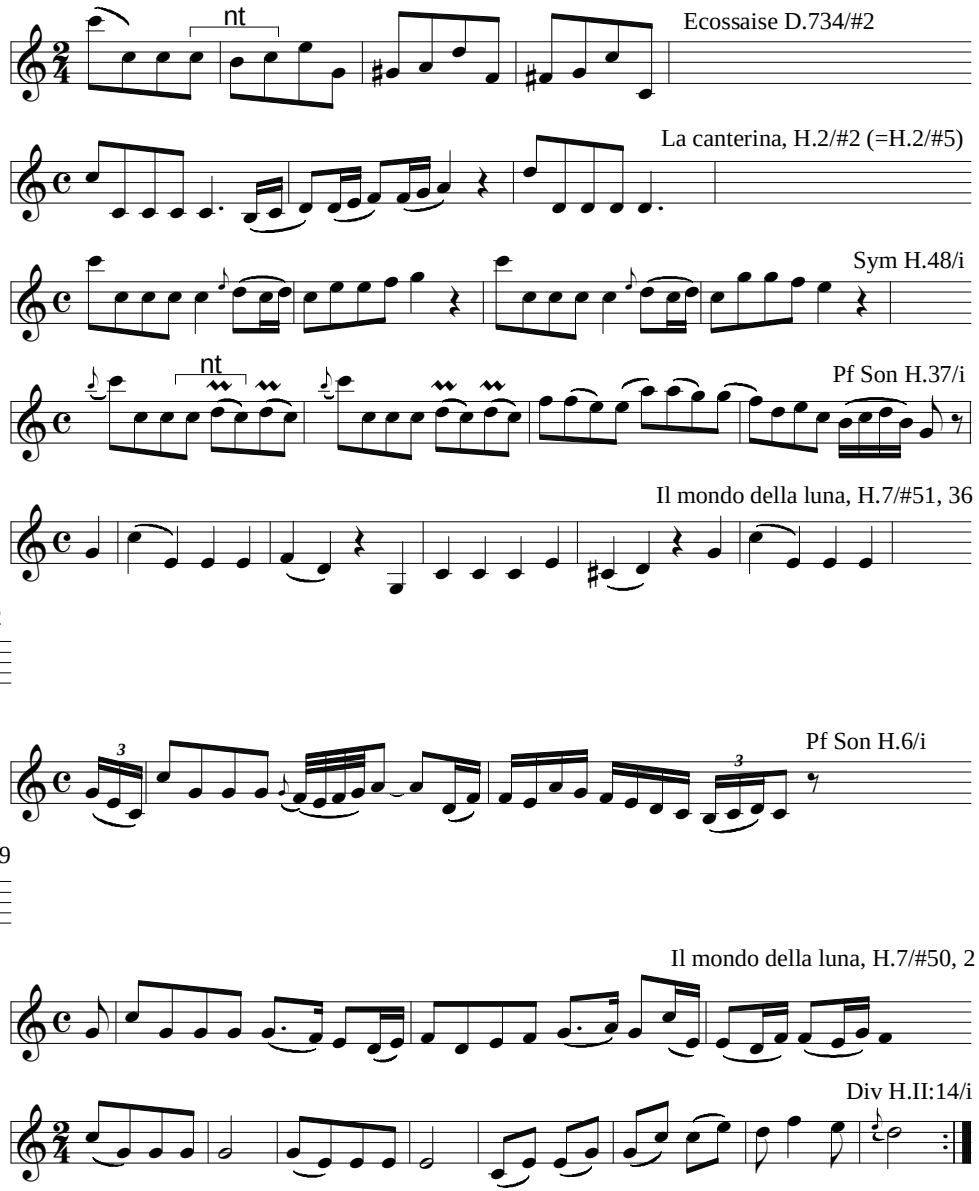


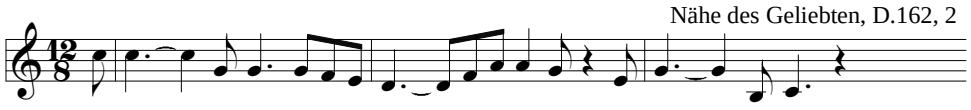
Z3^K, {-RR-}+ARP

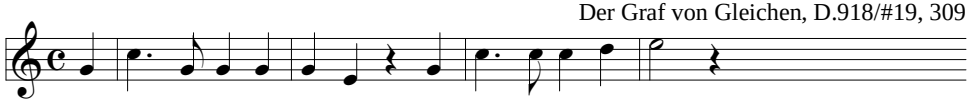

arp
Gesang an die Harmonie, D.394
arp
Pf Bagatelle Op 33/#4
arp
Der zürnenden Diane, D.707, 75
arp
tr
Vn Son K.303/i


arp
Min WoO 7/#8
arp
Deutsch D.970/#6

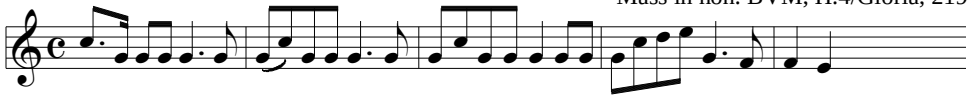
EX 19:
Z3^K, {-RRR}


nt
Ecossaise D.734/#2
La canterina, H.2/#2 (=H.2/#5)
Sym H.48/i
nt
Pf Son H.37/i
Il mondo della luna, H.7/#51, 36
Pf Son H.6/i
Il mondo della luna, H.7/#50, 2
Div H.II:14/i

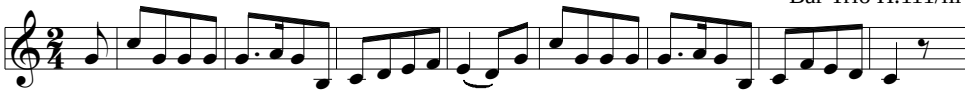

Nähe des Geliebten, D.162, 2

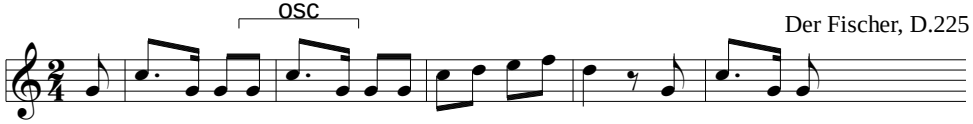

Der Graf von Gleichen, D.918/#19, 309

Mass in hon. BVM, H.4/Gloria, 219



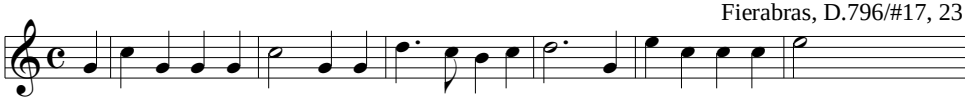
Bar Trio H.111/iii





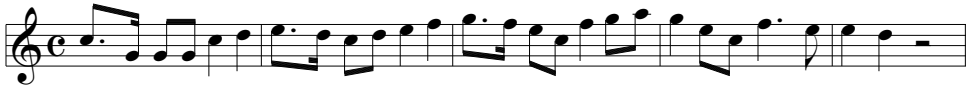
Der Fischer, D.225

Fierabras, D.796/#17, 23

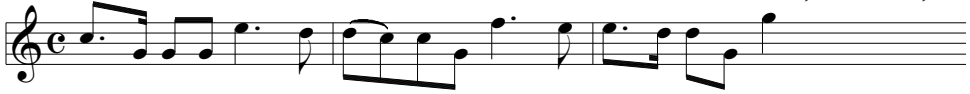


Missa cellensis, H.5/Gloria, 654

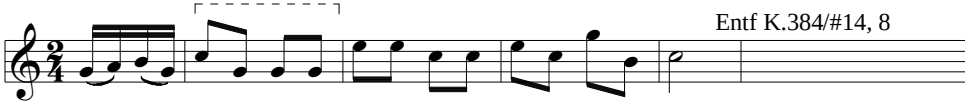
Heiligmesse, H.10/Gloria, 219



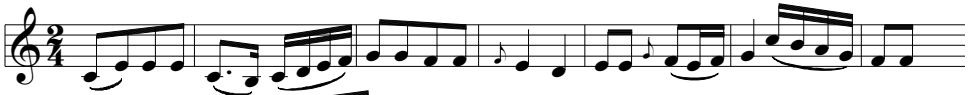
Mariazellermesse, H.8/Gloria, 233



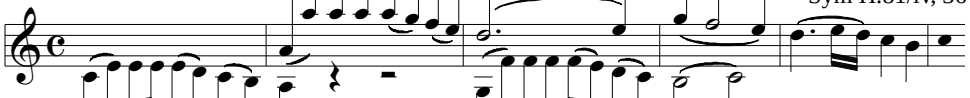
Entf K.384/#14, 8



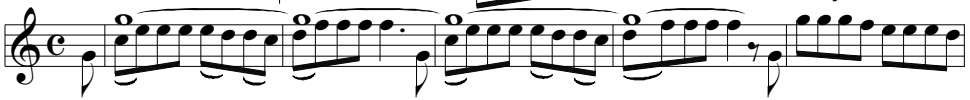
Sym H.63/ii, 21



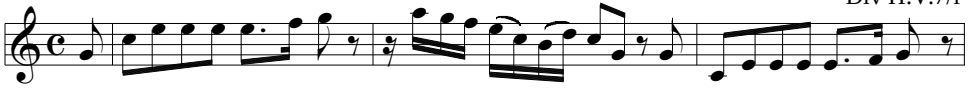
Sym H.81/iv, 36



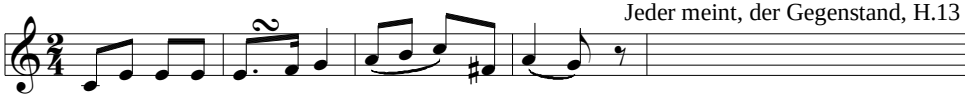
Sym H.39/i, 26



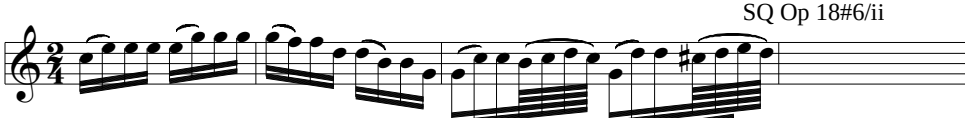
Div H.V:7/i



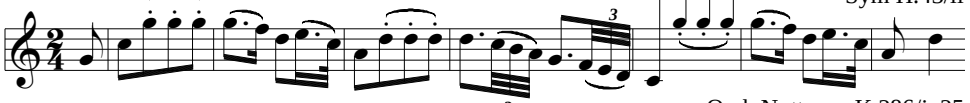
Jeder meint, der Gegenstand, H.13



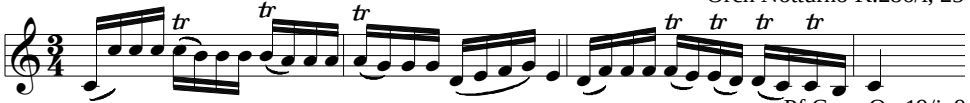
SQ Op 18#6/ii



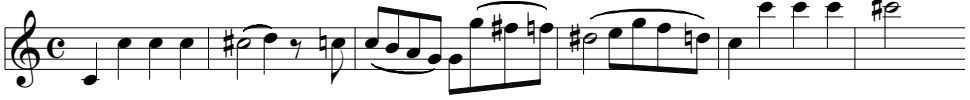
Sym H.43/ii



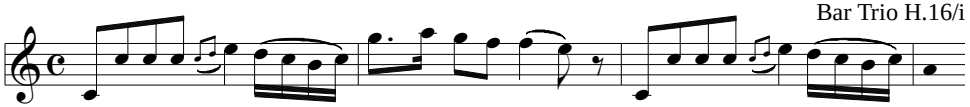
Orch Notturno K.286/i, 25



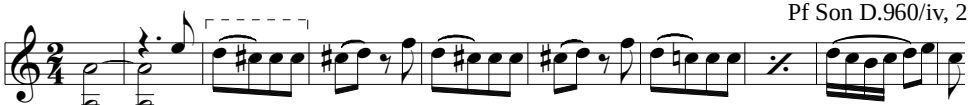
Pf Conc Op 19/i, 9



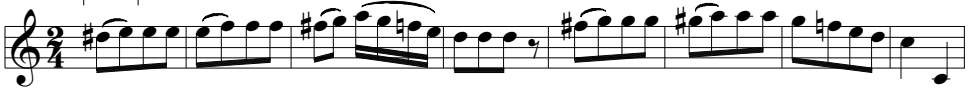
Bar Trio H.16/i



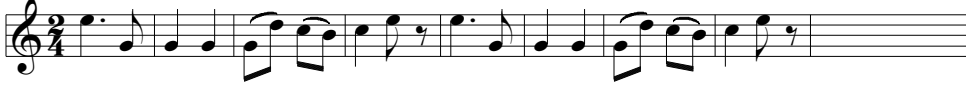
Pf Son D.960/iv, 2



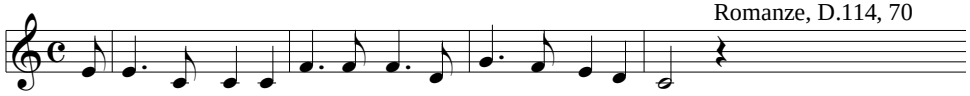
Contradance K.462/#5



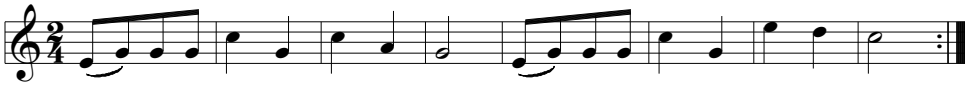
Suleika's zweiter Gesang, D.717, 9



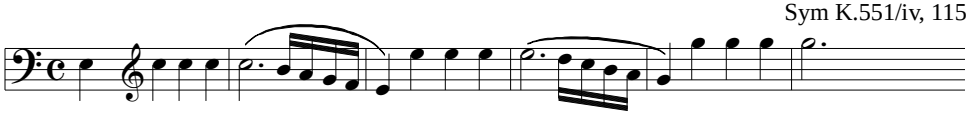
Romanze, D.114, 70

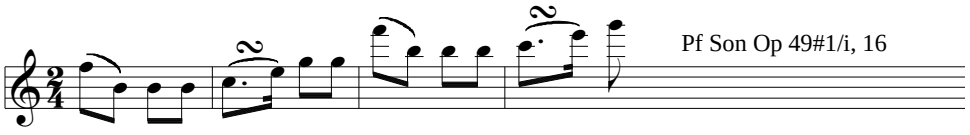


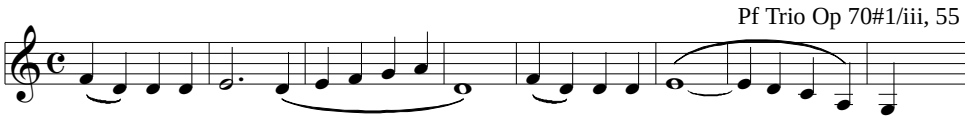
Ecossaise D.782

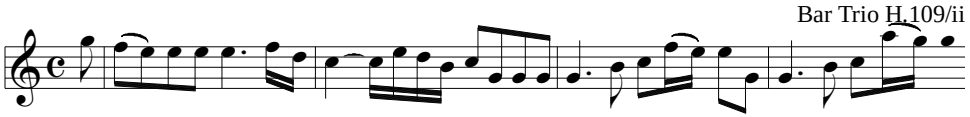


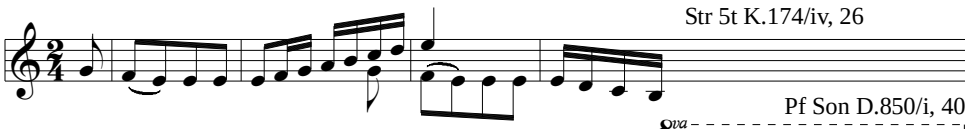
Sym K.551/iv, 115

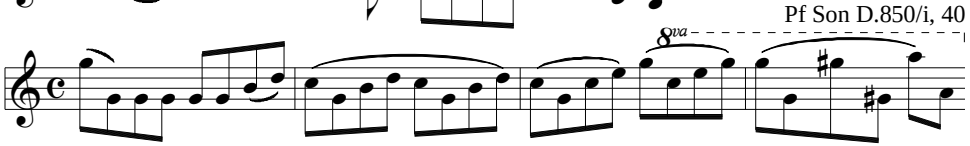


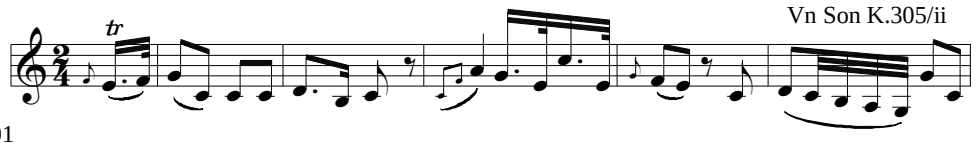

Pf Son Op 49#1/i, 16

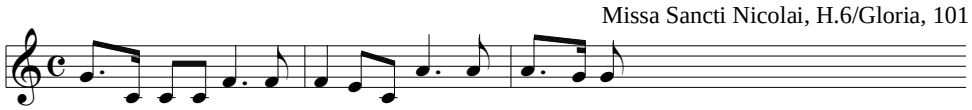

Pf Trio Op 70#1/iii, 55

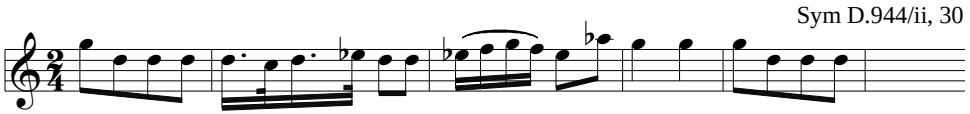

Bar Trio H.109/ii

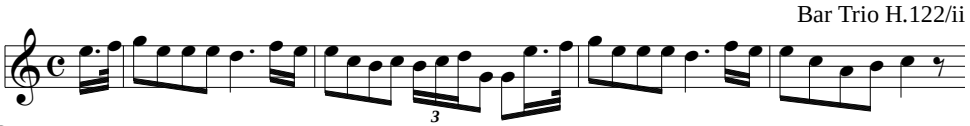

Str 5t K.174/iv, 26

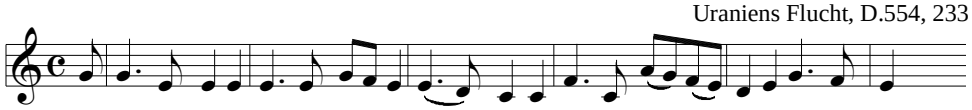

Pf Son D.850/i, 40
8va

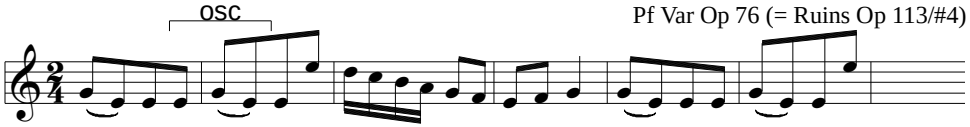

Vn Son K.305/ii
tr

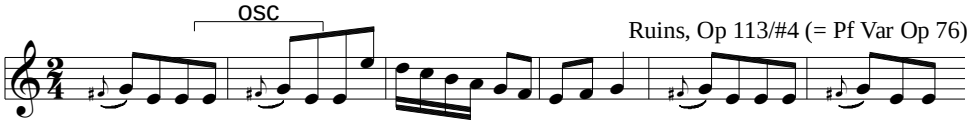

Missa Sancti Nicolai, H.6/Gloria, 101


Sym D.944/ii, 30

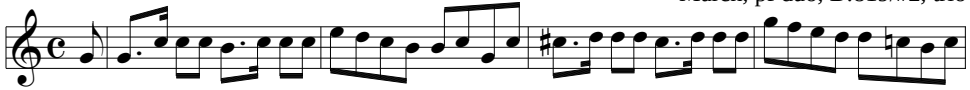

Bar Trio H.122/ii
3


Uraniens Flucht, D.554, 233

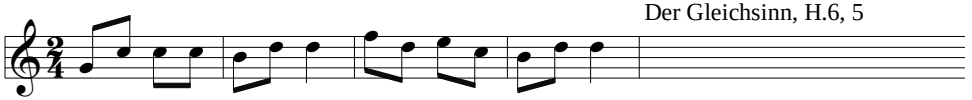

Pf Var Op 76 (= Ruins Op 113/#4)
OSC


Ruins, Op 113/#4 (= Pf Var Op 76)
OSC

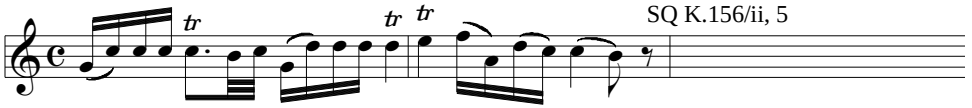
March, pf duo, D.819/#2, trio



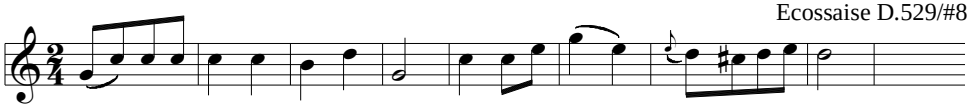
Der Gleichsinn, H.6, 5



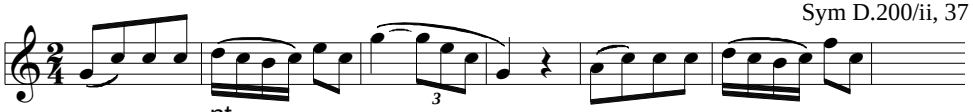
SQ K.156/ii, 5



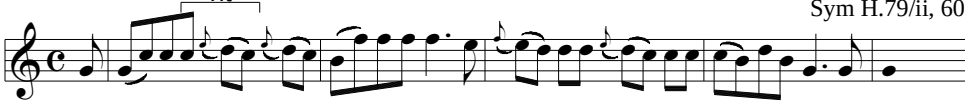
Ecossaise D.529/#8



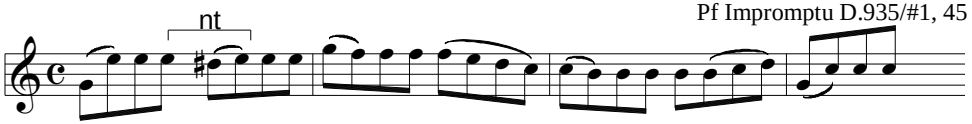
Sym D.200/ii, 37



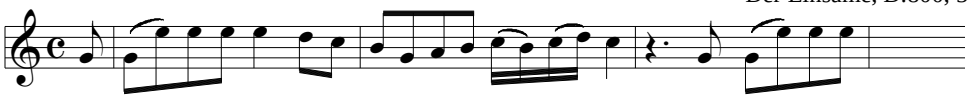
Sym H.79/ii, 60



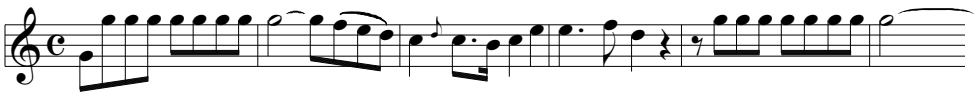
Pf Impromptu D.935/#1, 45



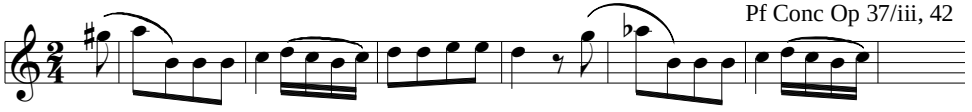
Der Einsame, D.800, 5



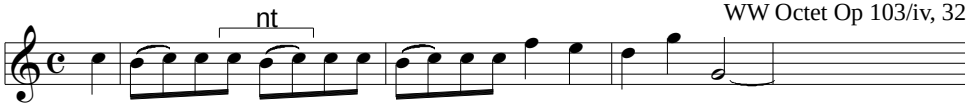
Orch Ser K.204/i, 29



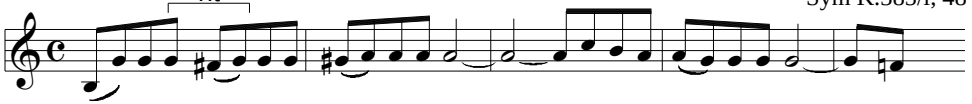
Pf Conc Op 37/iii, 42



WW Octet Op 103/iv, 32

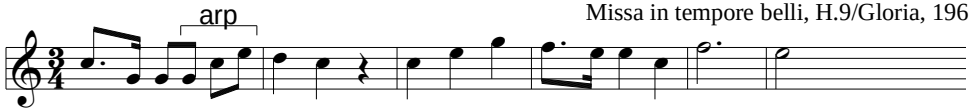


Sym K.385/i, 48

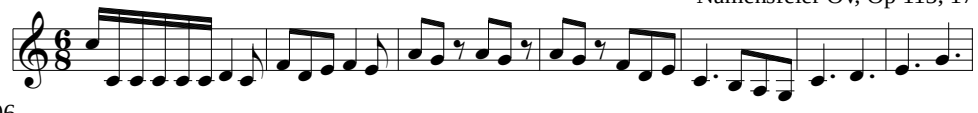


(Z3^K, {-RRR}, triple-metered)

Missa in tempore belli, H.9/Gloria, 196

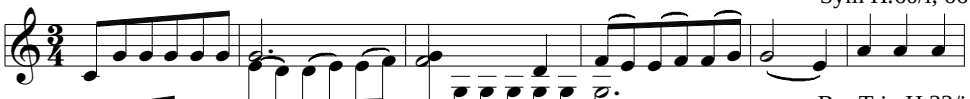


Namensfeier Ov, Op 115, 17

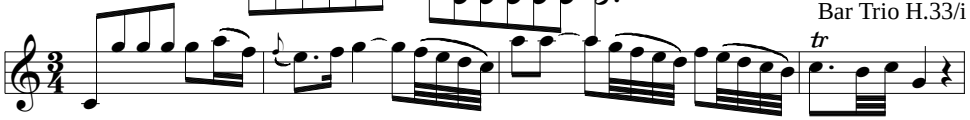


Sym H.69/ii, 33

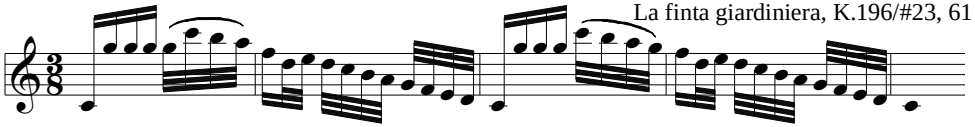
Sym H.60/i, 66



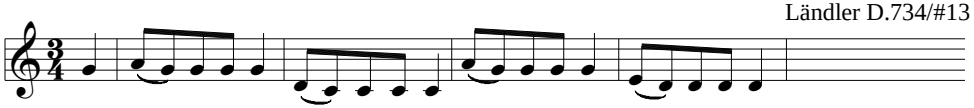
Bar Trio H.33/i



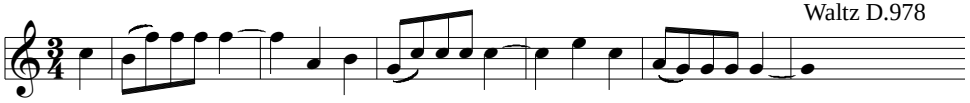
La finta giardiniera, K.196/#23, 61



Ländler D.734/#13

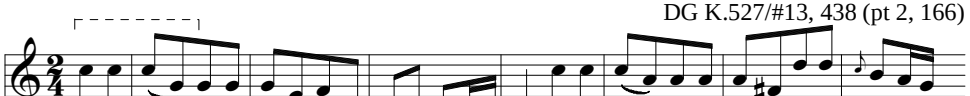


Waltz D.978

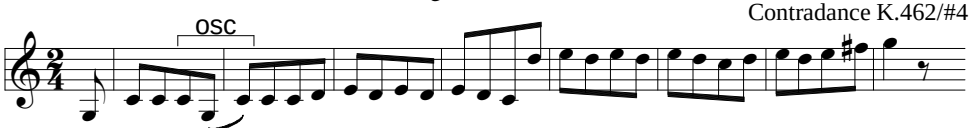


EX 20.1:
Z3^K, {RRR-}

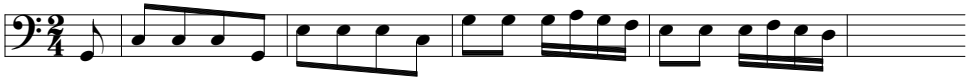
DG K.527/#13, 438 (pt 2, 166)



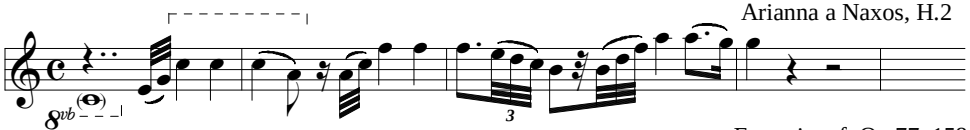
Contradance K.462/#4



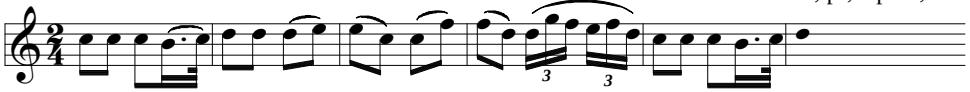
Pf Son Op 10#2/iii



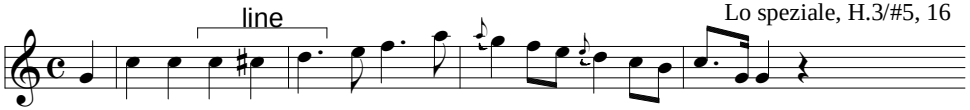
Arianna a Naxos, H.2



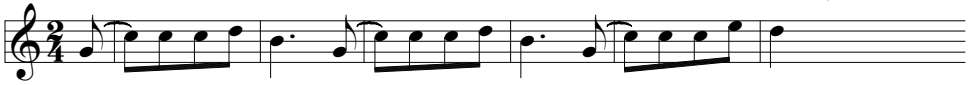
Fantasia, pf, Op 77, 158



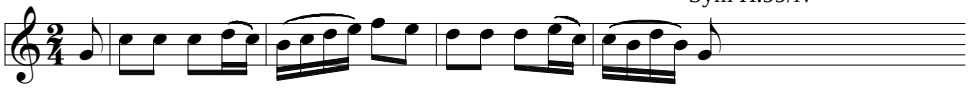
Lo speziale, H.3/#5, 16



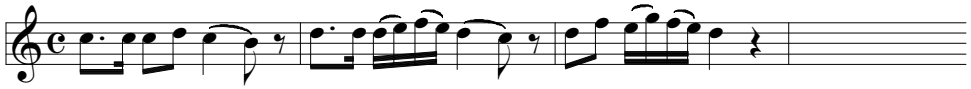
SQ D.173/iv, 48



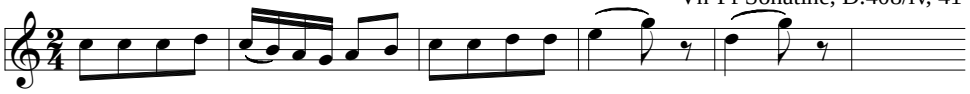
Sym H.99/iv

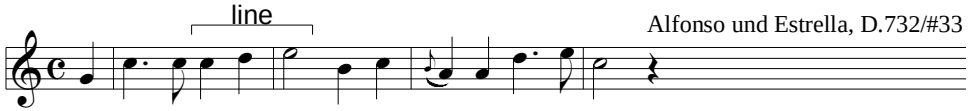


Das Zügenglöcklein, D.871, 5

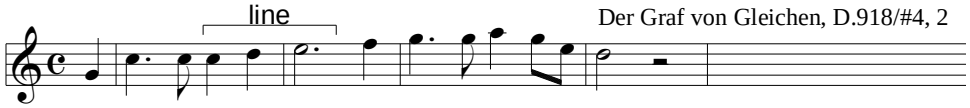


Vn-Pf Sonatine, D.408/iv, 41



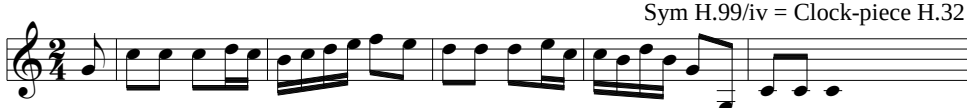


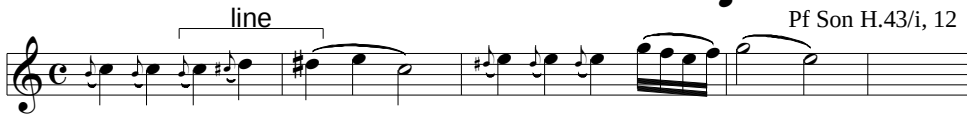
Alfonso und Estrella, D.732/#33



Der Graf von Gleichen, D.918/#4, 2

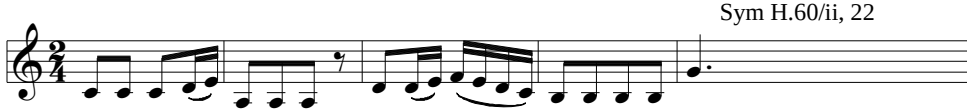
Sym H.99/iv = Clock-piece H.32

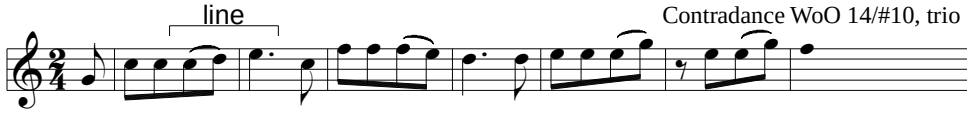




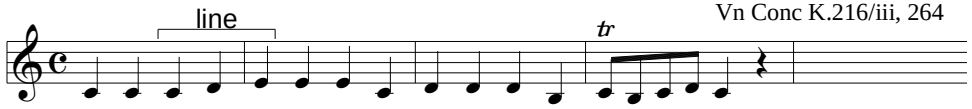
Pf Son H.43/i, 12

Sym H.60/ii, 22



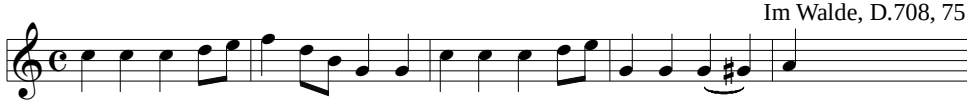


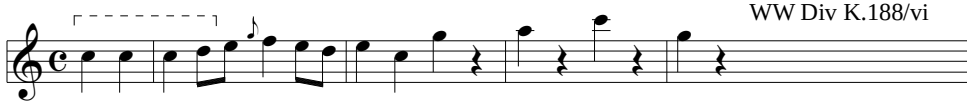
Contradance WoO 14/#10, trio



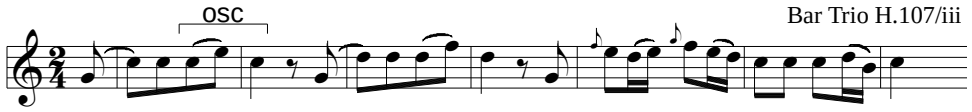
Vn Conc K.216/iii, 264

Im Walde, D.708, 75

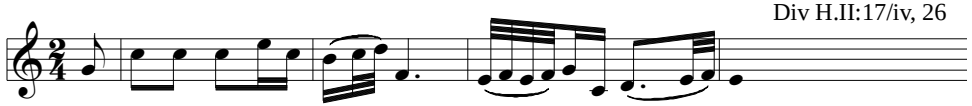




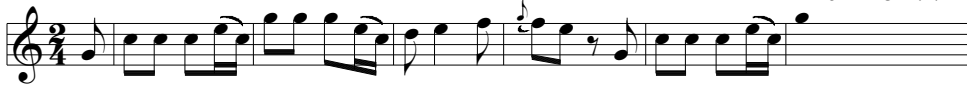
WW Div K.188/vi



Bar Trio H.107/iii

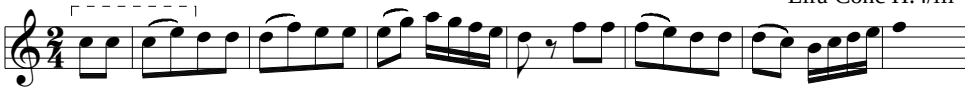


Div H.II:17/iv, 26

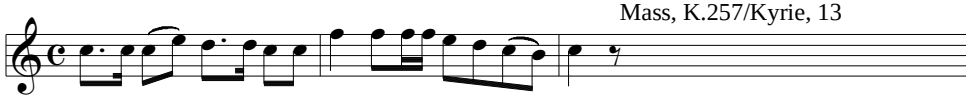


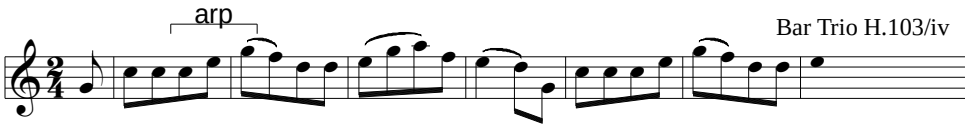
Bar Trio H.1/ii

Lira Conc H.4/iii



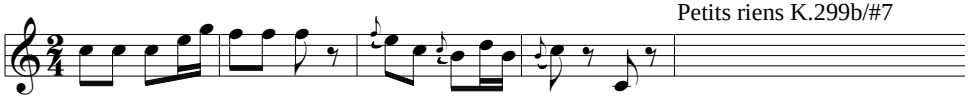
Mass, K.257/Kyrie, 13



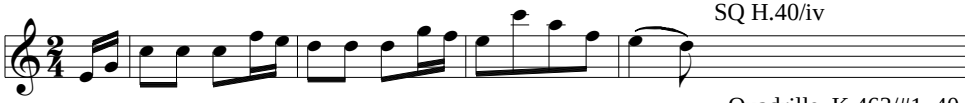


Bar Trio H.103/iv

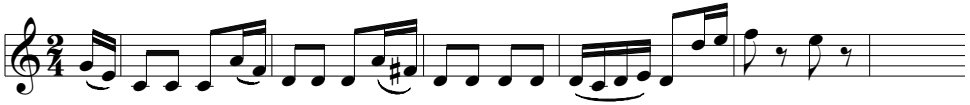
Petits riens K.299b/#7



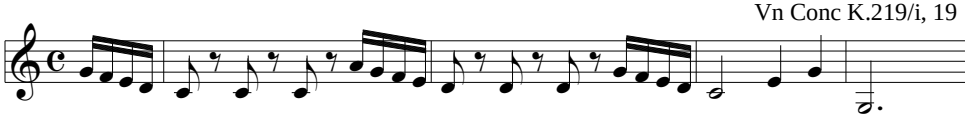
SQ H.40/iv



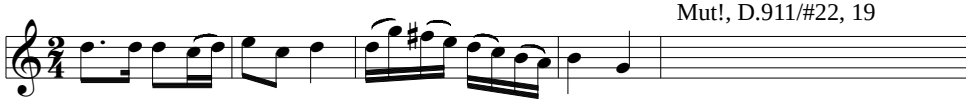
Quadrille, K.463/#1, 40



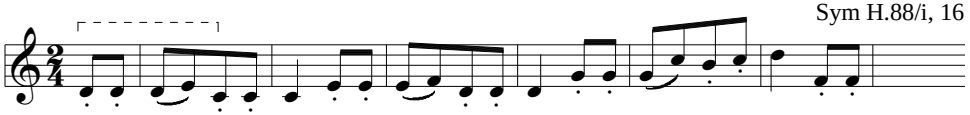
Vn Conc K.219/i, 19

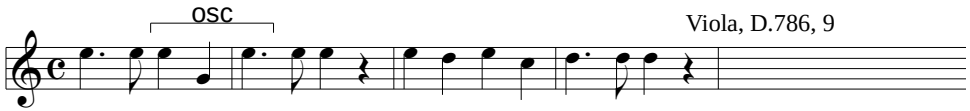


Mut!, D.911/#22, 19



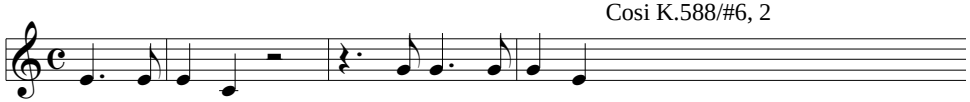
Sym H.88/i, 16

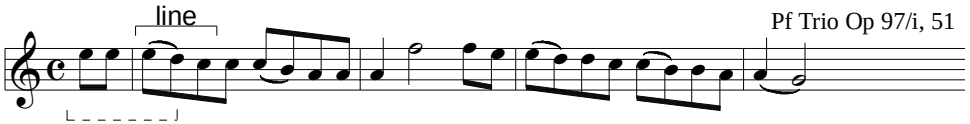




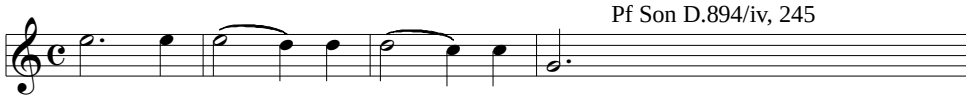
Viola, D.786, 9

Cosi K.588/#6, 2

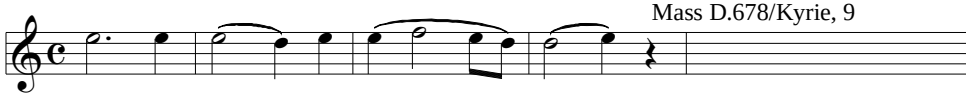




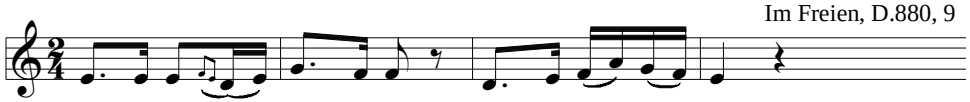
Pf Trio Op 97/i, 51



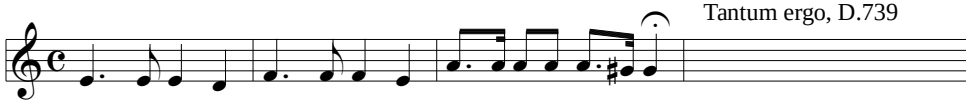
Pf Son D.894/iv, 245



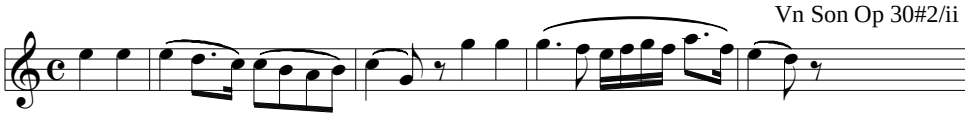
Mass D.678/Kyrie, 9



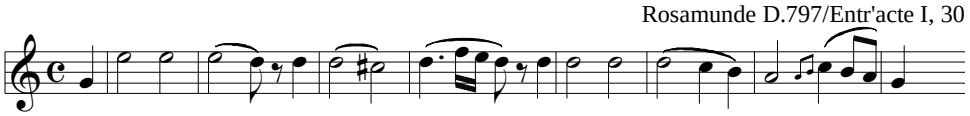
Im Freien, D.880, 9



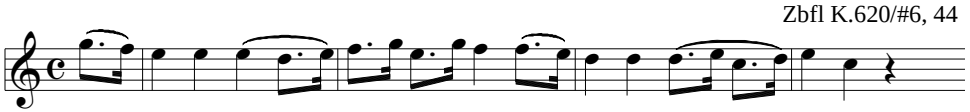
Tantum ergo, D.739



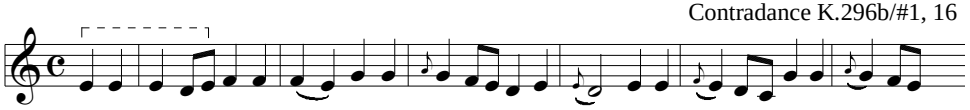
Vn Son Op 30#2/ii



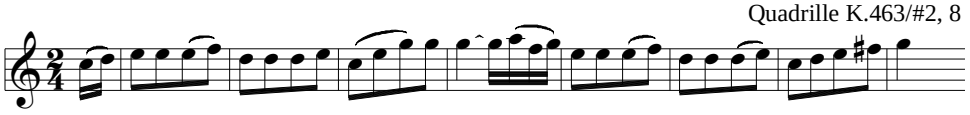
Rosamunde D.797/Entr'acte I, 30



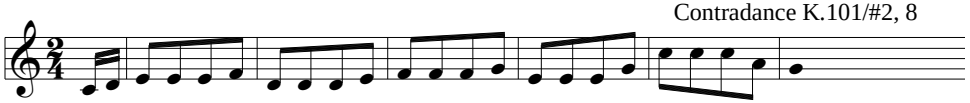
Zbfl K.620/#6, 44



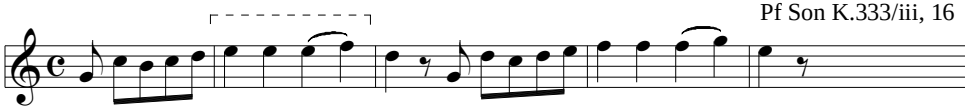
Contradance K.296b/#1, 16



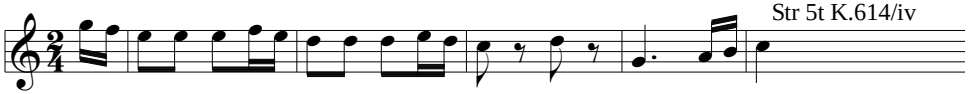
Quadrille K.463/#2, 8



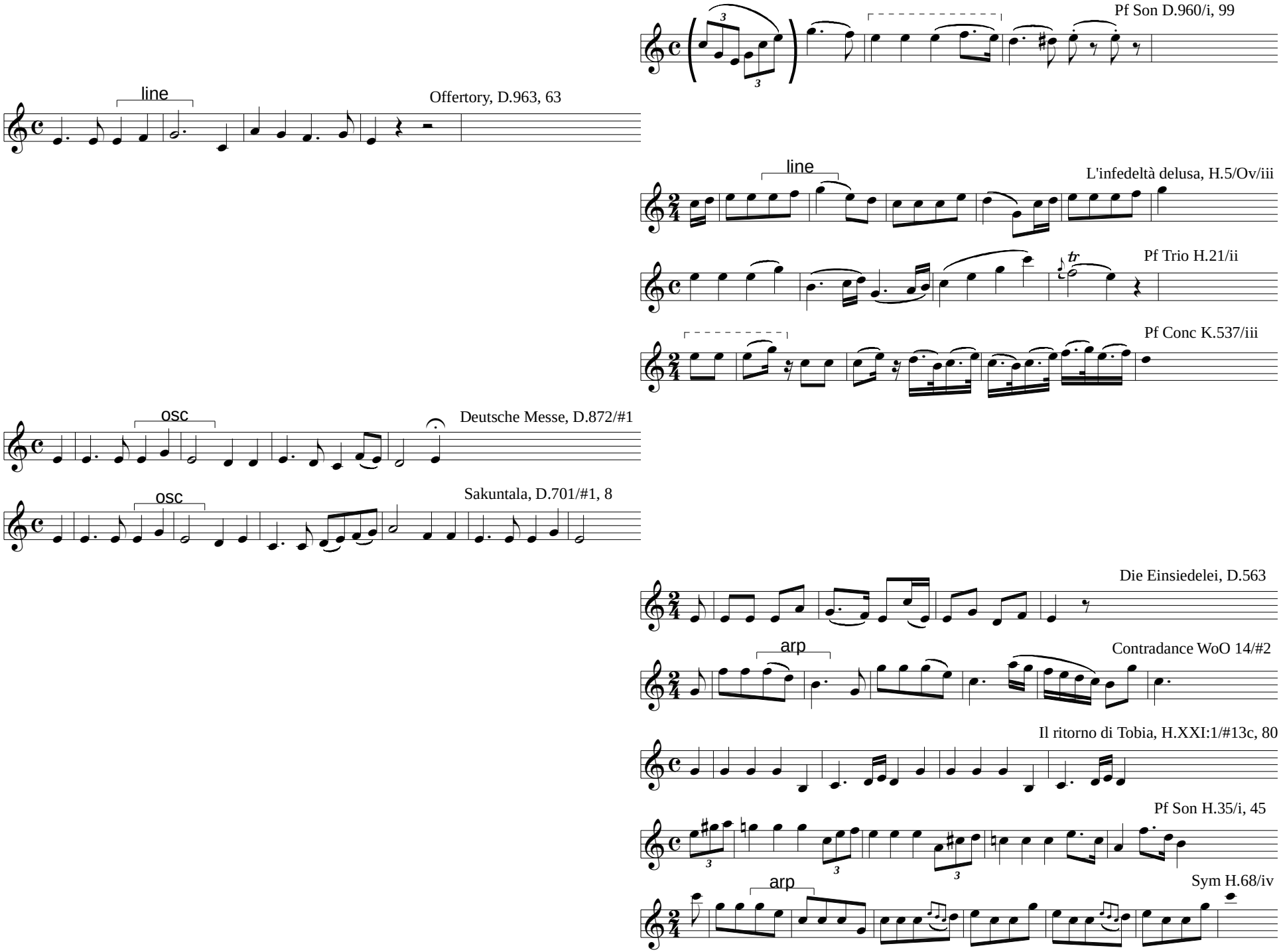
Contradance K.101/#2, 8

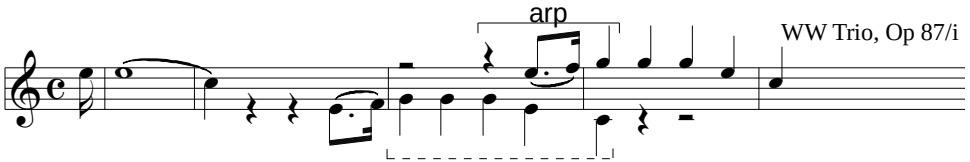


Pf Son K.333/iii, 16

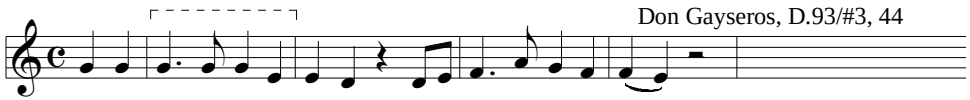


Str 5t K.614/iv

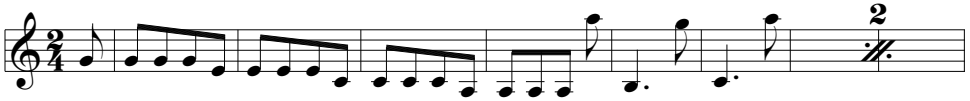

Pf Son D.960/i, 99
line
Offertory, D.963, 63
line
L'infedeltà delusa, H.5/Ov/iii
Pf Trio H.21/ii
Pf Conc K.537/iii
osc
Deutsche Messe, D.872/#1
osc
Sakuntala, D.701/#1, 8
Die Einsiedelei, D.563
arp
Contradance WoO 14/#2
Il ritorno di Tobia, H.XXI:1/#13c, 80
Pf Son H.35/i, 45
arp
Sym H.68/iv



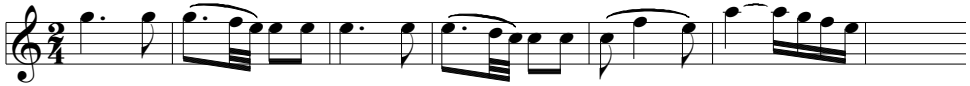
WW Trio, Op 87/i



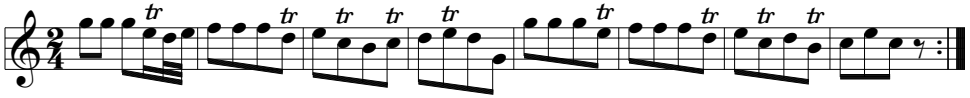
Don Gayseros, D.93/#3, 44



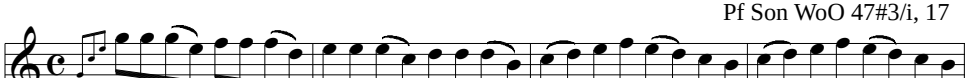
SQ H.76/iv



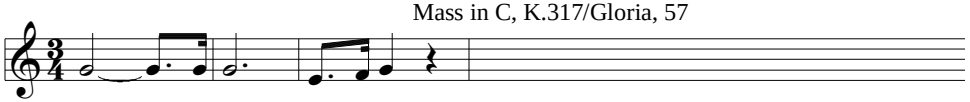
Vn Son Op 30#1/ii



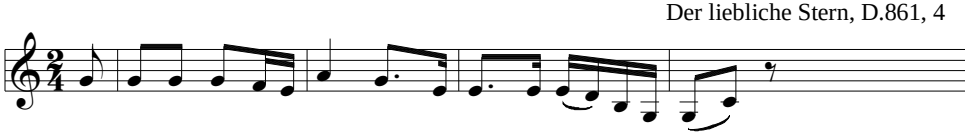
Rondo, pf-orch, K.382



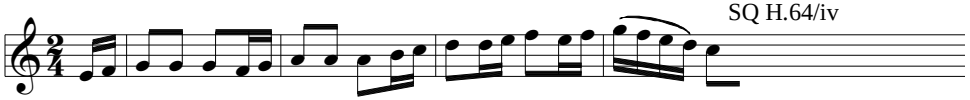
Pf Son WoO 47#3/i, 17



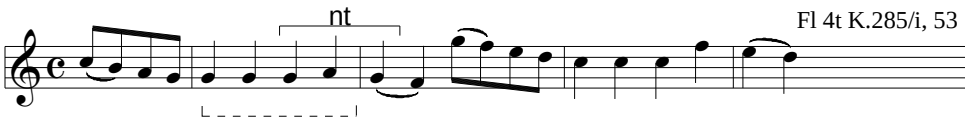
Mass in C, K.317/Gloria, 57



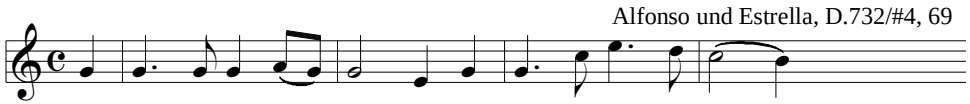
Der liebliche Stern, D.861, 4



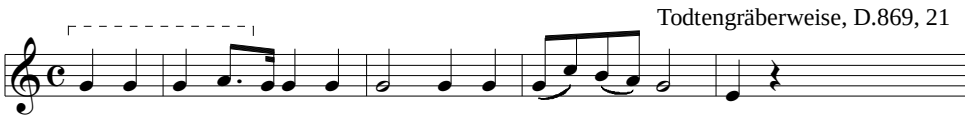
SQ H.64/iv



Fl 4t K.285/i, 53

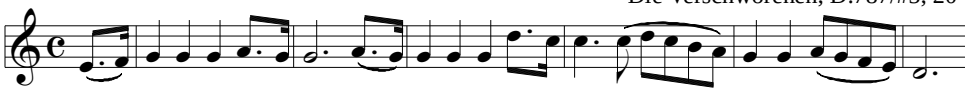


Alfonso und Estrella, D.732/#4, 69

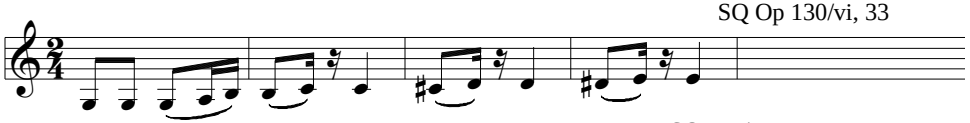


Todtengräberweise, D.869, 21

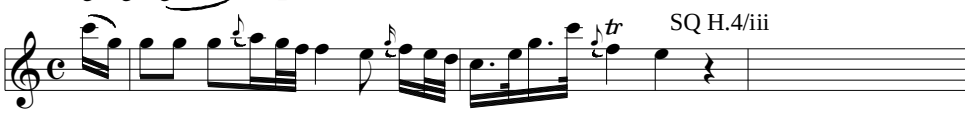
Die Verschworenen, D.787/#5, 20



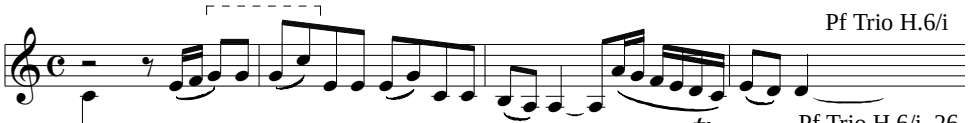
SQ Op 130/vi, 33



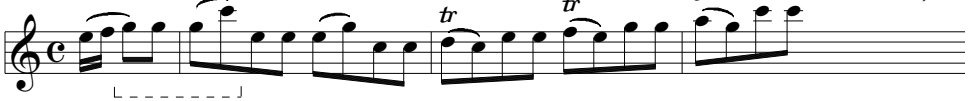
SQ H.4/iii



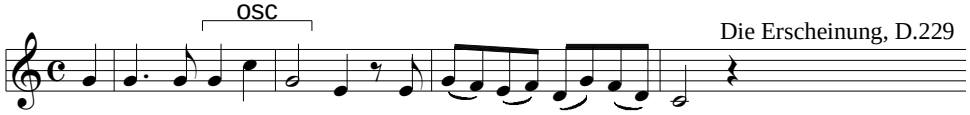
Pf Trio H.6/i



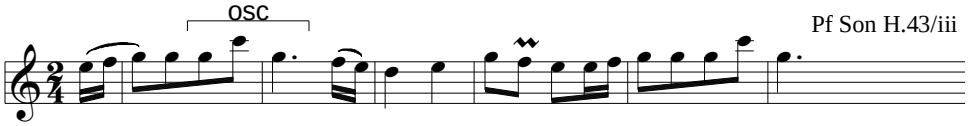
Pf Trio H.6/i, 26



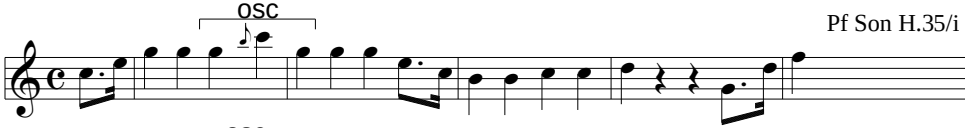
Die Erscheinung, D.229



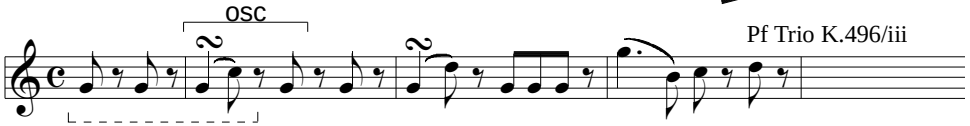
Pf Son H.43/iii



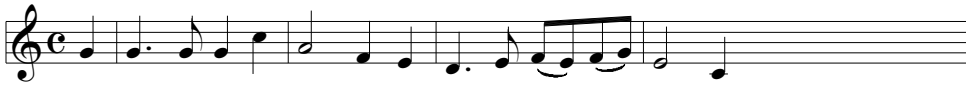
Pf Son H.35/i



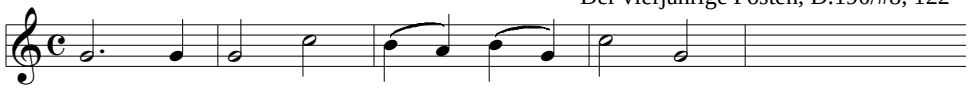
Pf Trio K.496/iii



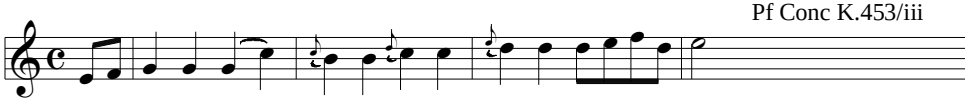
Claudine von Villa Bella, D.239/#7

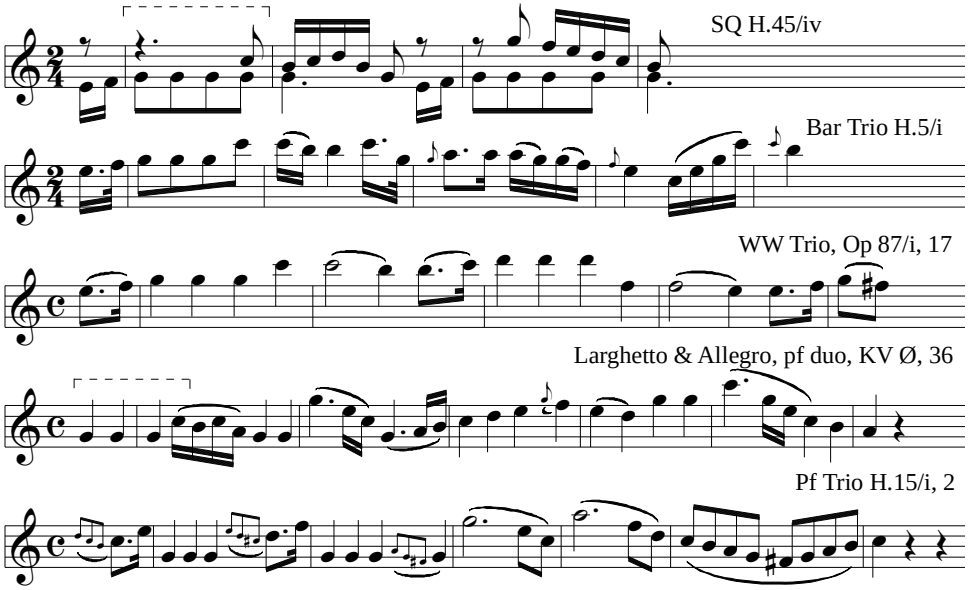


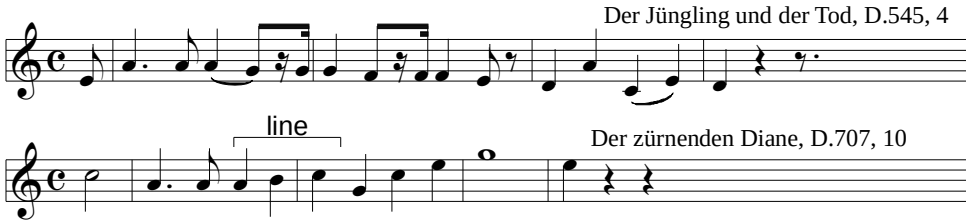
Der vierjährige Posten, D.190/#8, 122



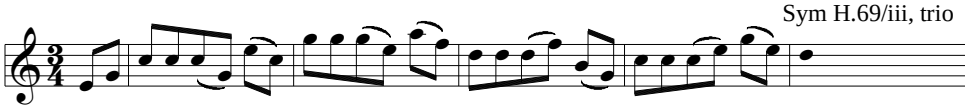
Pf Conc K.453/iii







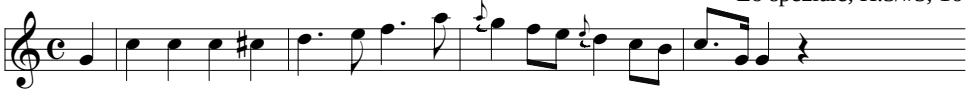
(the only triple-meter {RRR-} in the Z3^K repertory:)



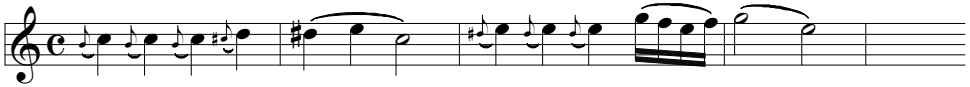
EX 20.2:

Z3^K, {RRR-}+line

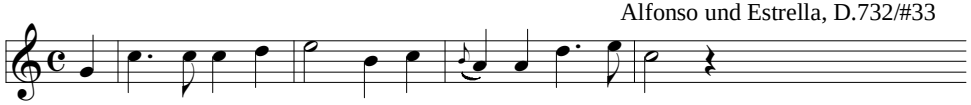
Lo speziale, H.3/#5, 16



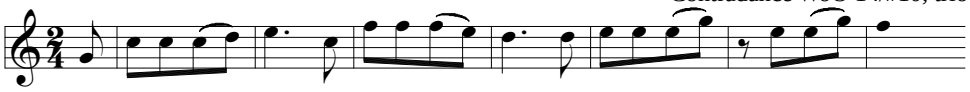
Pf Son H.43/i, 12



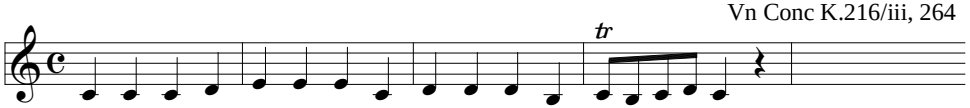
Alfonso und Estrella, D.732/#33



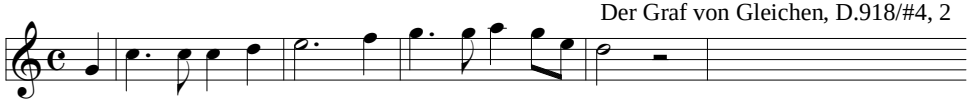
Contradance WoO 14/#10, trio



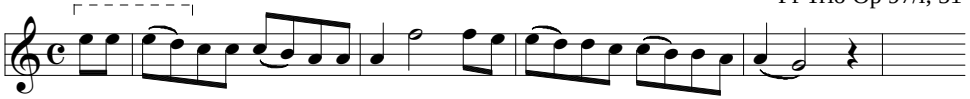
Vn Conc K.216/iii, 264



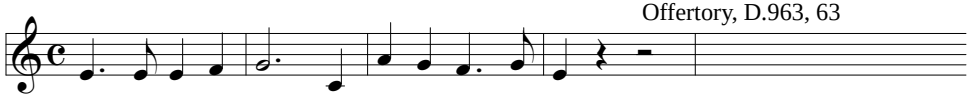
Der Graf von Gleichen, D.918/#4, 2



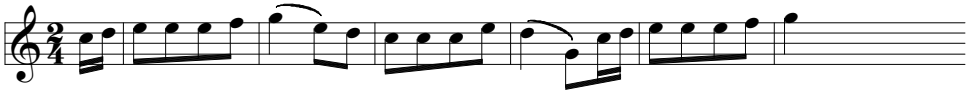
Pf Trio Op 97/i, 51



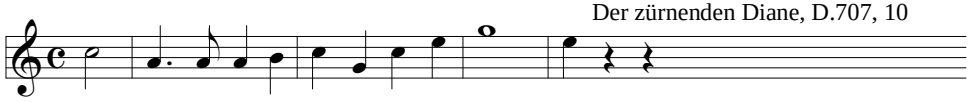
Offertory, D.963, 63



L'infedeltà delusa, H.5/Ov/iii

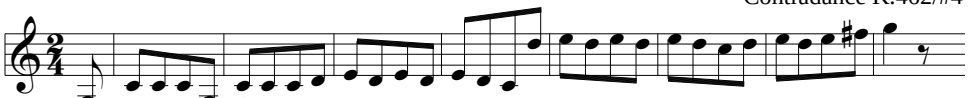


Der zürnenden Diane, D.707, 10

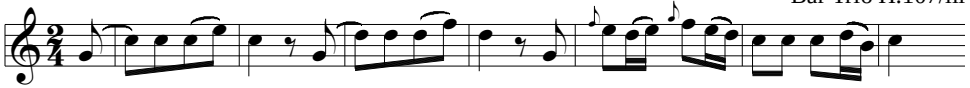


Z3^K, {RRR-}+OSC

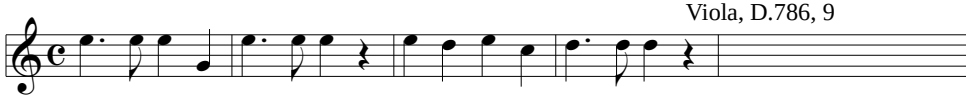
Contradance K.462/#4



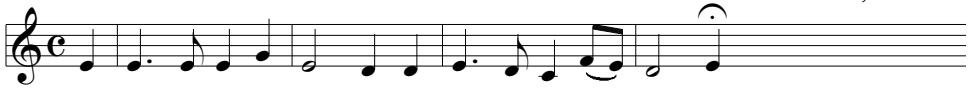
Bar Trio H.107/iii



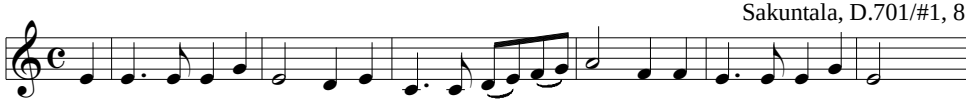
Viola, D.786, 9



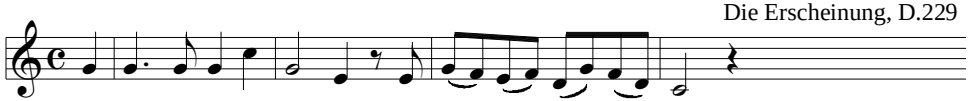
Deutsche Messe, D.872/#1



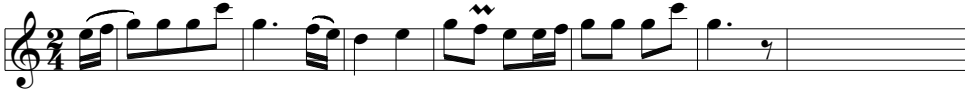
Sakuntala, D.701/#1, 8



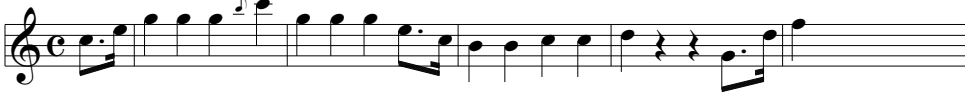
Die Erscheinung, D.229



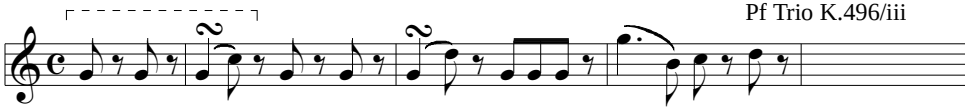
Pf Son H.43/iii



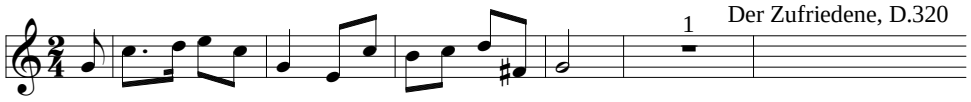
Pf Son H.35/i

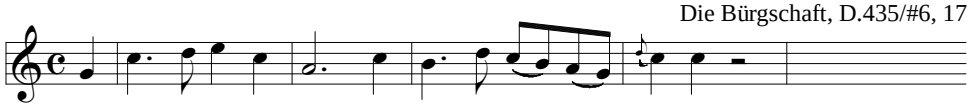


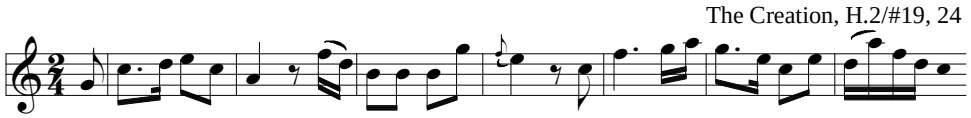
Pf Trio K.496/iii

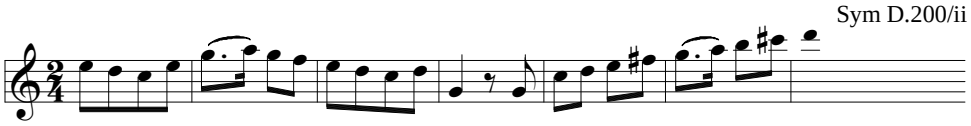


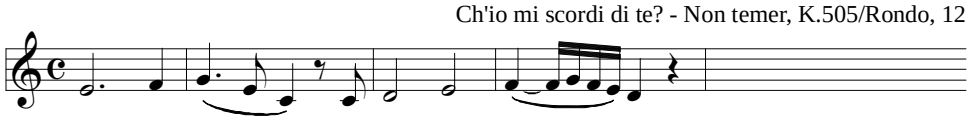
EX 21.1:
Z3^K, 3L+ARP

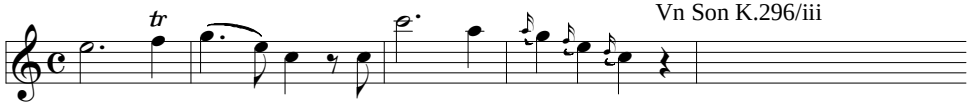


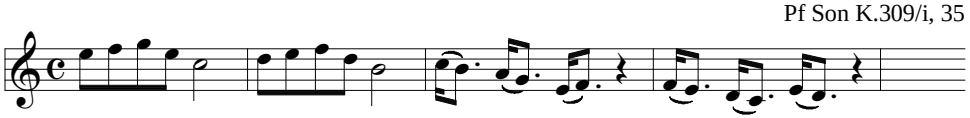


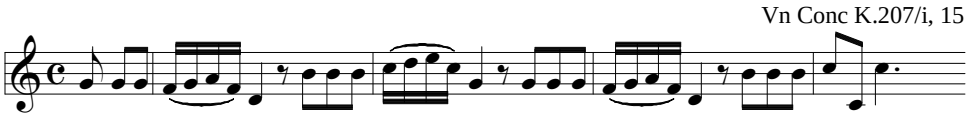


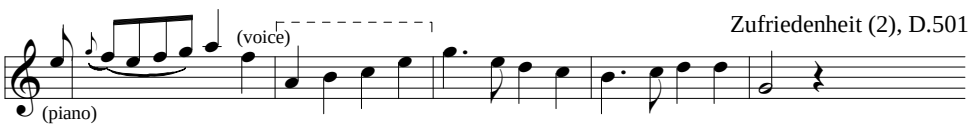






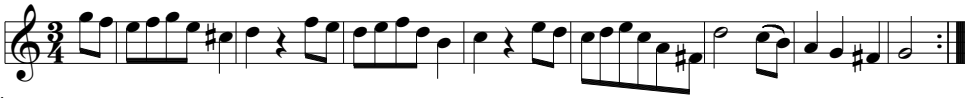




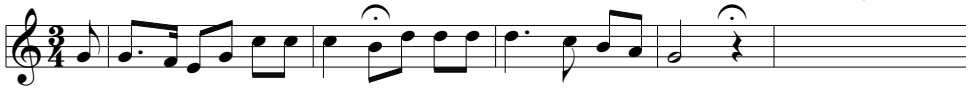


(Z3^K, 3L+ARP, triple-metered)

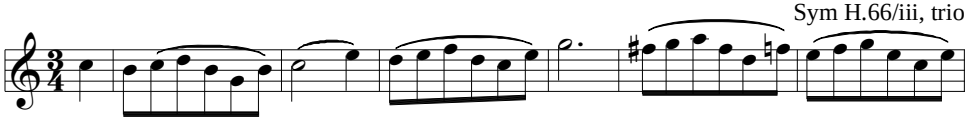
Min K.176/#13



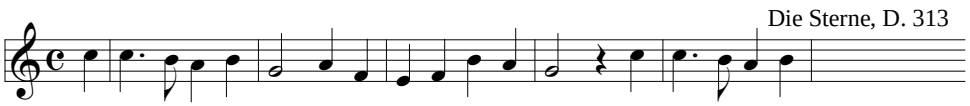
Deutsche Messe, D.872/#4

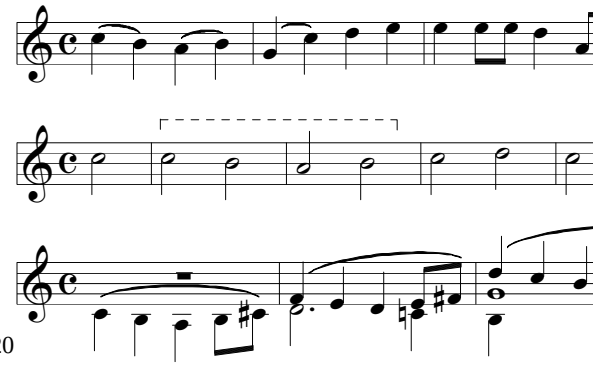


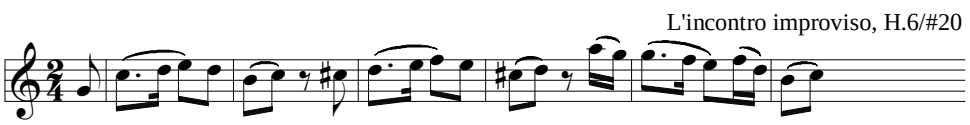
Sym H.66/iii, trio

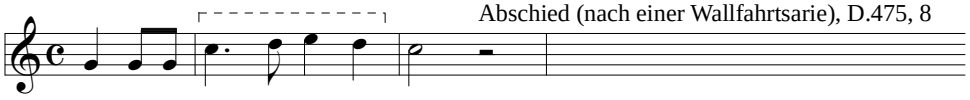


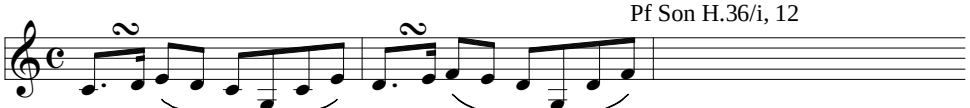
EX 21.2:
Z3^K, 3L+NT

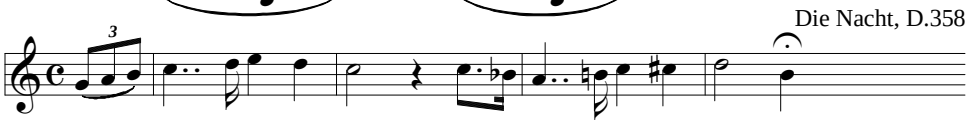


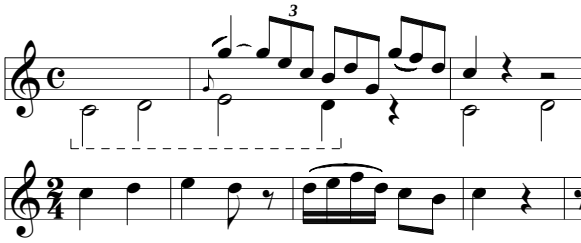




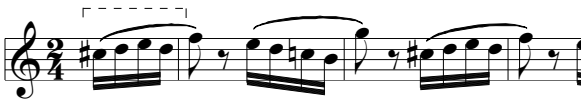


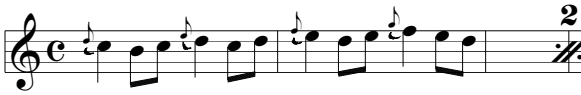


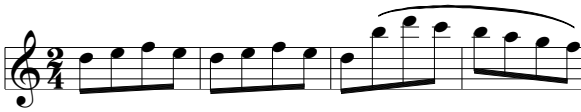




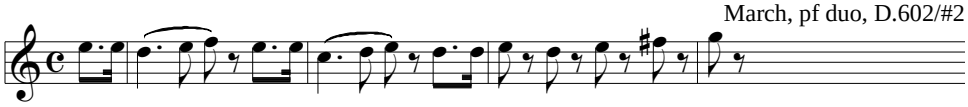
SQ H.77/ii

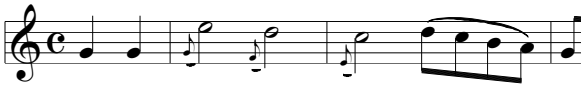




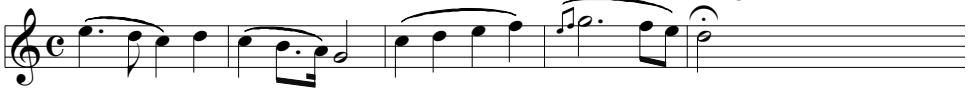


March, pf duo, D.602/#2

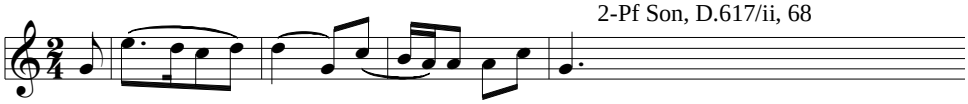


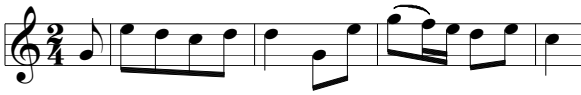


Die Bürgschaft, D.435/#12, 101

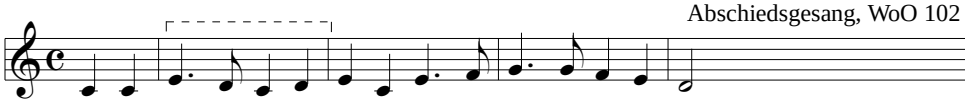


2-Pf Son, D.617/ii, 68

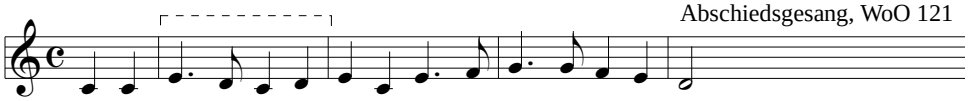




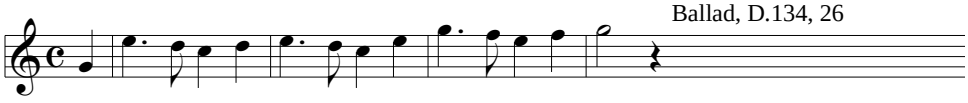
Abschiedsgesang, WoO 102

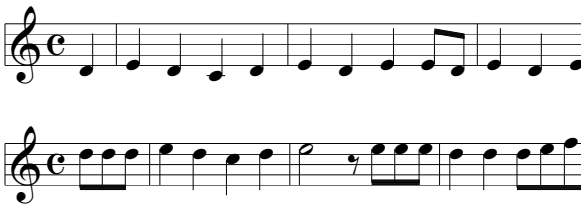


Abschiedsgesang, WoO 121

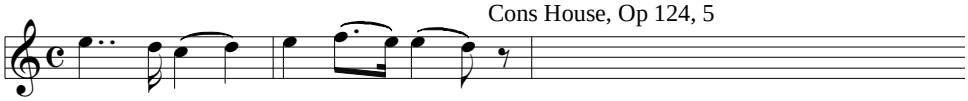


Ballad, D.134, 26

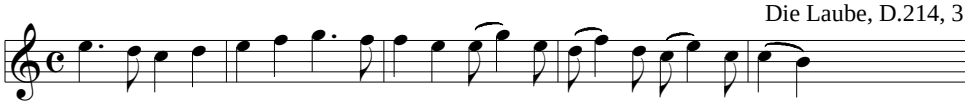




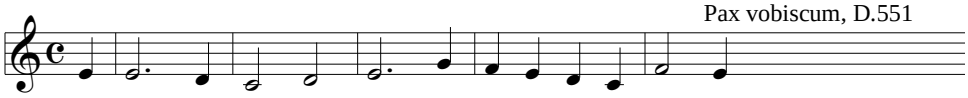
Cons House, Op 124, 5

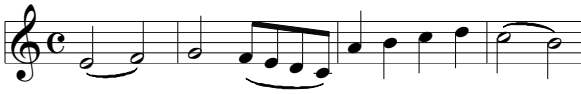


Die Laube, D.214, 3

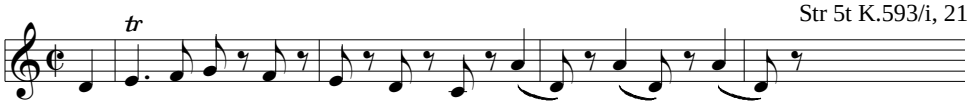


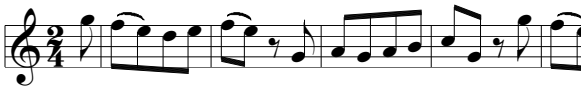
Pax vobiscum, D.551

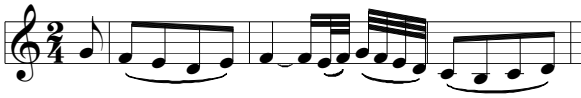


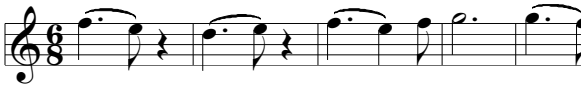


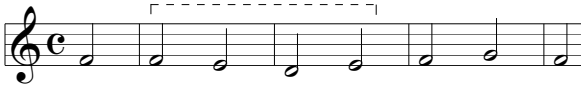
Str 5t K.593/i, 21

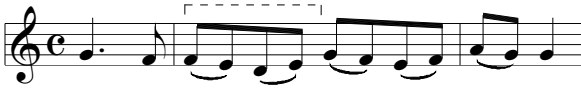


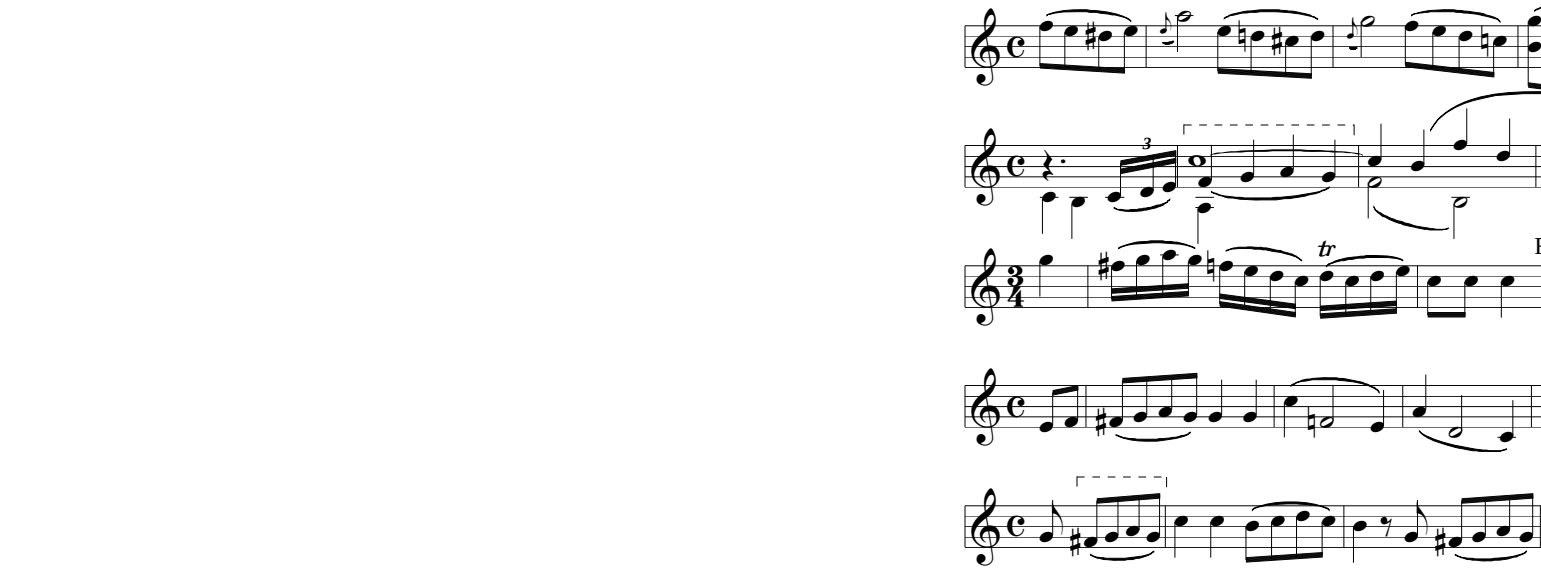








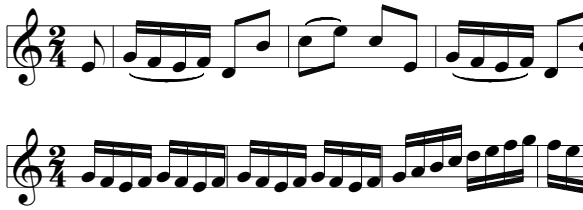




Bar Trio H.47/ii

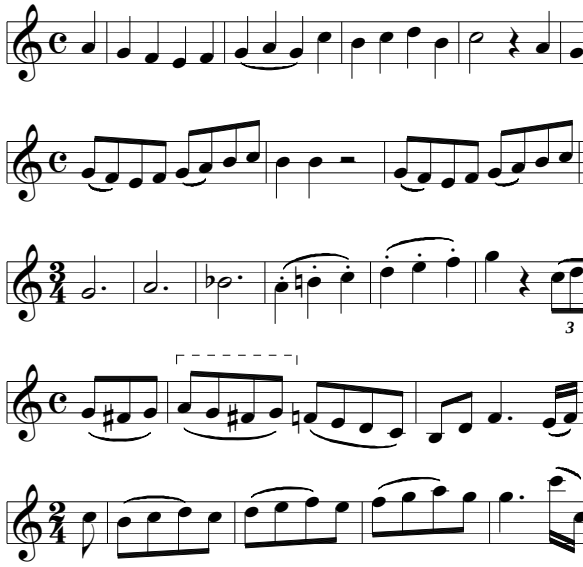
L'anima del filosofo, H.13/#3b

WW 5t frag, Hess 19/i, 23

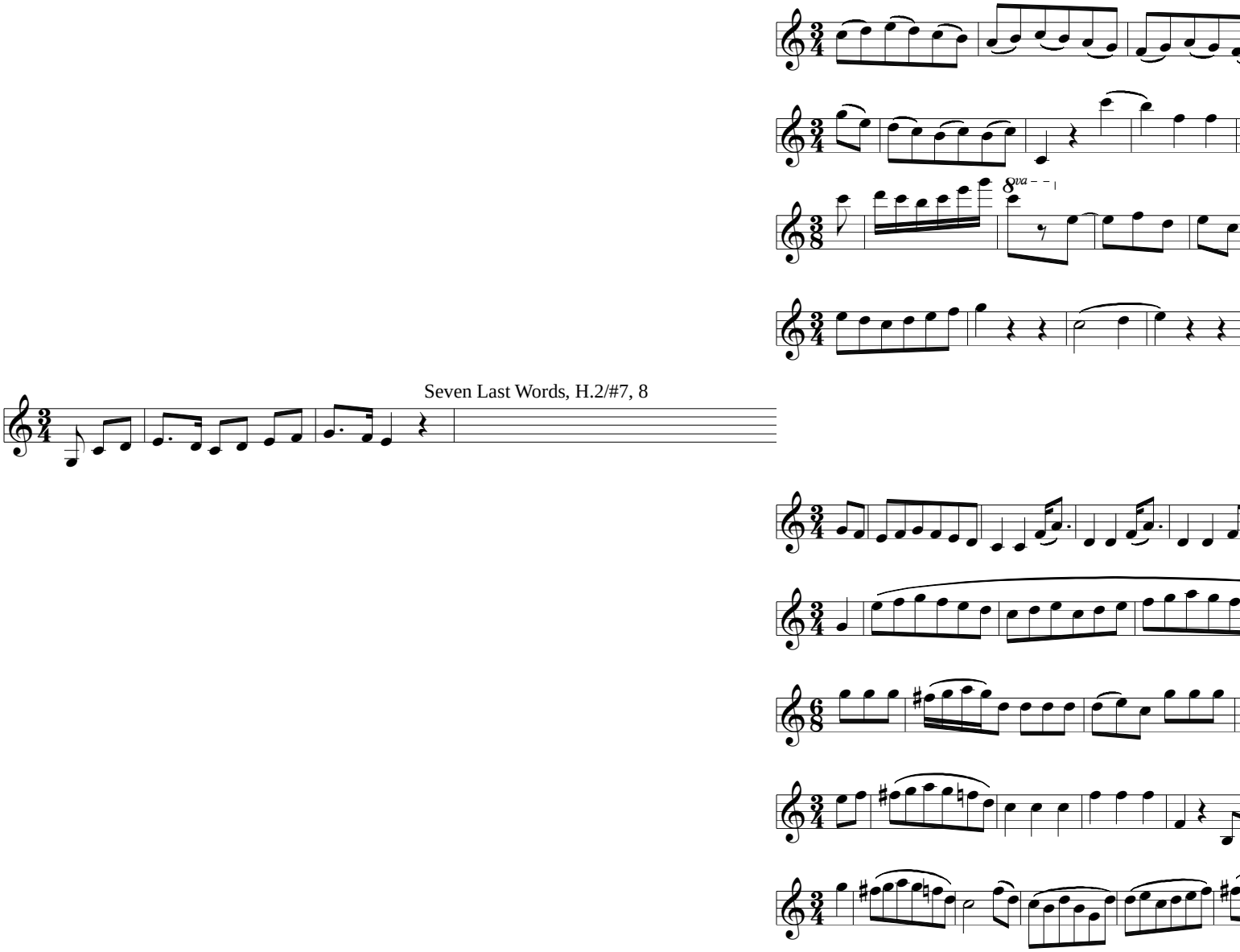


Zbfl K.620/#5, 34

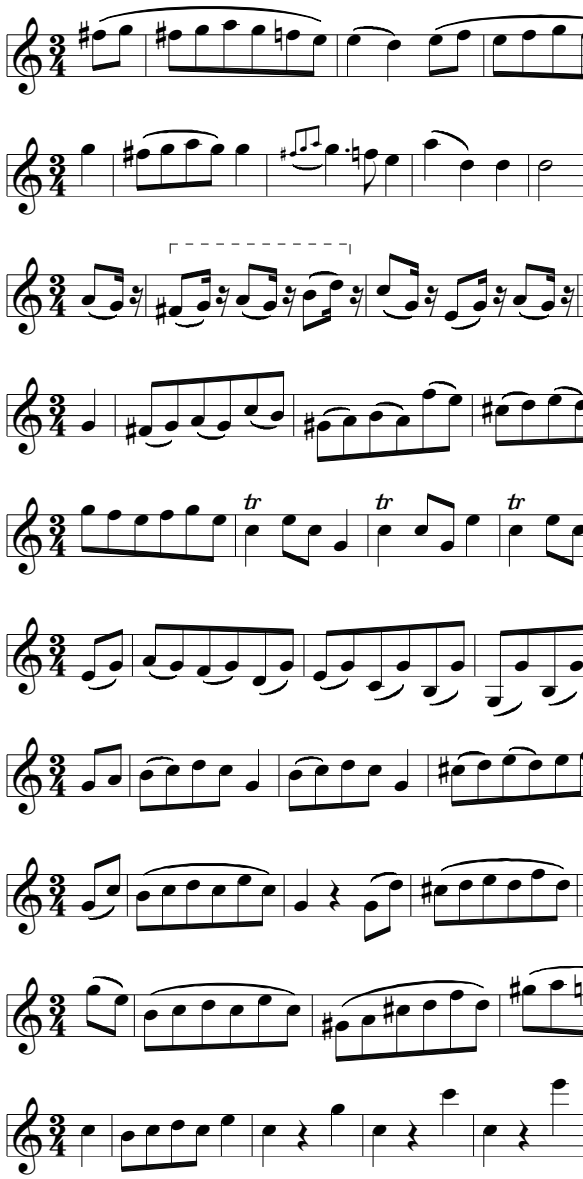
Vn Conc K.207/iii, 114



(Z3^K, 3L+NT, triple-metered)

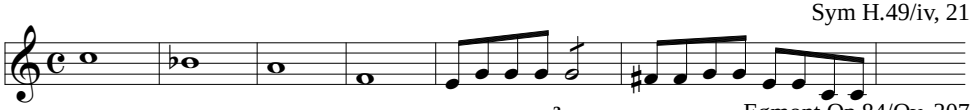


Seven Last Words, H.2/#7, 8

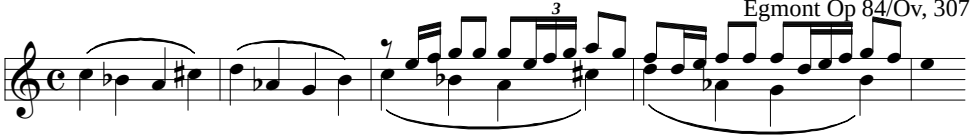


EX 21.3:
Z3^K, the rest of the 3-linear

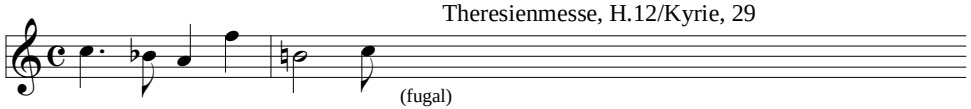
Sym H.49/iv, 21



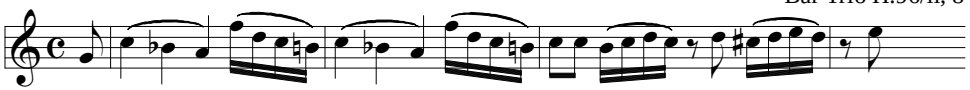
Egmont Op 84/Ov, 307



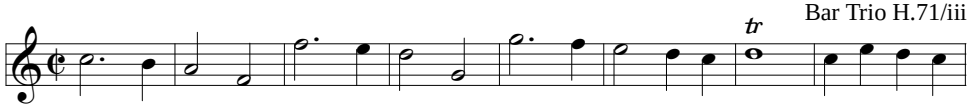
Theresienmesse, H.12/Kyrie, 29



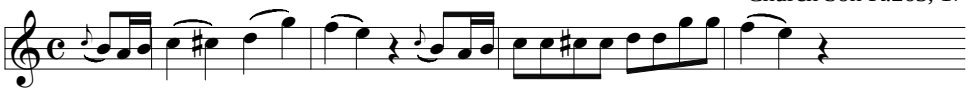
Bar Trio H.96/ii, 8



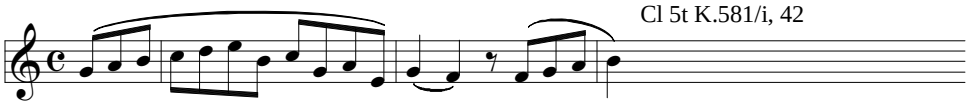
Bar Trio H.71/iii



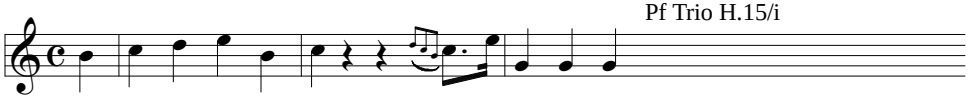
Church Son K.263, 17



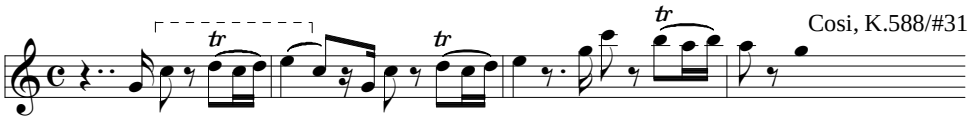
Cl 5t K.581/i, 42



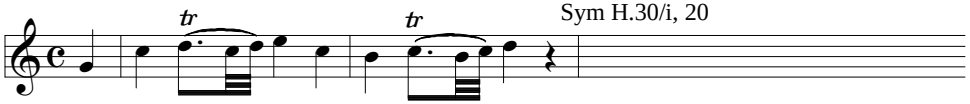
Pf Trio H.15/i

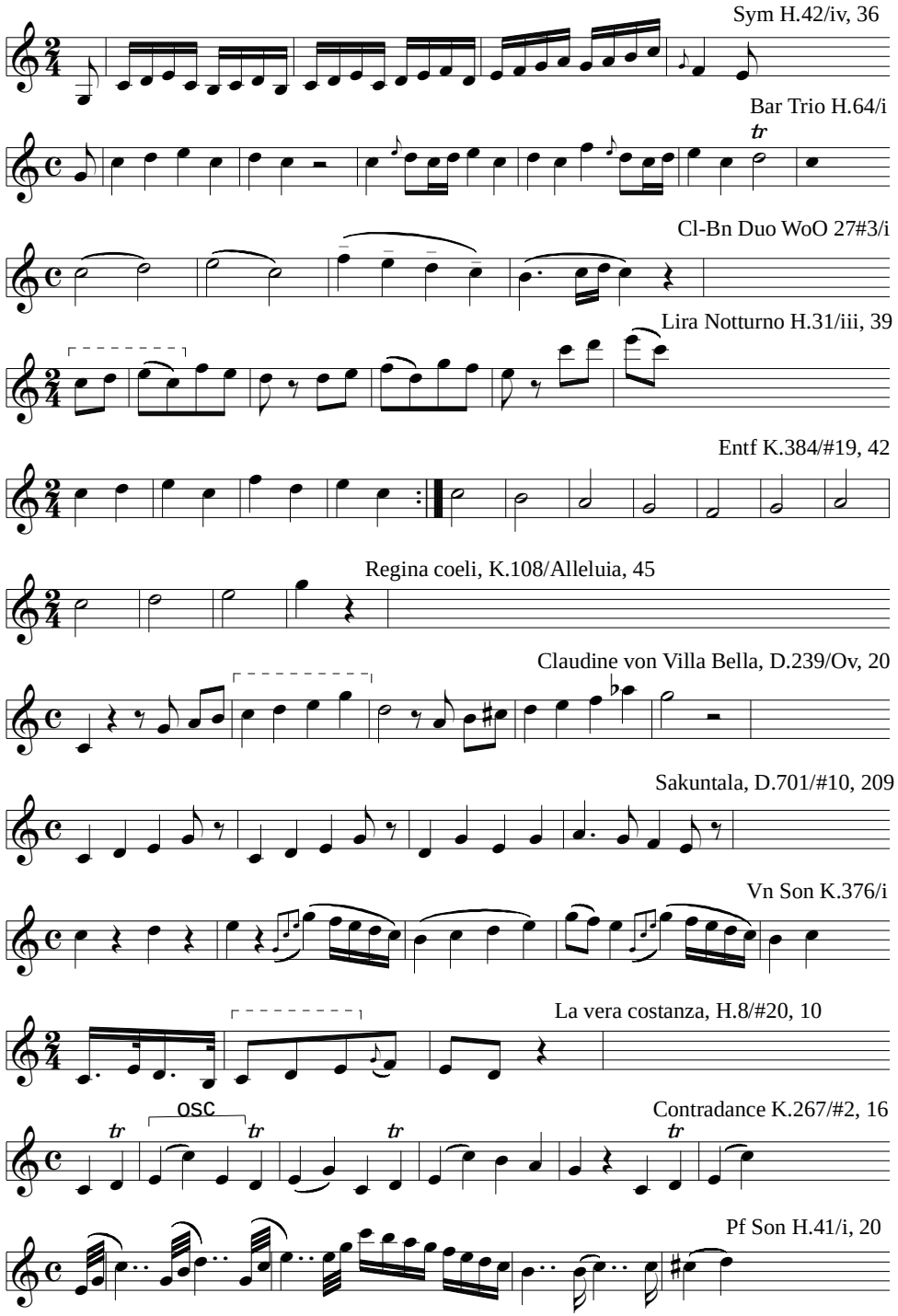


Cosi, K.588/#31

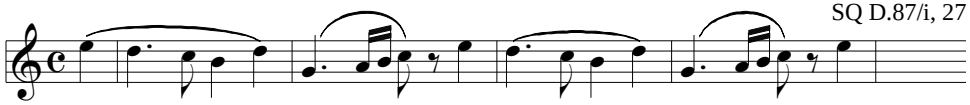


Sym H.30/i, 20

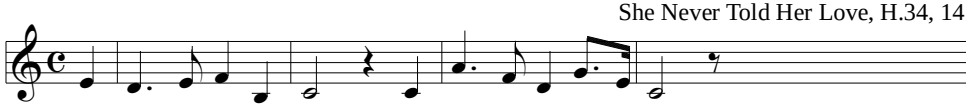



Sym H.42/iv, 36
Bar Trio H.64/i
tr
Cl-Bn Duo WoO 27#3/i
Lira Notturno H.31/iii, 39
Entf K.384/#19, 42
Regina coeli, K.108/Alleluia, 45
Claudine von Villa Bella, D.239/Ov, 20
Sakuntala, D.701/#10, 209
Vn Son K.376/i
La vera costanza, H.8/#20, 10
OSC
Contradance K.267/#2, 16
Pf Son H.41/i, 20

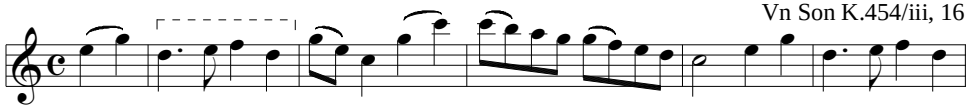
SQ D.87/i, 27



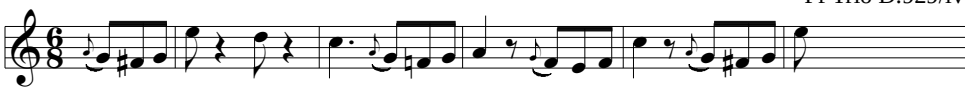
She Never Told Her Love, H.34, 14



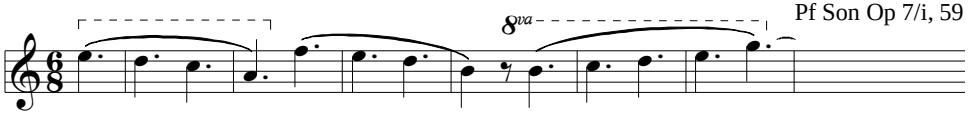
Vn Son K.454/iii, 16



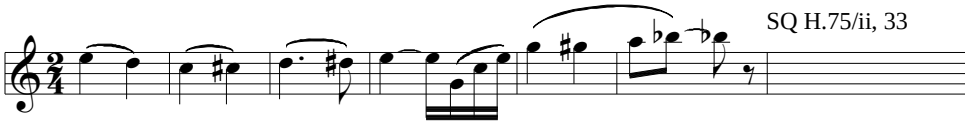
Pf Trio D.929/iv



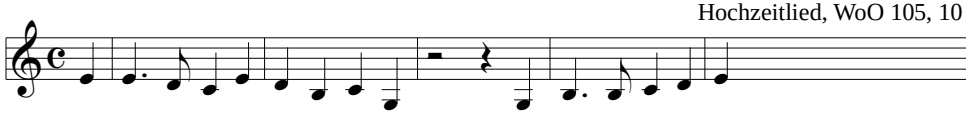
Pf Son Op 7/i, 59



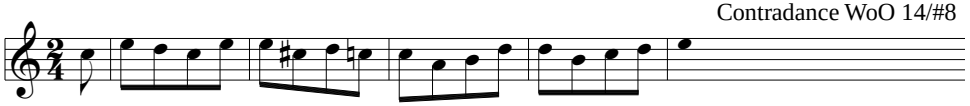
SQ H.75/ii, 33



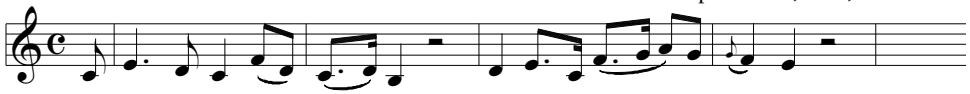
Hochzeitlied, WoO 105, 10



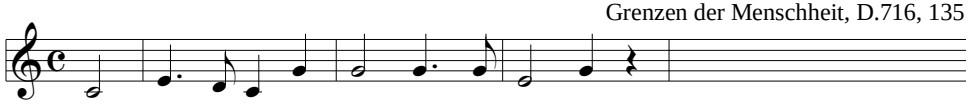
Contradance WoO 14/#8



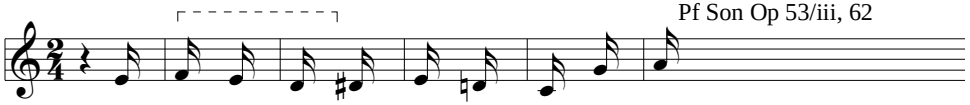
Saper vorrei, duet, H.XXVa:2



Grenzen der Menschheit, D.716, 135

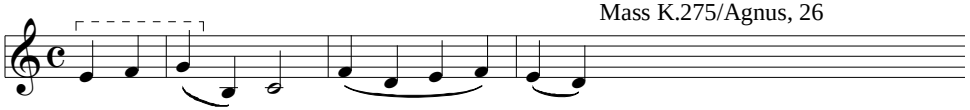


Pf Son Op 53/iii, 62

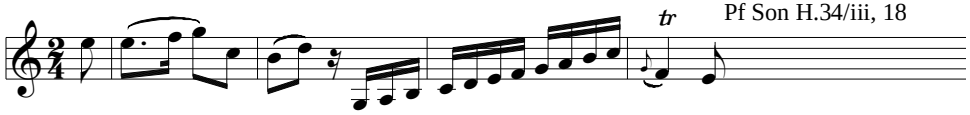


Sym Op 60/i, 141

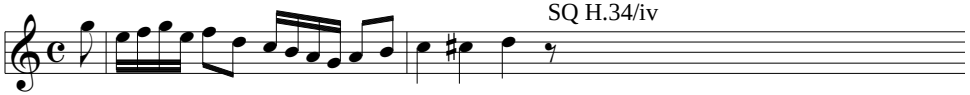
Mass K.275/Agnus, 26



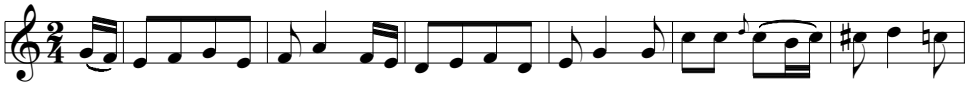
Pf Son H.34/iii, 18



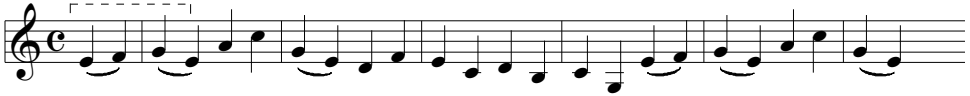
SQ H.34/iv



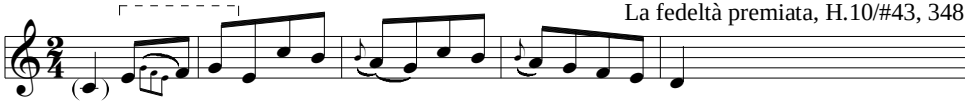
Contradance WoO 14/#4



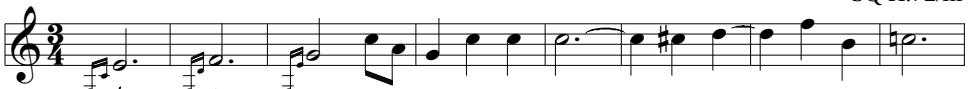
Contradance K.267/#3



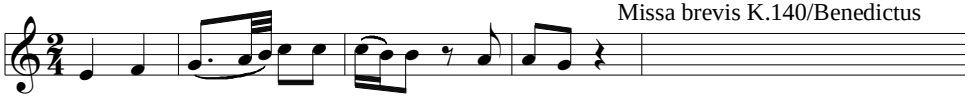
La fedeltà premiata, H.10/#43, 348



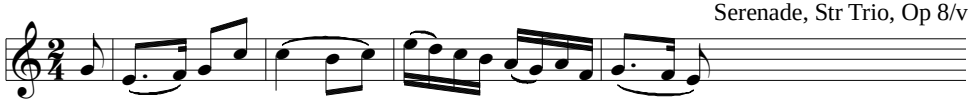
SQ H.72/iii



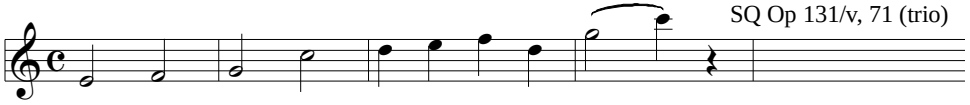
Missa brevis K.140/Benedictus



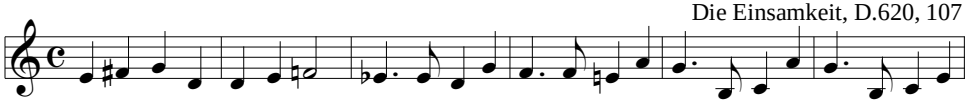
Serenade, Str Trio, Op 8/v



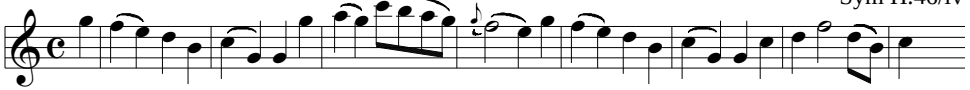
SQ Op 131/v, 71 (trio)



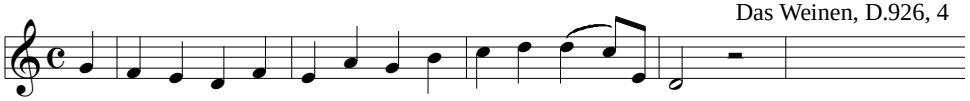
Die Einsamkeit, D.620, 107



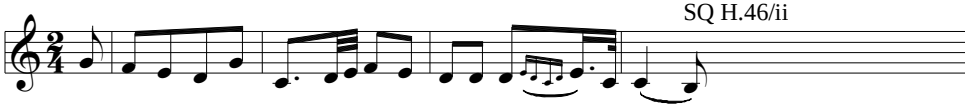
Sym H.46/iv



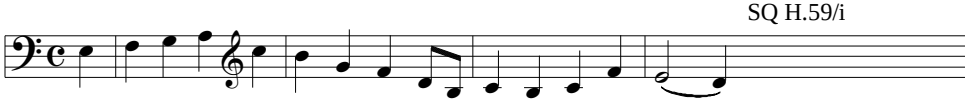
Das Weinen, D.926, 4



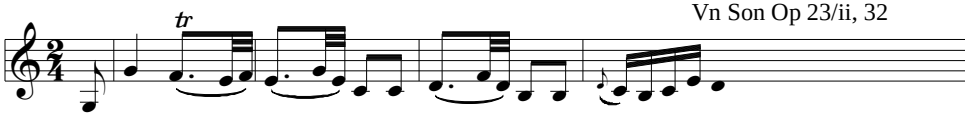
SQ H.46/ii



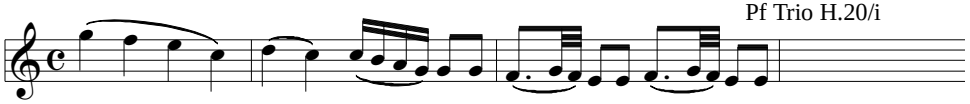
SQ H.59/i



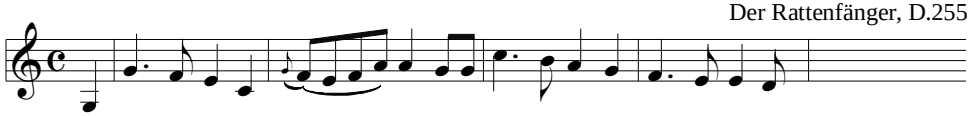
Vn Son Op 23/ii, 32



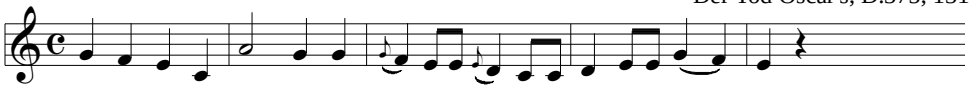
Pf Trio H.20/i



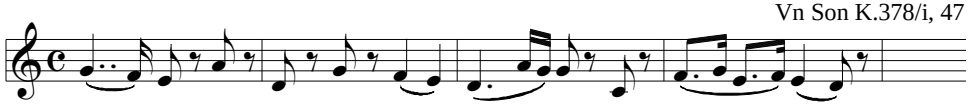
Der Rattenfänger, D.255



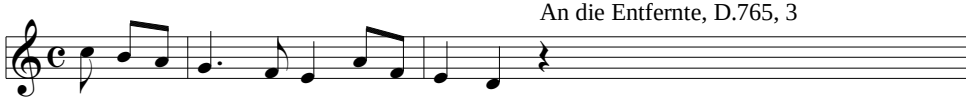
Der Tod Oscar's, D.375, 131



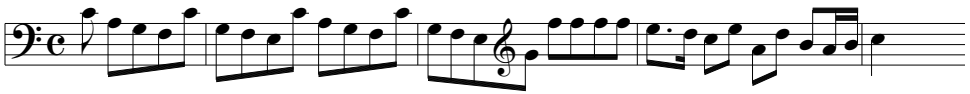
Vn Son K.378/i, 47



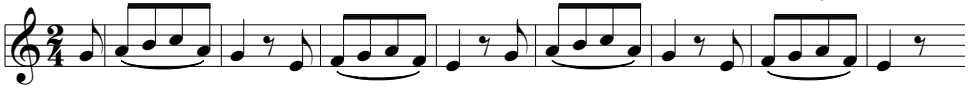
An die Entfernte, D.765, 3



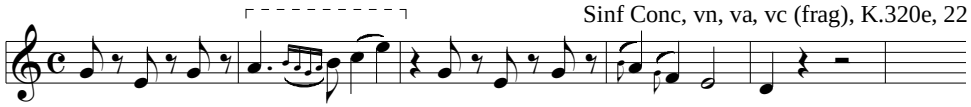
Orch Div K.251/i, 26

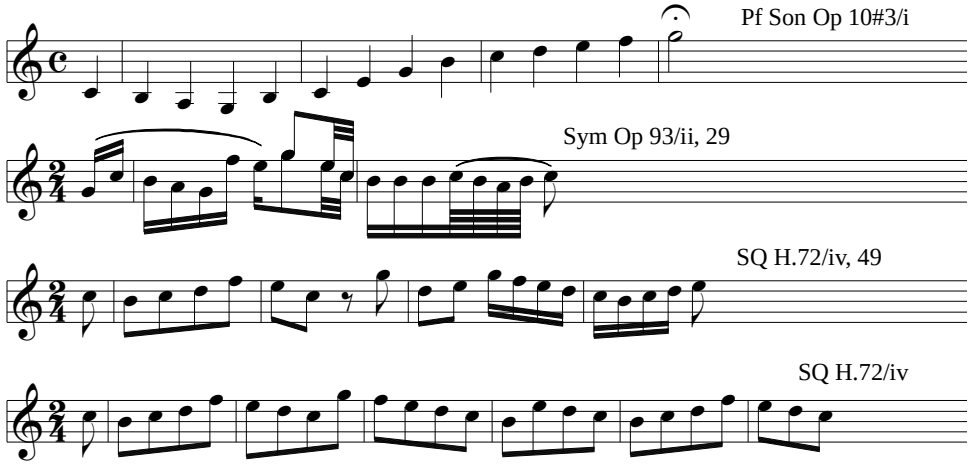


Sym H.80/iv, 72

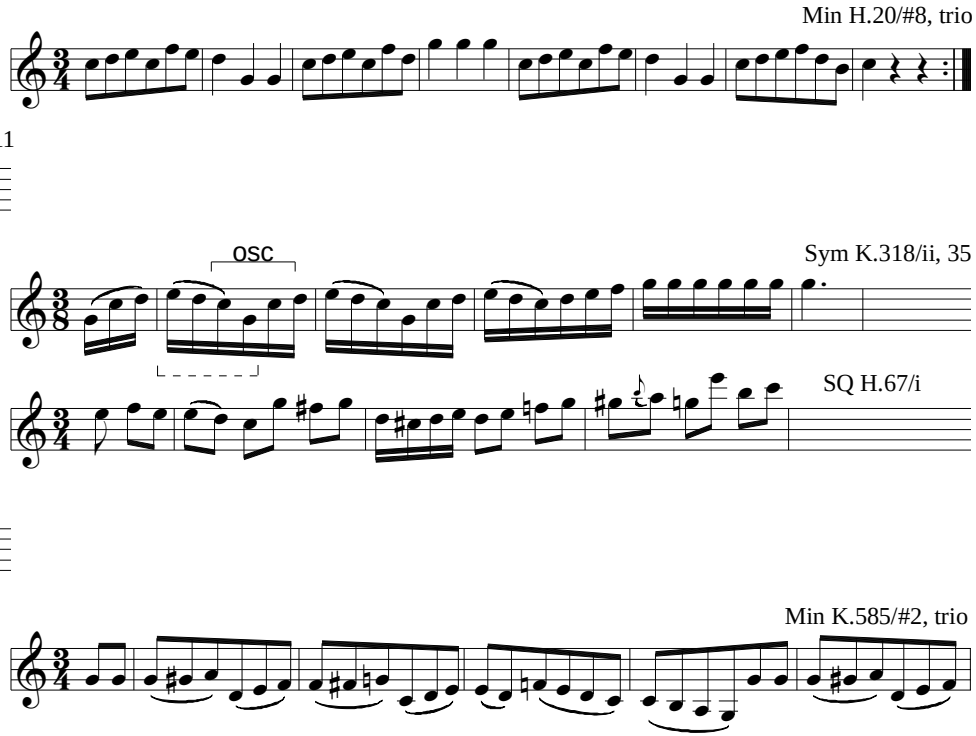


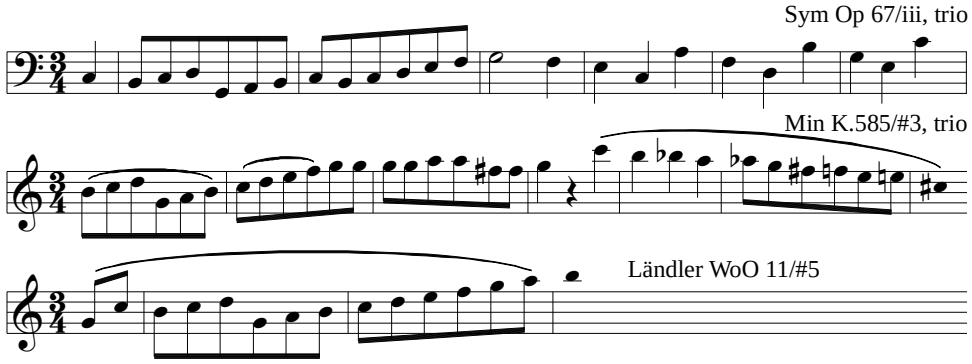
Sinf Conc, vn, va, vc (frag), K.320e, 22





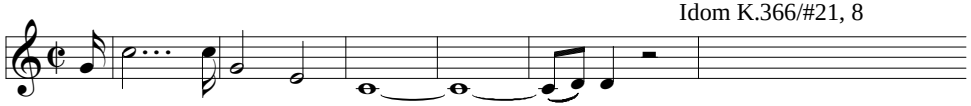
(Z3^K, 3-linear, triple-metered)



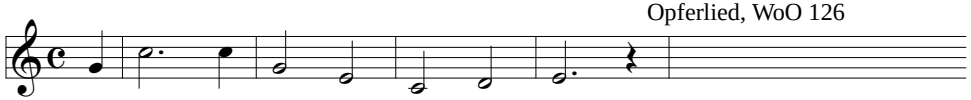

Sym Op 67/iii, trio
Min K.585/#3, trio
Ländler WoO 11/#5

EX 22.1:
Z3^K, {RR--}

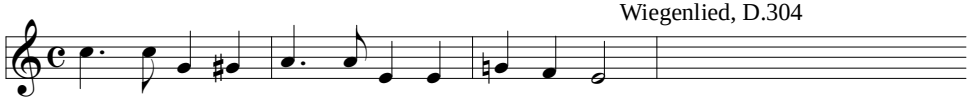
Idom K.366/#21, 8



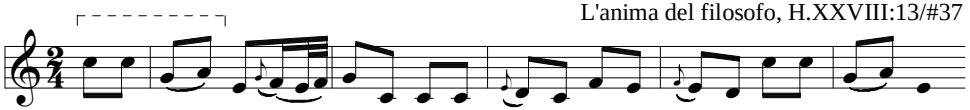
Opferlied, WoO 126



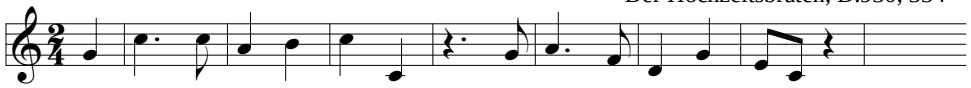
Wiegenlied, D.304



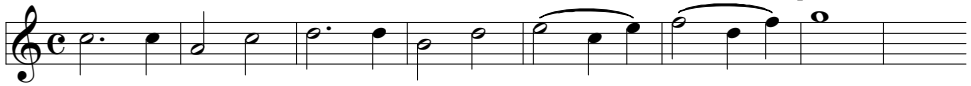
L'anima del filosofo, H.XXVIII:13/#37



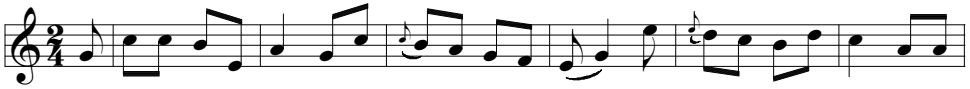
Der Hochzeitsbraten, D.930, 334



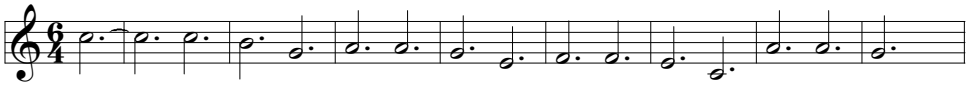
Mass in C, Op 86/Gloria, 214



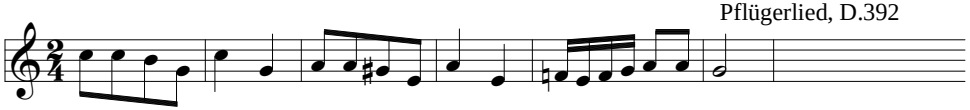
Edone, D.445



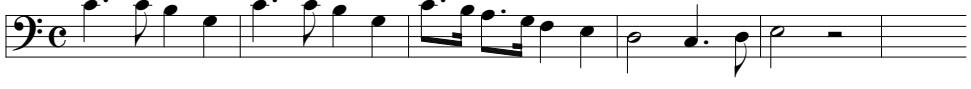
Sym Op 125/iv, 655



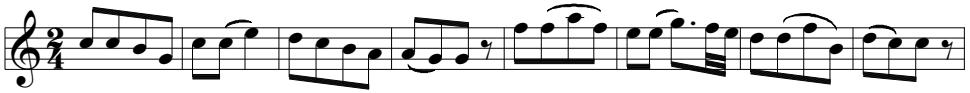
Pflügerlied, D.392



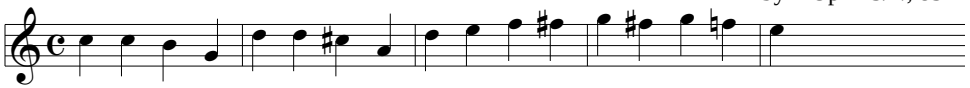
Die Zwillingsbrüder, D.647/#4, 8



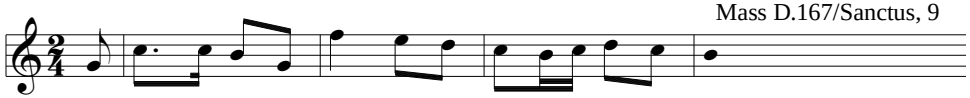
Str Trio K.563/iv



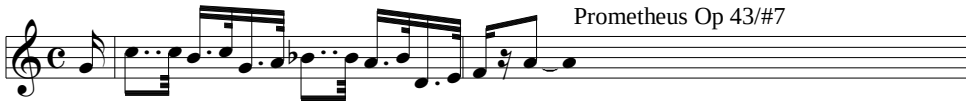
Sym Op 125/iv, 851



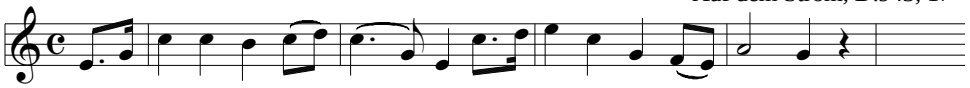
Mass D.167/Sanctus, 9



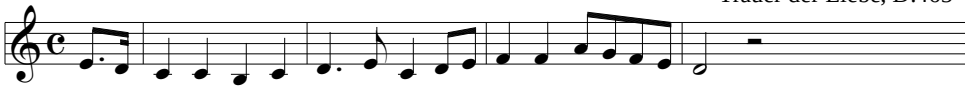
Prometheus Op 43/#7



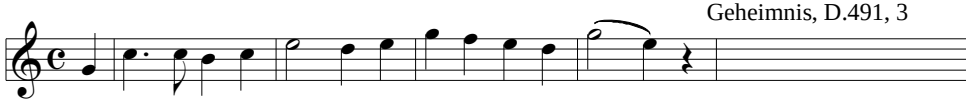
Auf dem Strom, D.943, 17



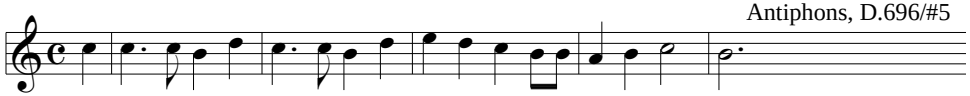
Trauer der Liebe, D.465



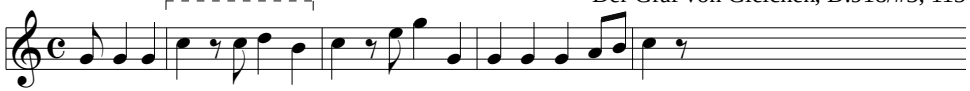
Geheimnis, D.491, 3



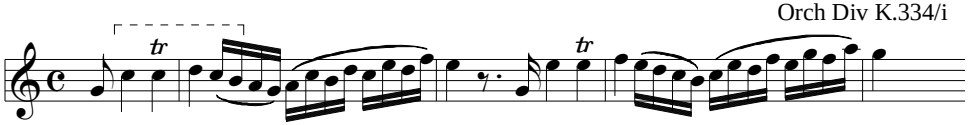
Antiphons, D.696/#5



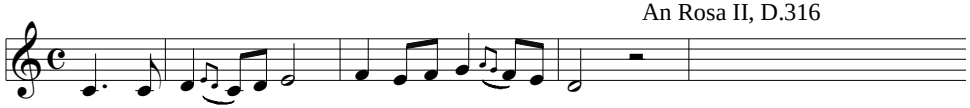
Der Graf von Gleichen, D.918/#3, 115



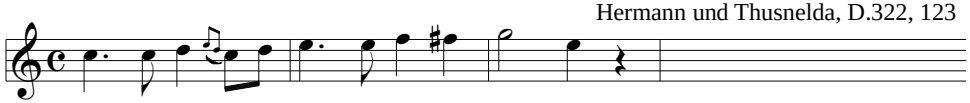
Orch Div K.334/i



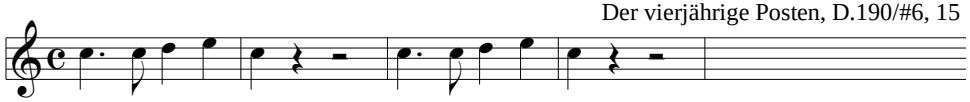
An Rosa II, D.316



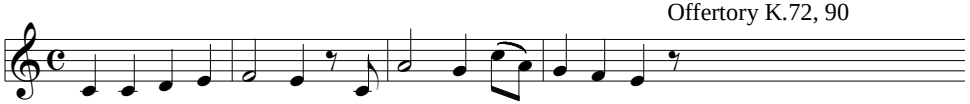
Hermann und Thusnelda, D.322, 123



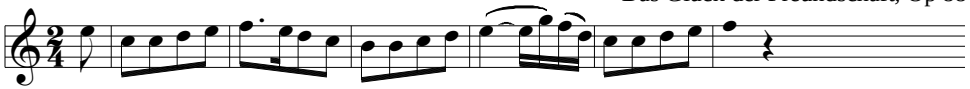
Der vierjährige Posten, D.190/#6, 15



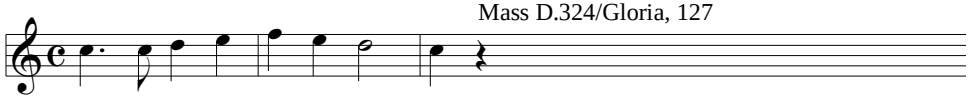
Offertory K.72, 90



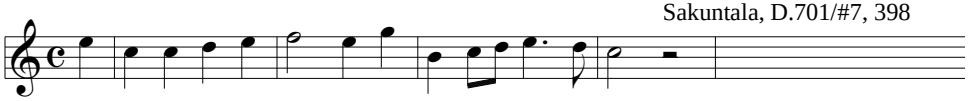
Das Glück der Freundschaft, Op 88



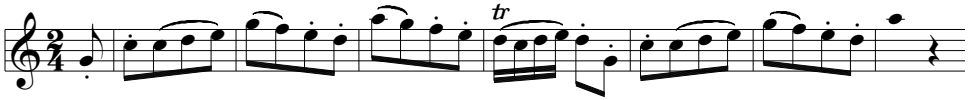
Mass D.324/Gloria, 127



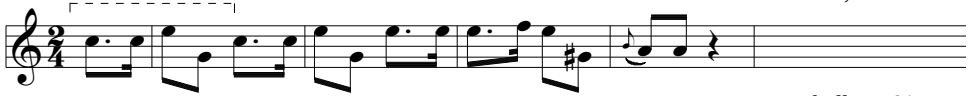
Sakuntala, D.701/#7, 398



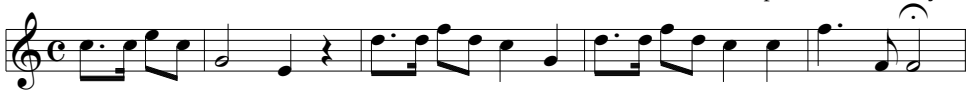
WW Div K.439b#1/v



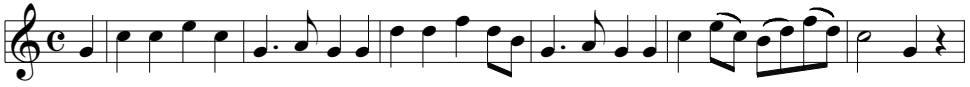
Der Graf von Gleichen, D.918/#19



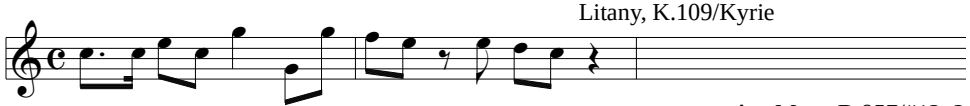
Missa in tempore belli, H.9/Kyrie



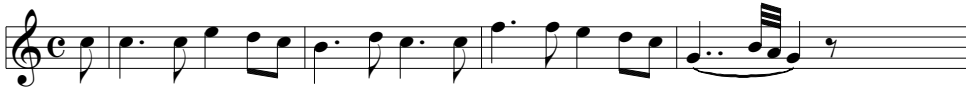
The Creation, H.2/#24, 11



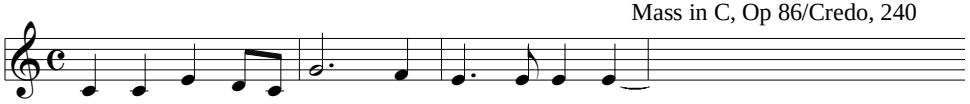
Litany, K.109/Kyrie



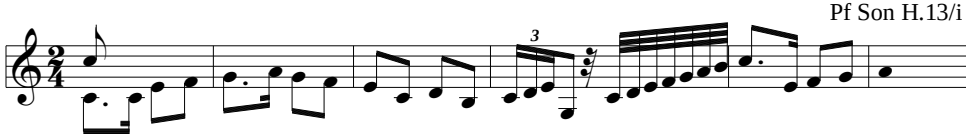
Am Meer, D.957/#12, 2



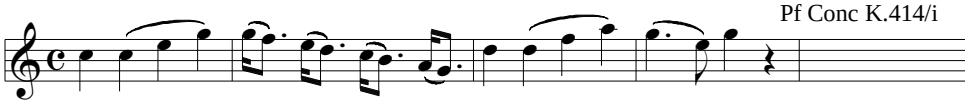
Mass in C, Op 86/Credo, 240



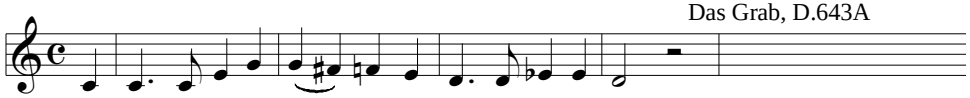
Pf Son H.13/i



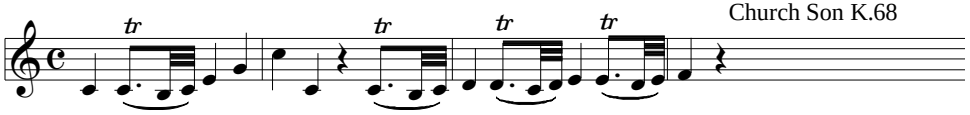
Pf Conc K.414/i



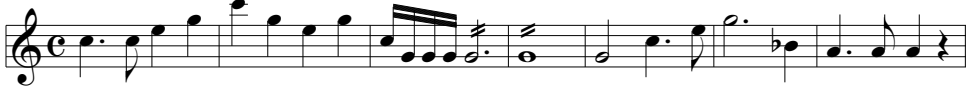
Das Grab, D.643A



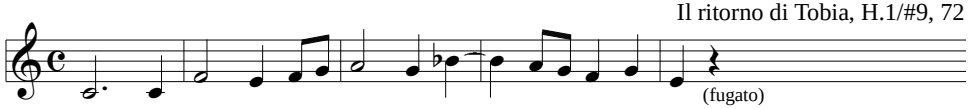
Church Son K.68



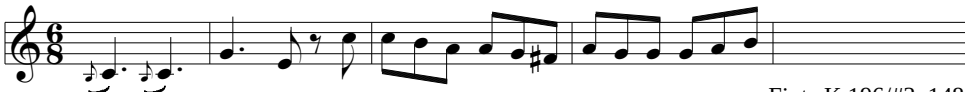
Lucio Silla K.135/#9



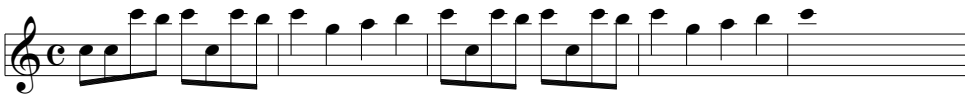
Il ritorno di Tobia, H.1/#9, 72



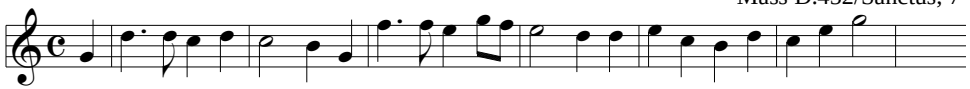
Schöpfungsmesse, H.13/Benedictus



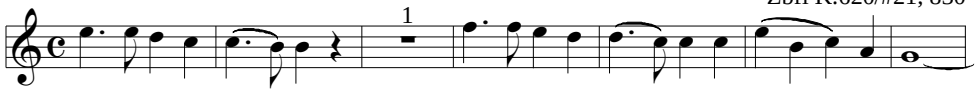
Finta K.196/#3, 148



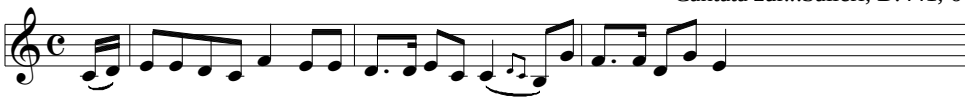
Mass D.452/Sanctus, 7



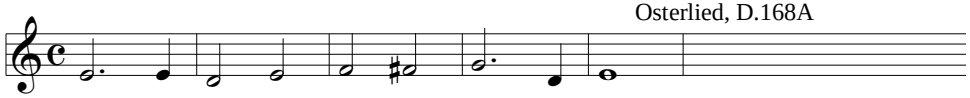
Zbfl K.620/#21, 830



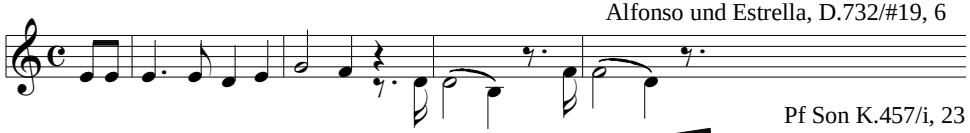
Cantata zur...Salieri, D.441, 6



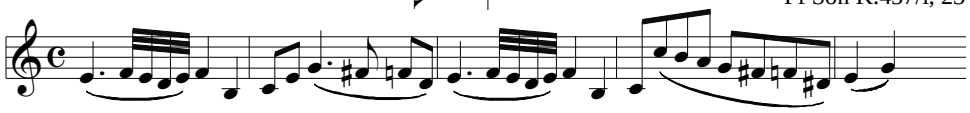
Osterlied, D.168A



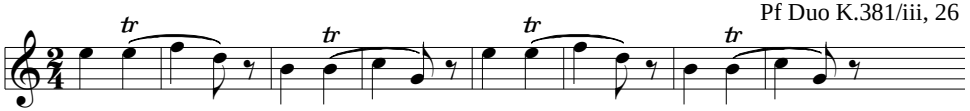
Alfonso und Estrella, D.732/#19, 6



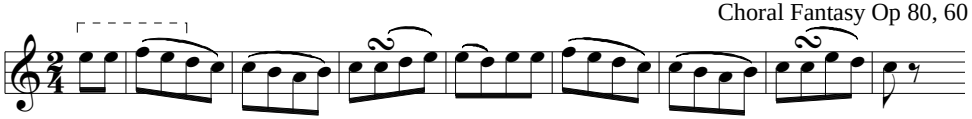
Pf Son K.457/i, 23



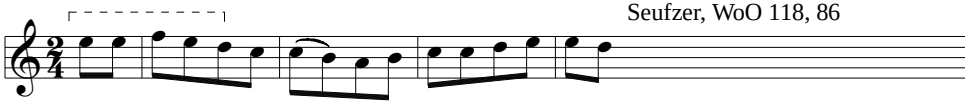
Pf Duo K.381/iii, 26



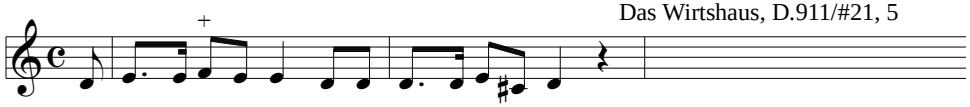
Choral Fantasy Op 80, 60



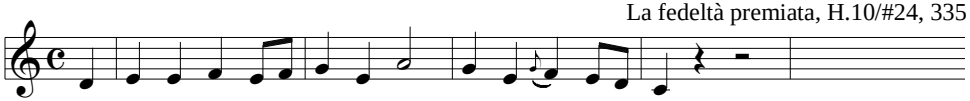
Seufzer, WoO 118, 86



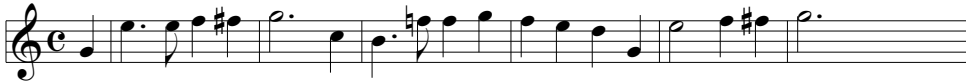
Das Wirtshaus, D.911/#21, 5



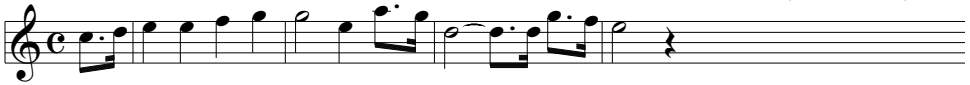
La fedeltà premiata, H.10/#24, 335



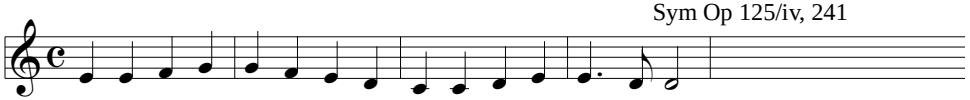
Alfonso und Estrella, D.732/#10, 243



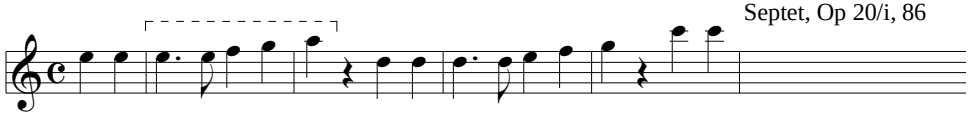
Alfonso und Estrella, D.732/#27, 38



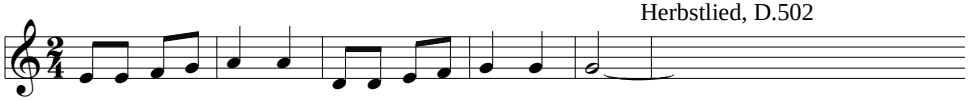
Sym Op 125/iv, 241



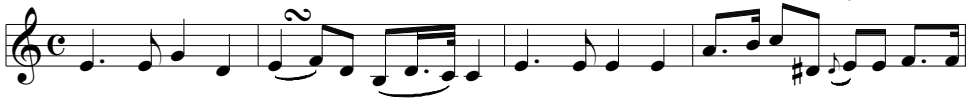
Septet, Op 20/i, 86



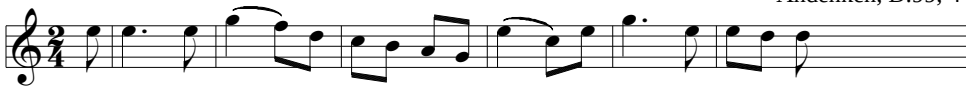
Herbstlied, D.502



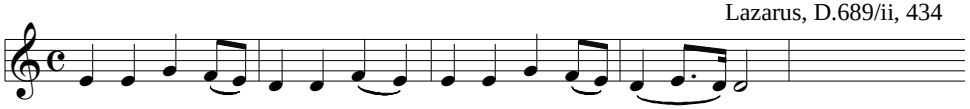
Litaney, D.343, 2



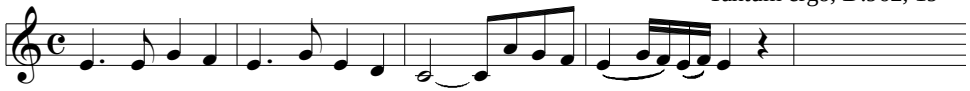
Andenken, D.99, 4



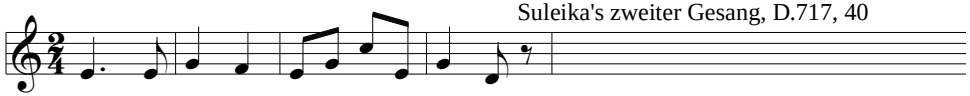
Lazarus, D.689/ii, 434



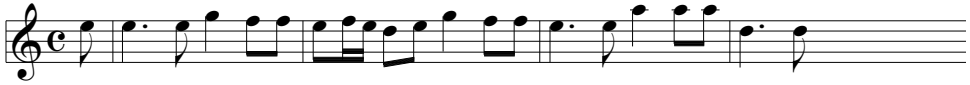
Tantum ergo, D.962, 19



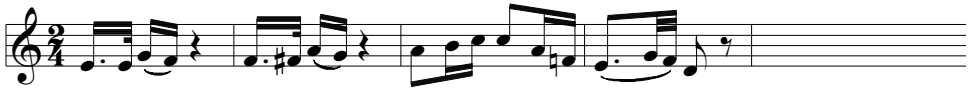
Suleika's zweiter Gesang, D.717, 40



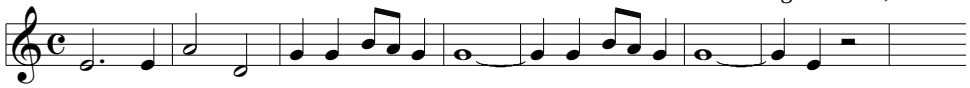
Über Wildemann, D.884, 51



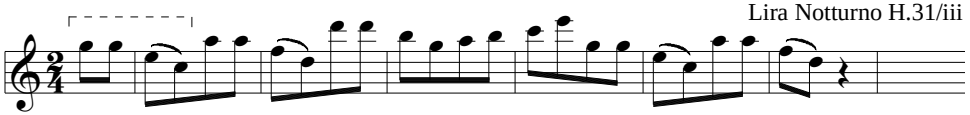
Wonne der Wehmut, Op 83/#1



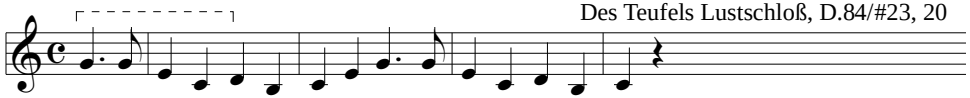
Die Entzückung an Laura, D.390



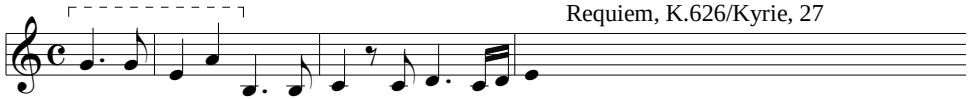
Lira Notturno H.31/iii



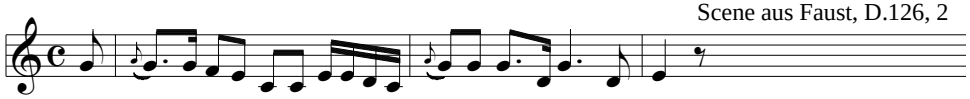
Des Teufels Lustschloß, D.84/#23, 20



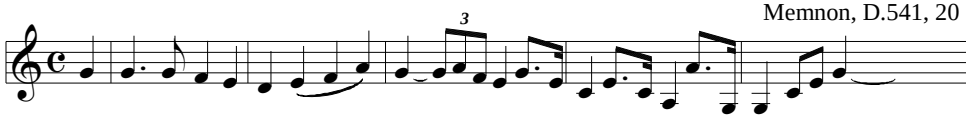
Requiem, K.626/Kyrie, 27



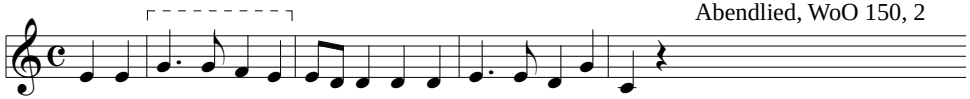
Scene aus Faust, D.126, 2



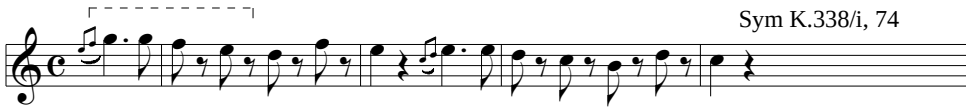
Memnon, D.541, 20



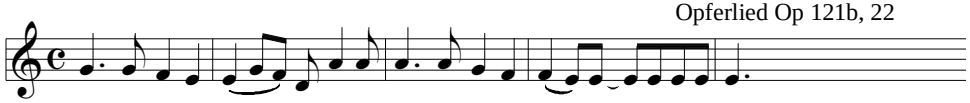
Abendlied, WoO 150, 2



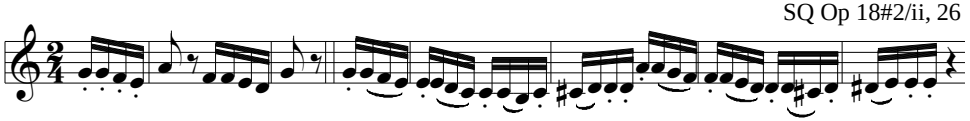
Sym K.338/i, 74



Opferlied Op 121b, 22



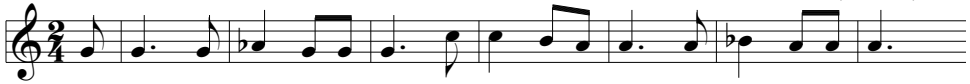
SQ Op 18#2/ii, 26



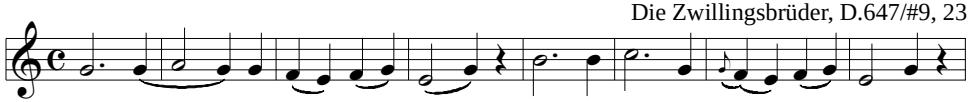
Pf Trio H.17/i, 26

WW 5t frag, Hess 19/i, 56

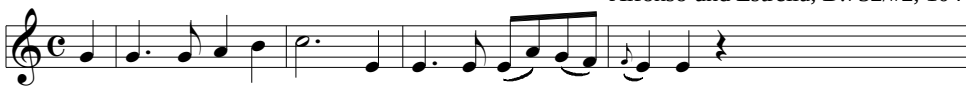
Rastlose Liebe, D.138, 6



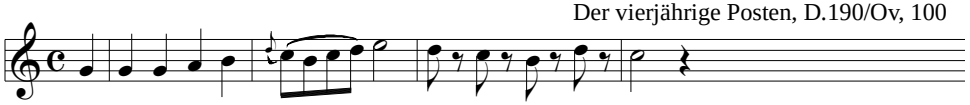
Die Zwillingsbrüder, D.647/#9, 23



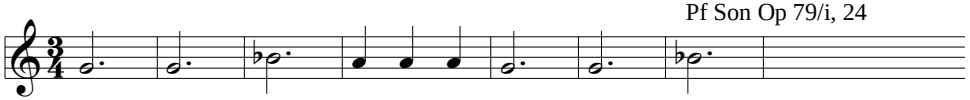
Alfonso und Estrella, D.732/#2, 104



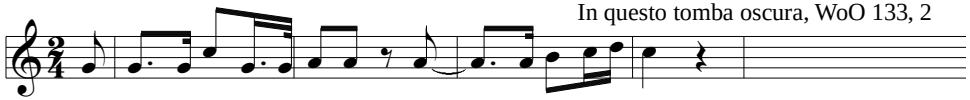
Der vierjährige Posten, D.190/Ov, 100



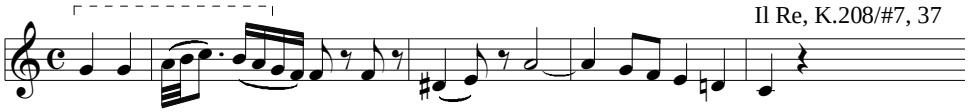
Pf Son Op 79/i, 24



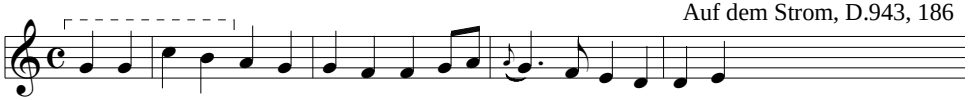
In questo tomba oscura, WoO 133, 2



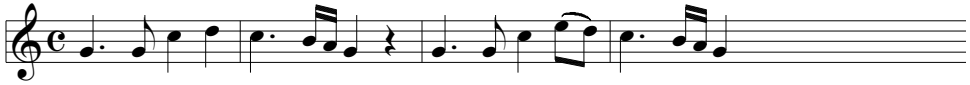
Il Re, K.208/#7, 37



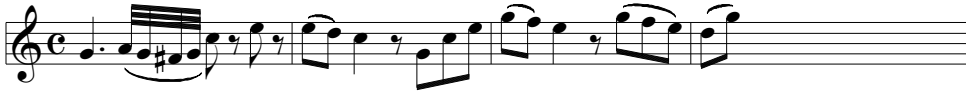
Auf dem Strom, D.943, 186



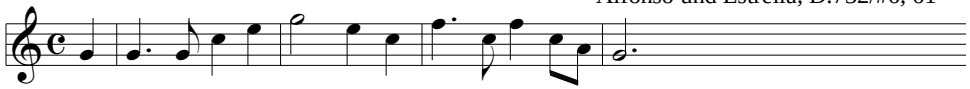
Die Zauberharfe, D.644/#13



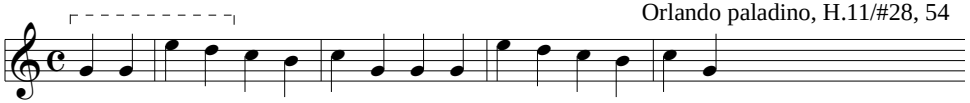
Pf Conc K.595/ii, 49



Alfonso und Estrella, D.732/#6, 61

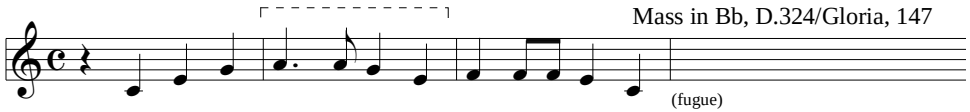


Orlando paladino, H.11/#28, 54

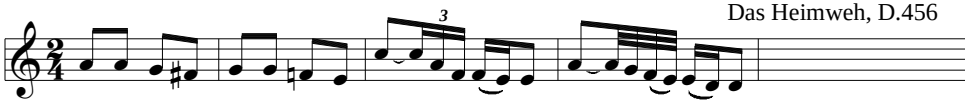


Pf Son Op 7/iv, 36

Mass in Bb, D.324/Gloria, 147

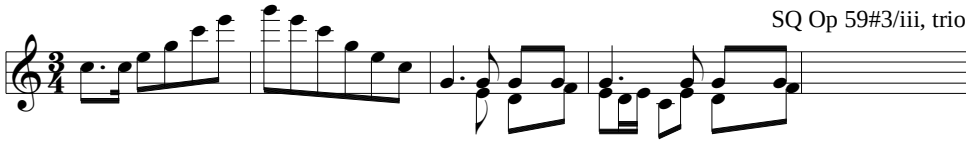


Das Heimweh, D.456

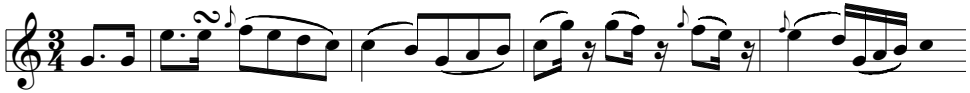


(Z3^K, {RR--}, triple-metered)

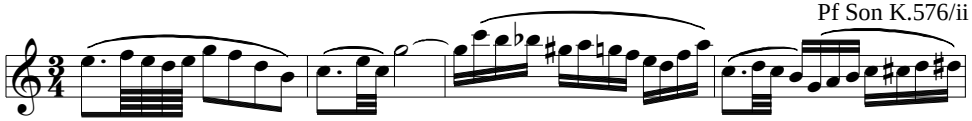
SQ Op 59#3/iii, trio



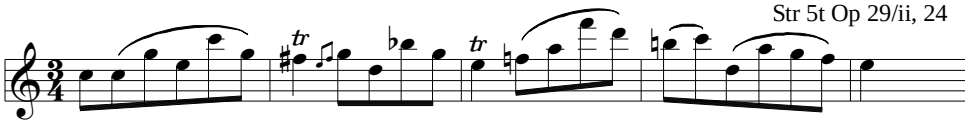
Pf 4t WoO 36#3/ii



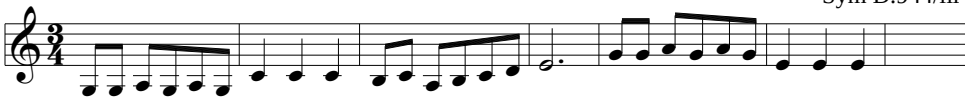
Pf Son K.576/ii



Str 5t Op 29/ii, 24



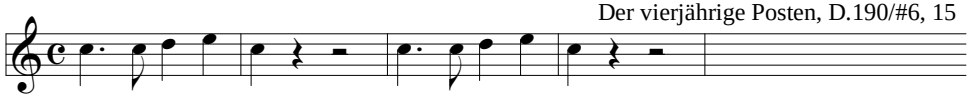
Sym D.944/iii



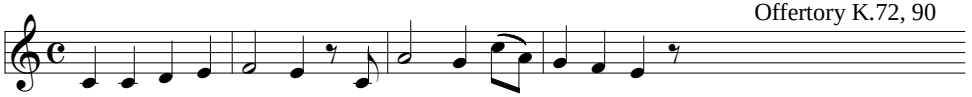
EX 22.2

Z3^K, {RR--}+line

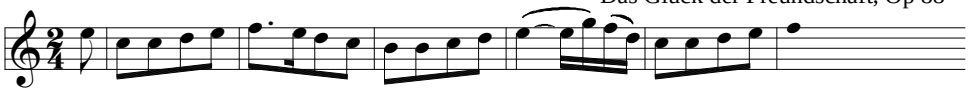
Der vierjährige Posten, D.190/#6, 15



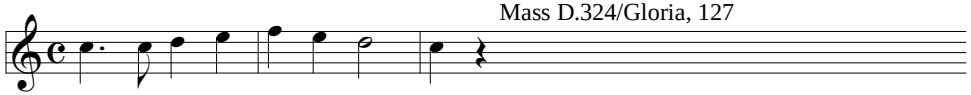
Offertory K.72, 90



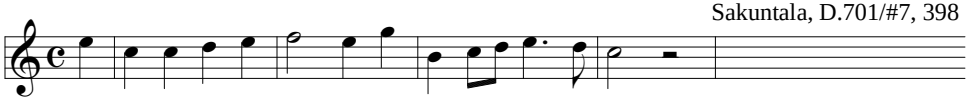
Das Glück der Freundschaft, Op 88



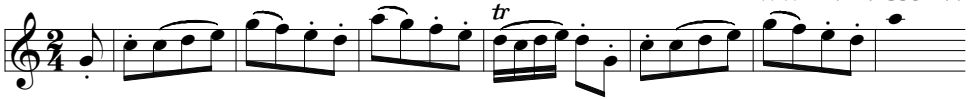
Mass D.324/Gloria, 127



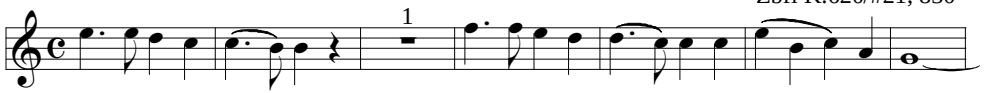
Sakuntala, D.701/#7, 398



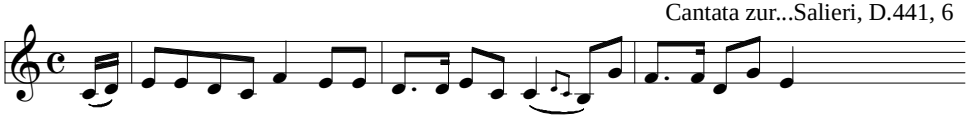
WW Div K.439b#1/v



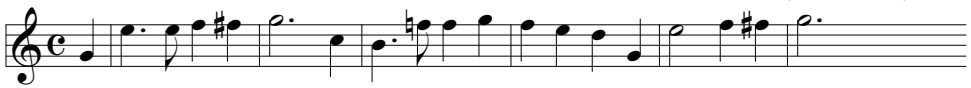
Zbfl K.620/#21, 830



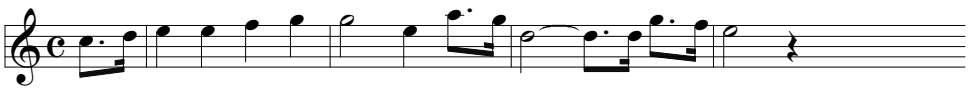
Cantata zur...Salieri, D.441, 6



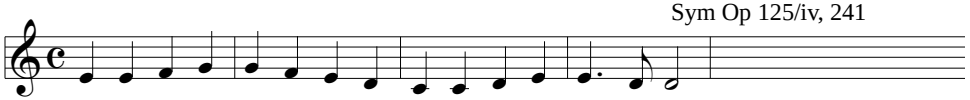
Alfonso und Estrella, D.732/#10, 243



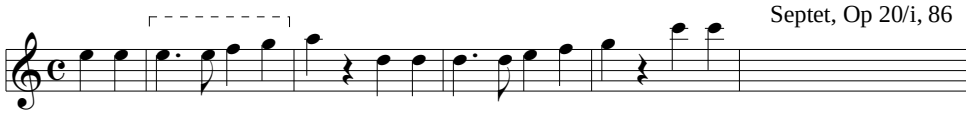
Alfonso und Estrella, D.732/#27, 38



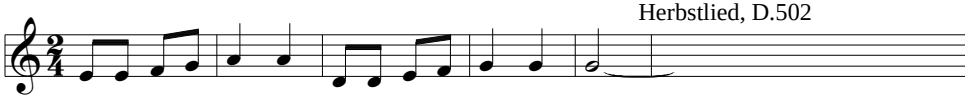
Sym Op 125/iv, 241



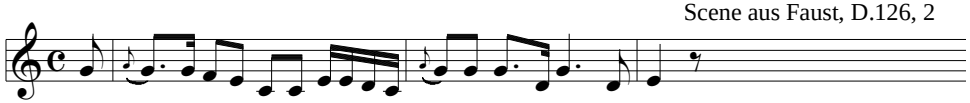
Septet, Op 20/i, 86



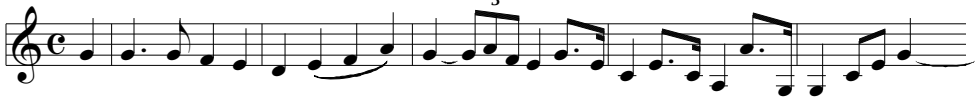
Herbstlied, D.502



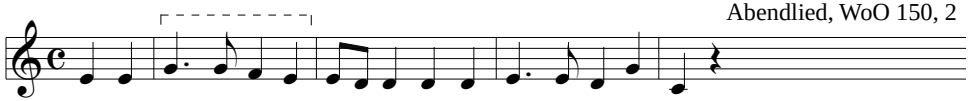
Scene aus Faust, D.126, 2



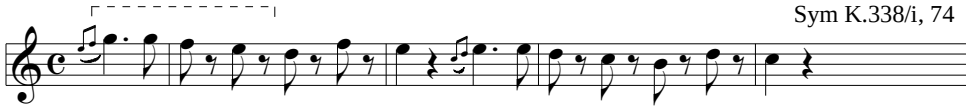
Memnon, D.541, 20



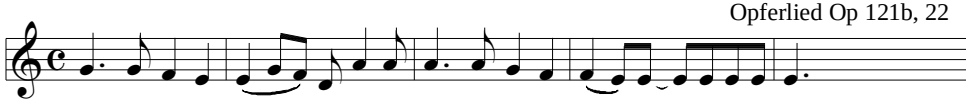
Abendlied, WoO 150, 2



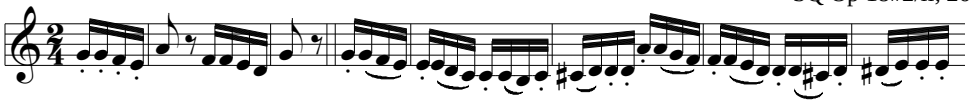
Sym K.338/i, 74



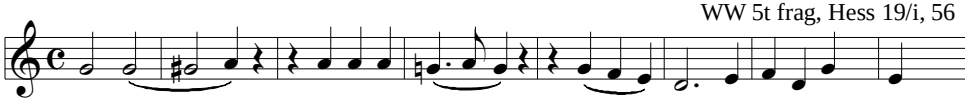
Opferlied Op 121b, 22



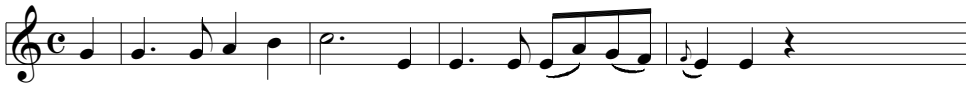
SQ Op 18#2/ii, 26



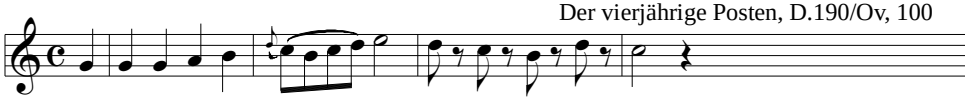
WW 5t frag, Hess 19/i, 56



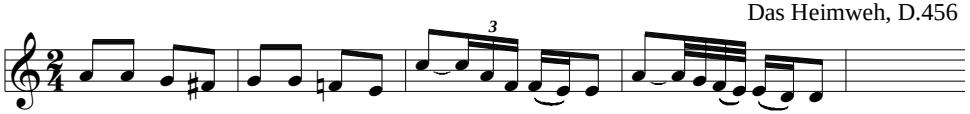
Alfonso und Estrella, D.732/#2, 104



Der vierjährige Posten, D.190/Ov, 100

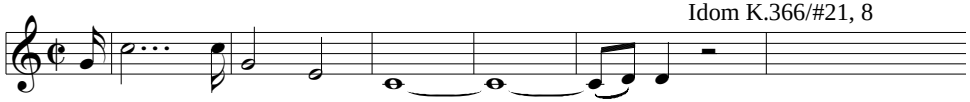


Das Heimweh, D.456

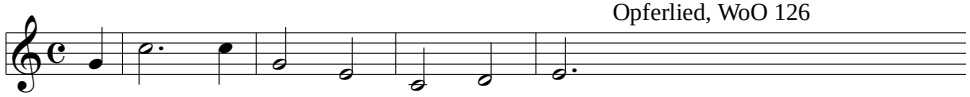


Z3^K, {RR--}+ARP

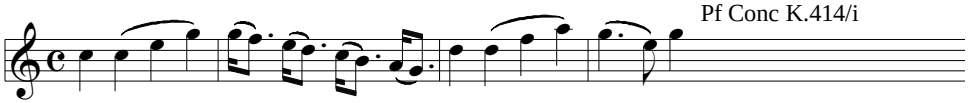
Idom K.366/#21, 8



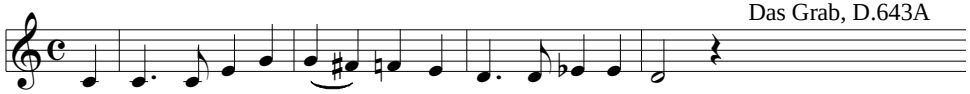
Opferlied, WoO 126



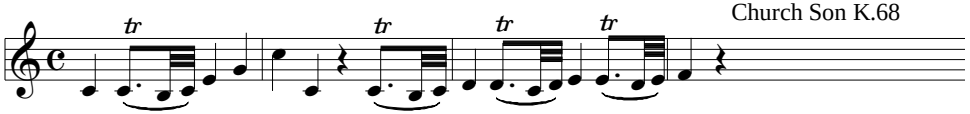
Pf Conc K.414/i



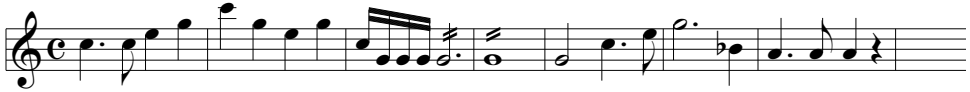
Das Grab, D.643A



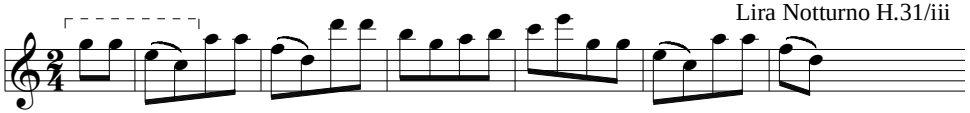
Church Son K.68



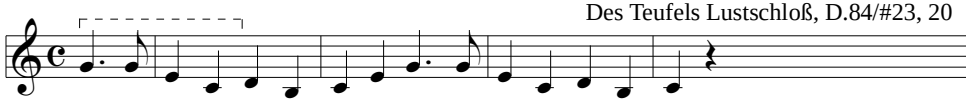
Lucio Silla K.135/#9



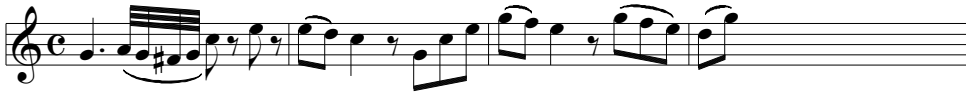
Lira Notturno H.31/iii



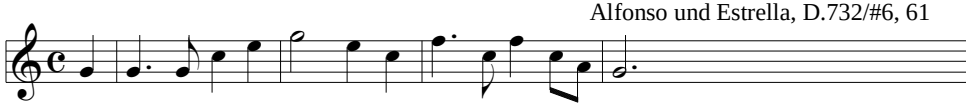
Des Teufels Lustschloß, D.84/#23, 20

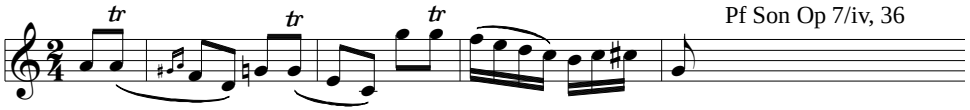


Pf Conc K.595/ii, 49



Alfonso und Estrella, D.732/#6, 61

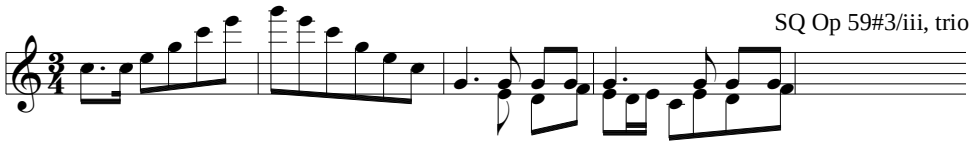




Pf Son Op 7/iv, 36

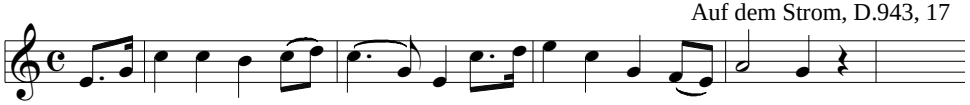
(Z3^K, {RR--}+ARP, triple-metered)

SQ Op 59#3/iii, trio

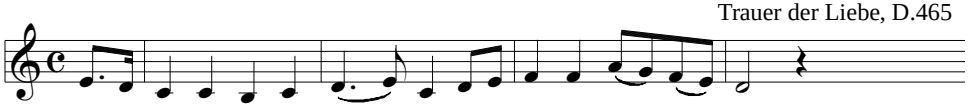


Z3^K, {RR--}+NT

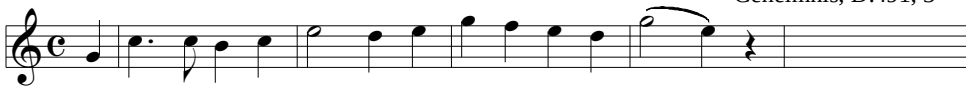
Auf dem Strom, D.943, 17



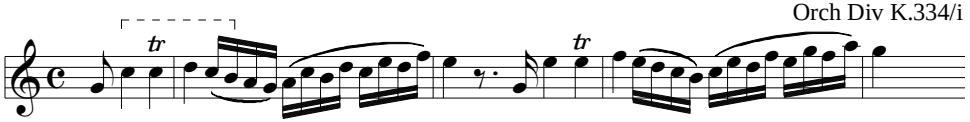
Trauer der Liebe, D.465



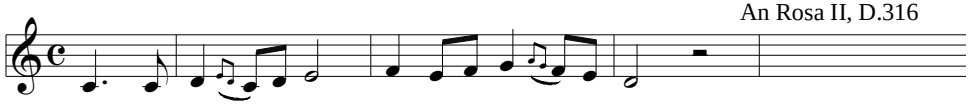
Geheimnis, D.491, 3



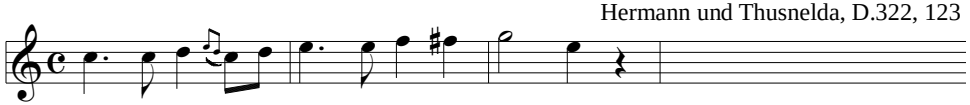
Orch Div K.334/i



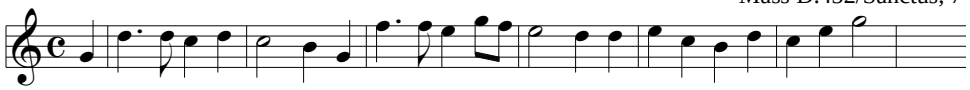
An Rosa II, D.316



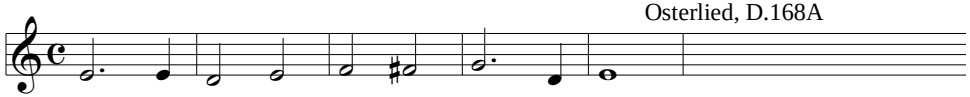
Hermann und Thusnelda, D.322, 123



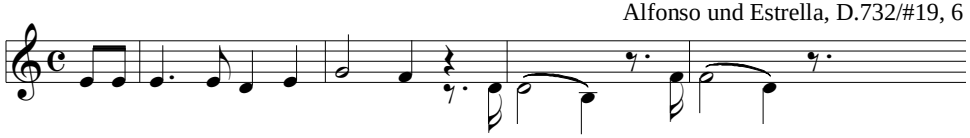
Mass D.452/Sanctus, 7



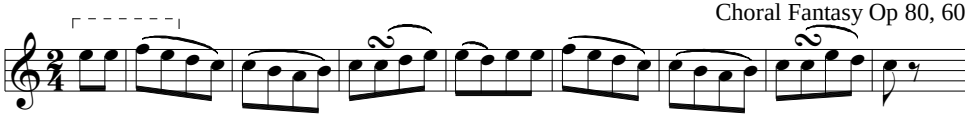
Osterlied, D.168A



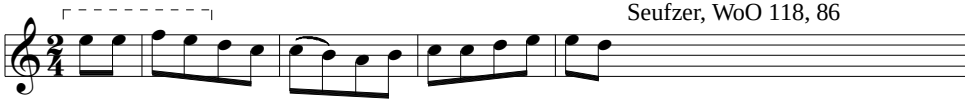
Alfonso und Estrella, D.732/#19, 6



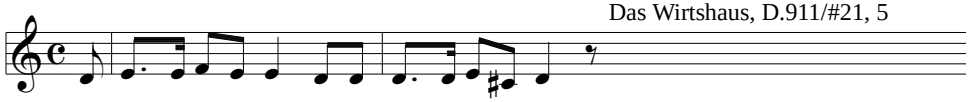
Choral Fantasy Op 80, 60



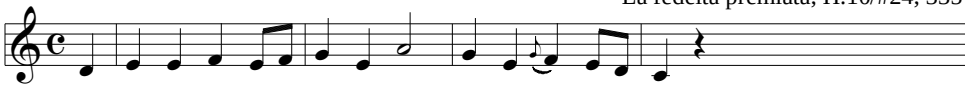
Seufzer, WoO 118, 86



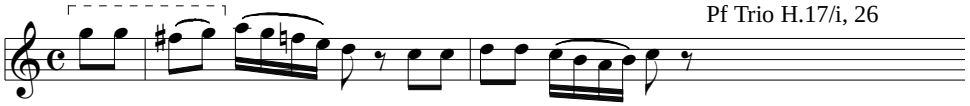
Das Wirtshaus, D.911/#21, 5



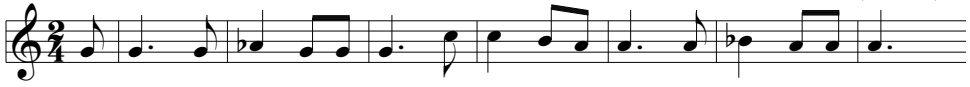
La fedeltà premiata, H.10/#24, 335



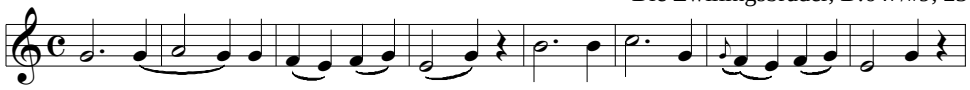
Pf Trio H.17/i, 26



Rastlose Liebe, D.138, 6

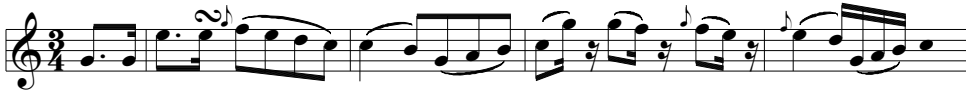


Die Zwillingsbrüder, D.647/#9, 23

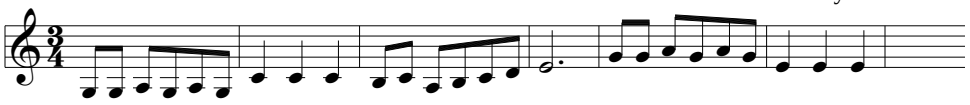


(Z3^K, {RR--}+NT, triple-metered)

Pf 4t WoO 36#3/ii

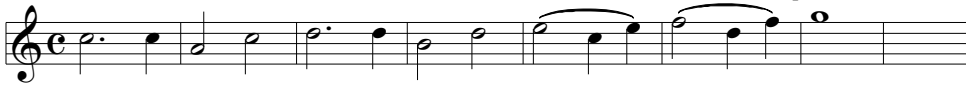


Sym D.944/iii

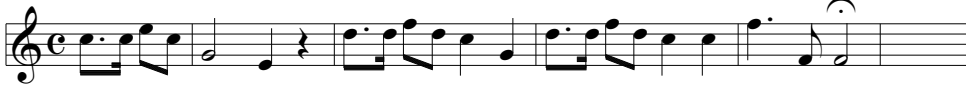


Z3^K, {RR--}+OSC

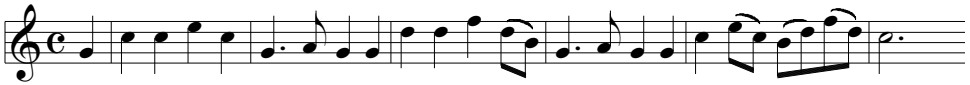
Mass in C, Op 86/Gloria, 214



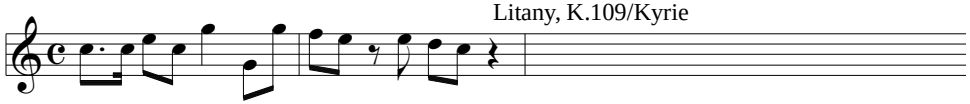
Missa in tempore belli, H.9/Kyrie



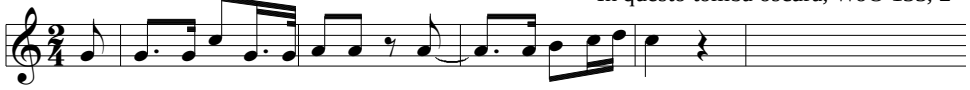
The Creation, H.2/#24, 11



Litany, K.109/Kyrie



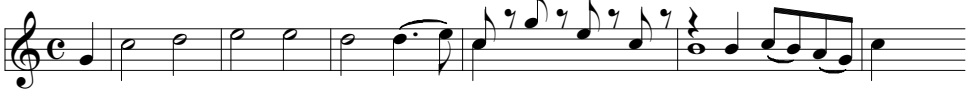
In questo tomba oscura, WoO 133, 2



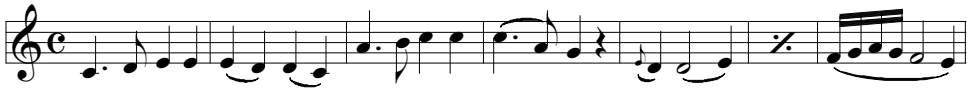
EX 23:
Z3^K, {--RR}

Z3^K, 3L+{--RR}

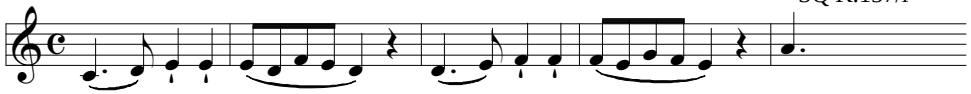
Zbfl K.620/#1, 46



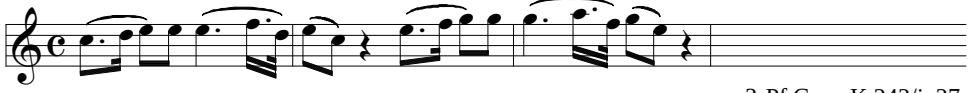
Zaïde, K.344/#8, 45



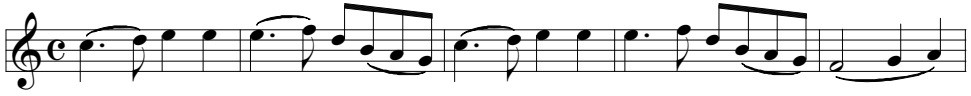
SQ K.157/i



Pf Conc K.413/ii

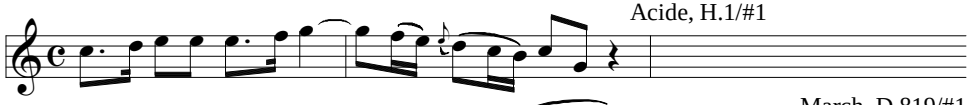


3-Pf Conc K.242/i, 27

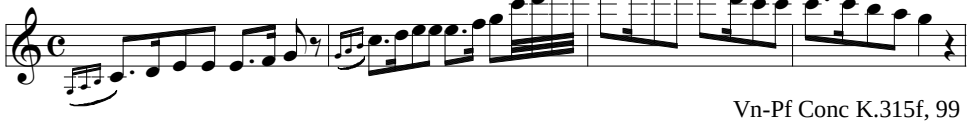


Il Re, K.208/#2 (sc ii)

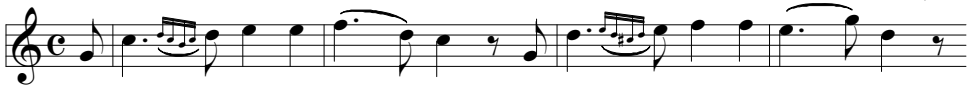
Acide, H.1/#1



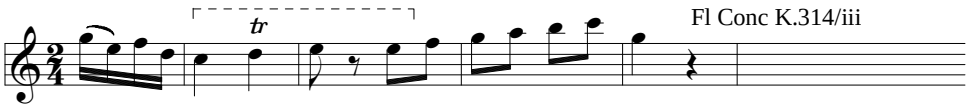
March, D.819/#1



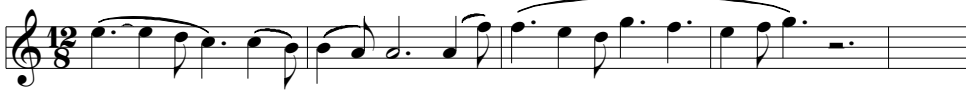
Vn-Pf Conc K.315f, 99



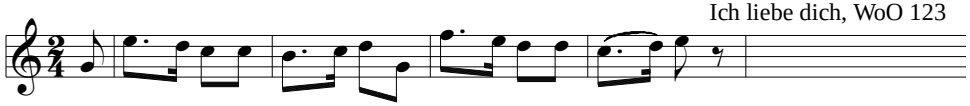
Fl Conc K.314/iii



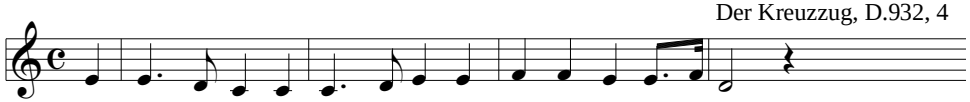
Missa solemnis, Op 123/Sanctus, 119



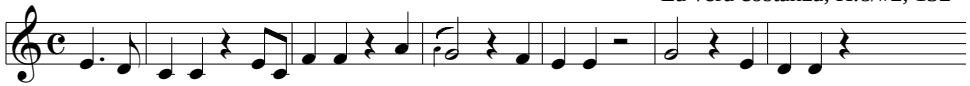
Ich liebe dich, WoO 123



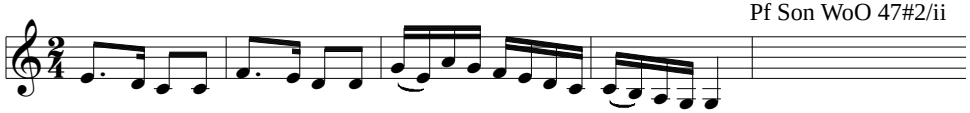
Der Kreuzzug, D.932, 4



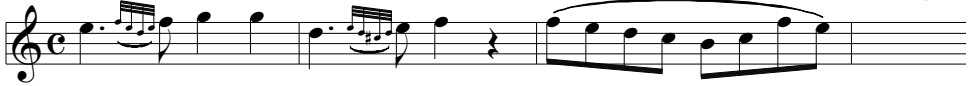
La vera costanza, H.8/#2, 132



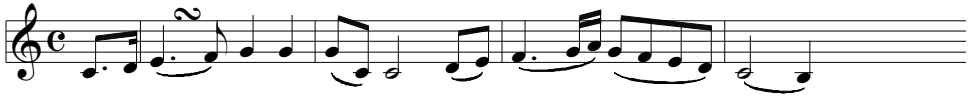
Pf Son WoO 47#2/ii



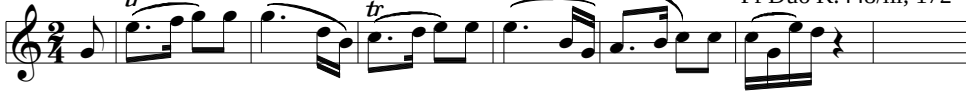
Vn Son K.376/i, 48



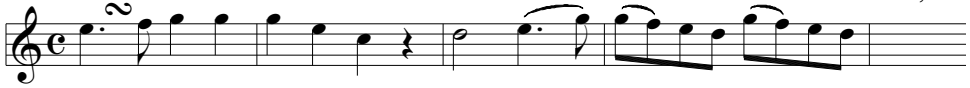
Cl-Bn Duo WoO 27#2/i (dubious)



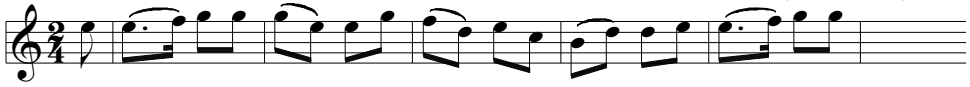
Pf Duo K.448/iii, 172



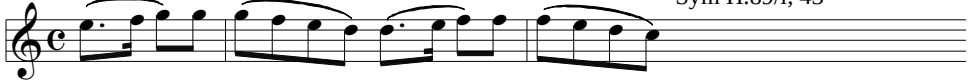
Sinf Conc K.364/i, 38



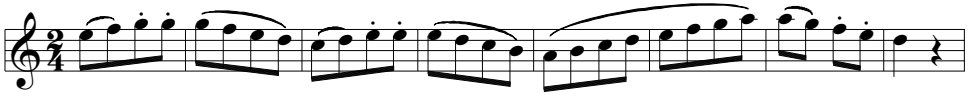
Armida, H.12/#12b, 183



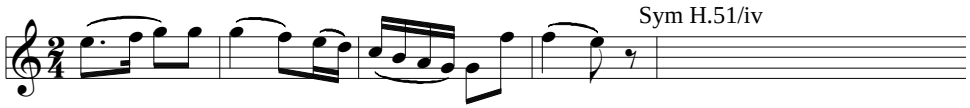
Sym H.89/i, 43



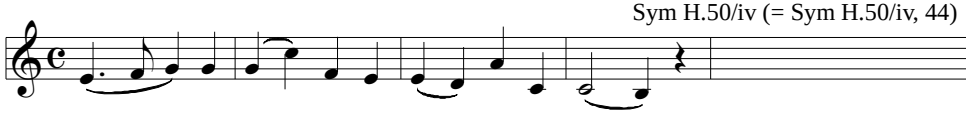
King Stephan Op 117, 117



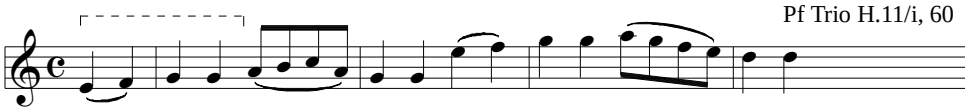
Sym H.51/iv



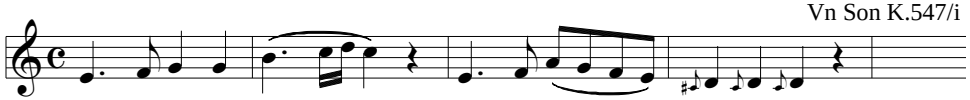
Sym H.50/iv (= Sym H.50/iv, 44)



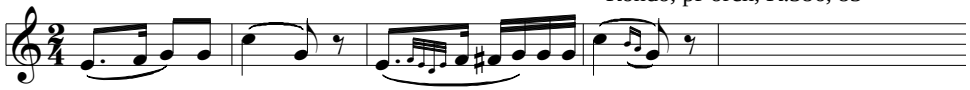
Pf Trio H.11/i, 60



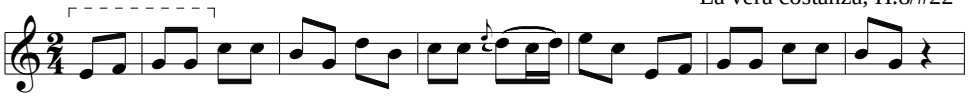
Vn Son K.547/i



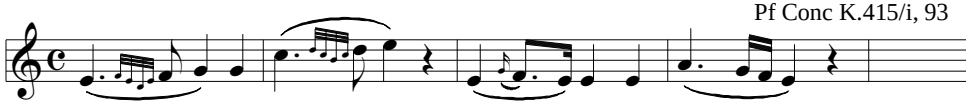
Rondo, pf-orch, K.386, 83



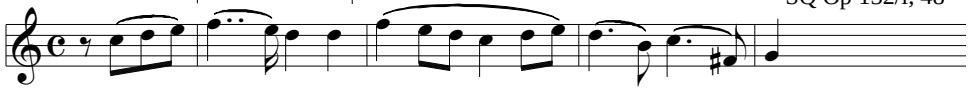
La vera costanza, H.8/#22



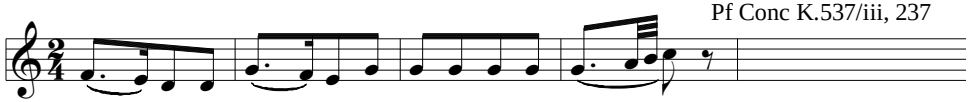
Pf Conc K.415/i, 93



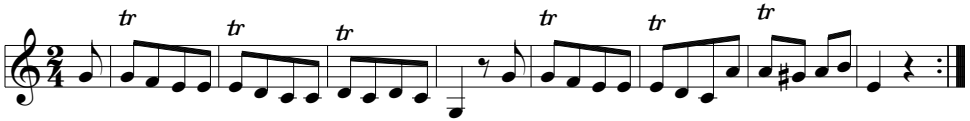
SQ Op 132/i, 48



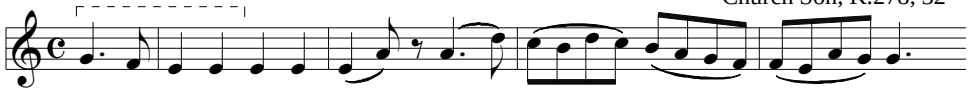
Pf Conc K.537/iii, 237



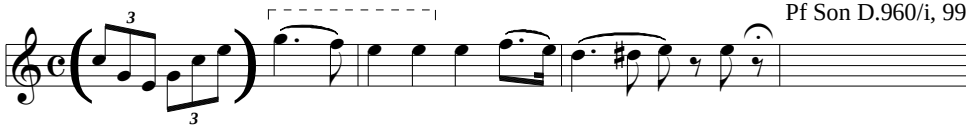
Pf Son H.31/iii



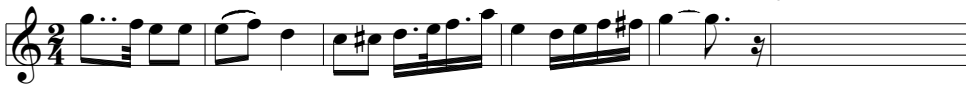
Church Son, K.278, 32



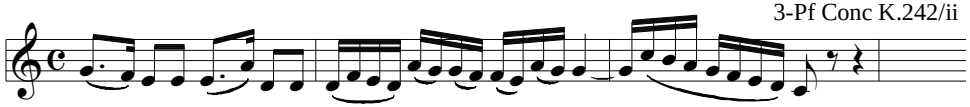
Pf Son D.960/i, 99



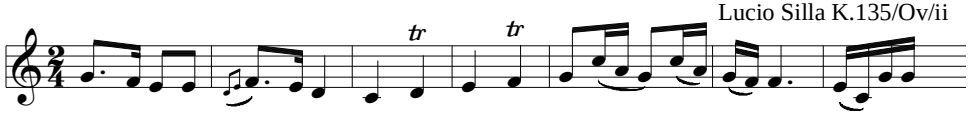
SQ H.73/ii



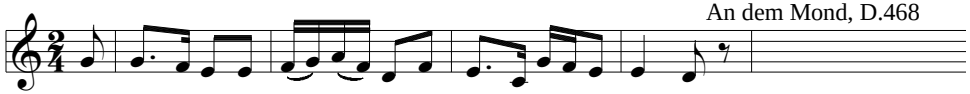
3-Pf Conc K.242/ii



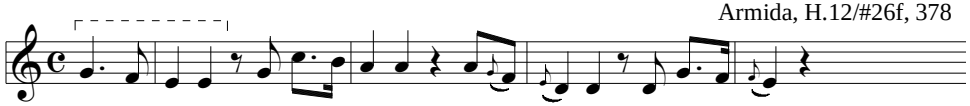
Lucio Silla K.135/Ov/ii



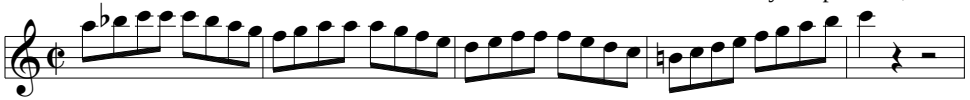
An dem Mond, D.468



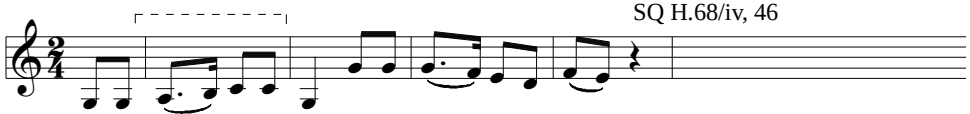
Armida, H.12/#26f, 378



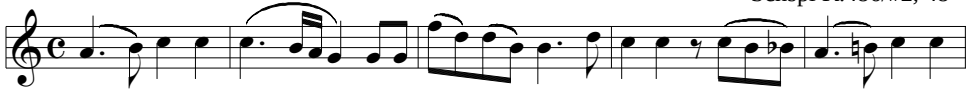
Sym Op 125/iv, 763



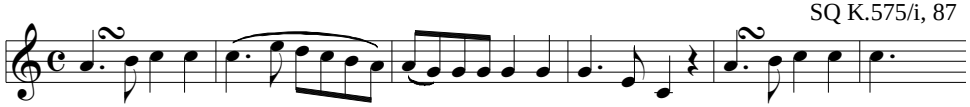
SQ H.68/iv, 46



Schspl K.486/#2, 48

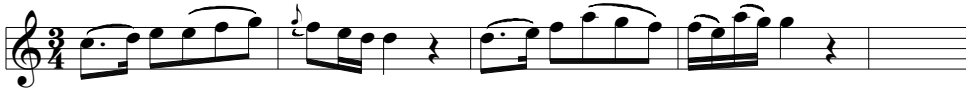


SQ K.575/i, 87

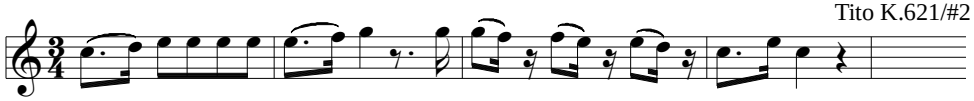


(Z3^K, 3ARP+NT, triple-metered)

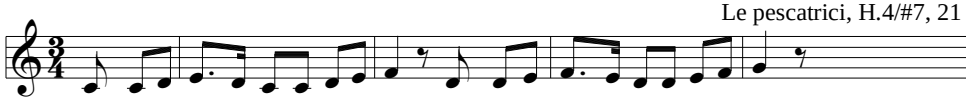
Orch Ser K.203/ii



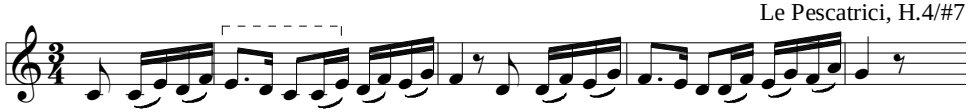
Tito K.621/#2



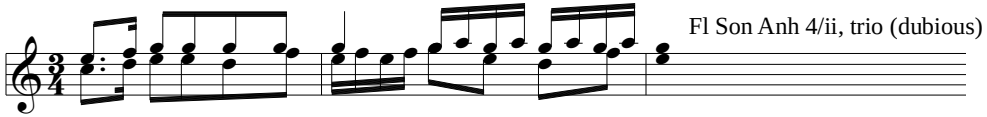
Le pescatrici, H.4/#7, 21



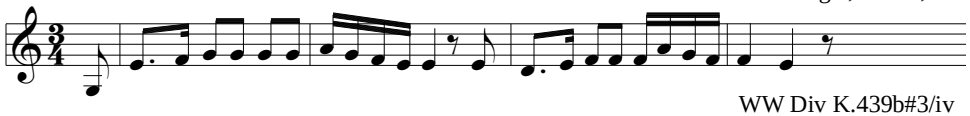
Le Pescatrici, H.4/#7



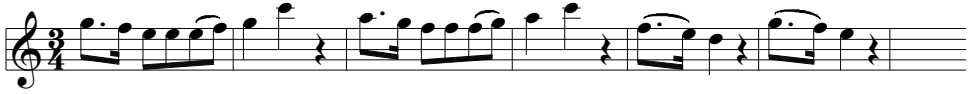
Fl Son Anh 4/ii, trio (dubious)



Die drei Sänger, D.329, 28

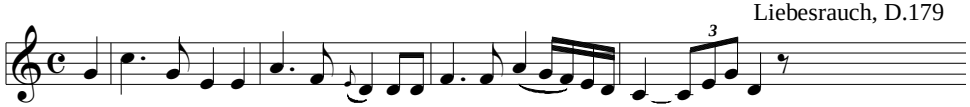


WW Div K.439b#3/iv

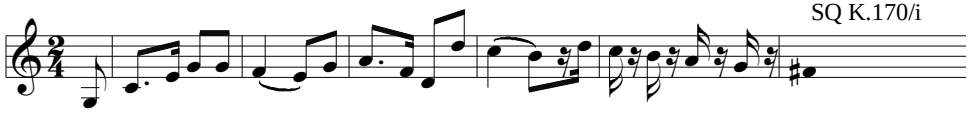


Z3^K, ARP+{--RR}

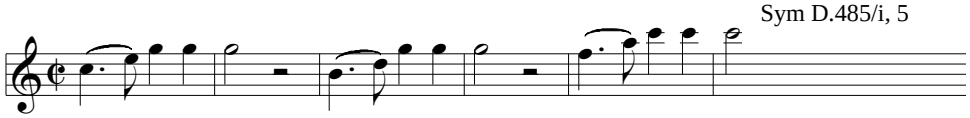
Liebesrauch, D.179



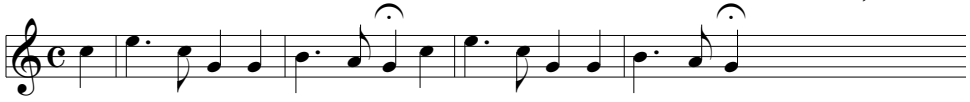
SQ K.170/i



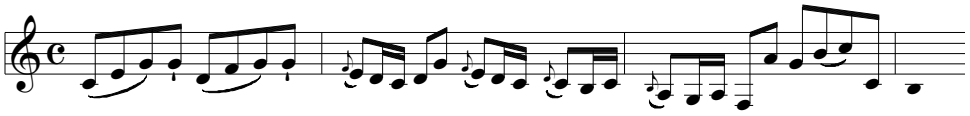
Sym D.485/i, 5



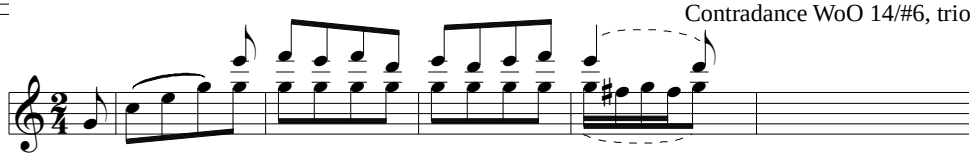
Deutsches Trauermesse, D.621/#9



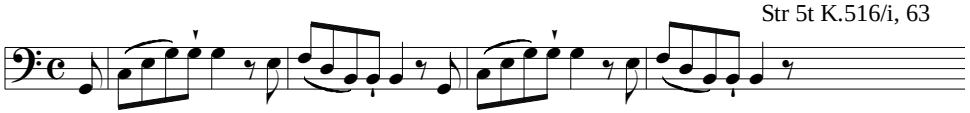
Orch Div K.205/i, 9



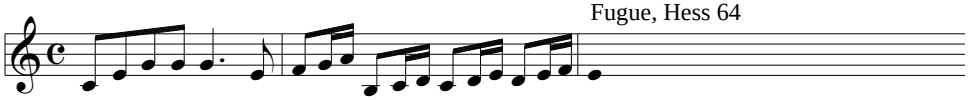
Contradance WoO 14/#6, trio



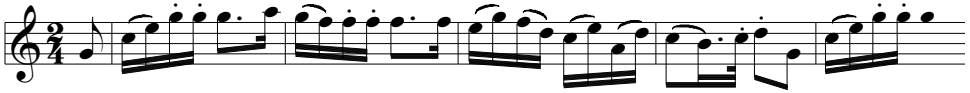
Str 5t K.516/i, 63



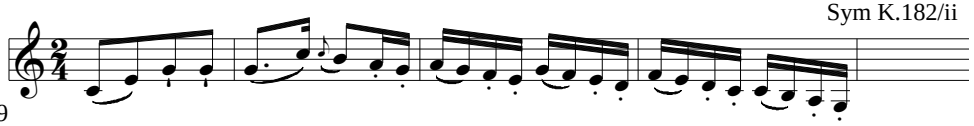
Fugue, Hess 64



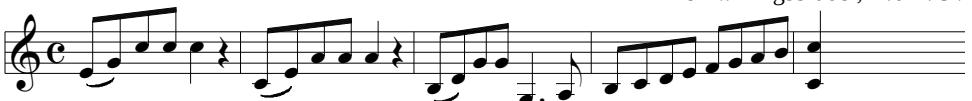
WW Div K.253/i, var 4



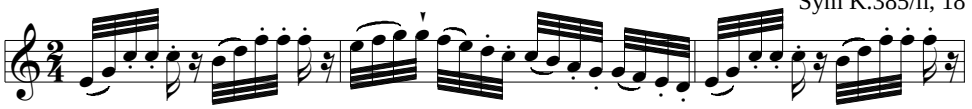
Sym K.182/ii



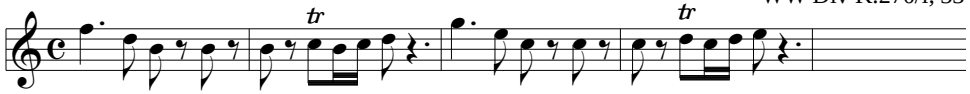
Die Zwillingsbrüder, D.647/Ov



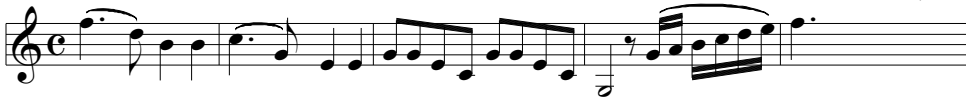
Sym K.385/ii, 18



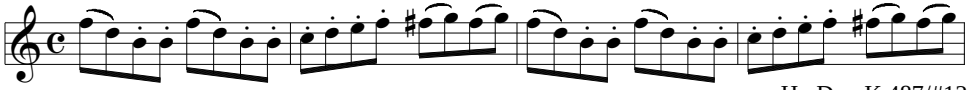
WW Div K.270/i, 33



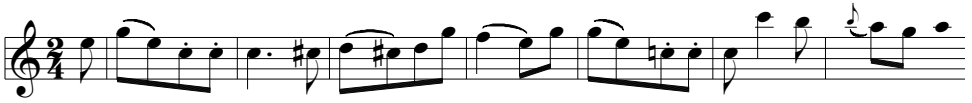
Pf Conc K.482/i, 36



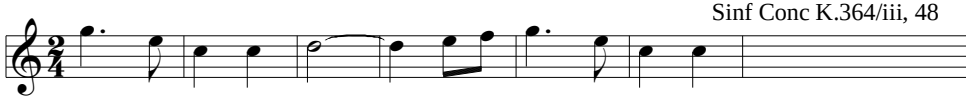
Pf Son K.333/i, 39



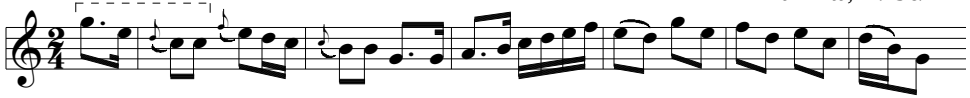
Hn Duo K.487/#12



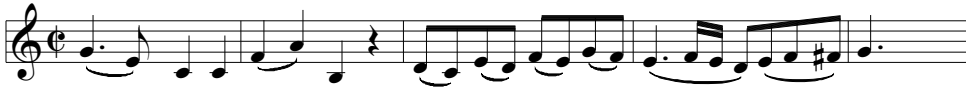
Sinf Conc K.364/iii, 48



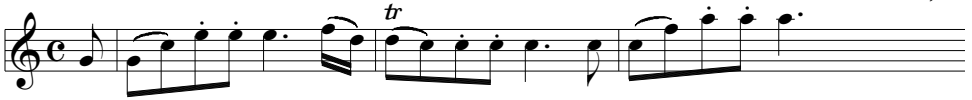
La Finta, K.196/#14



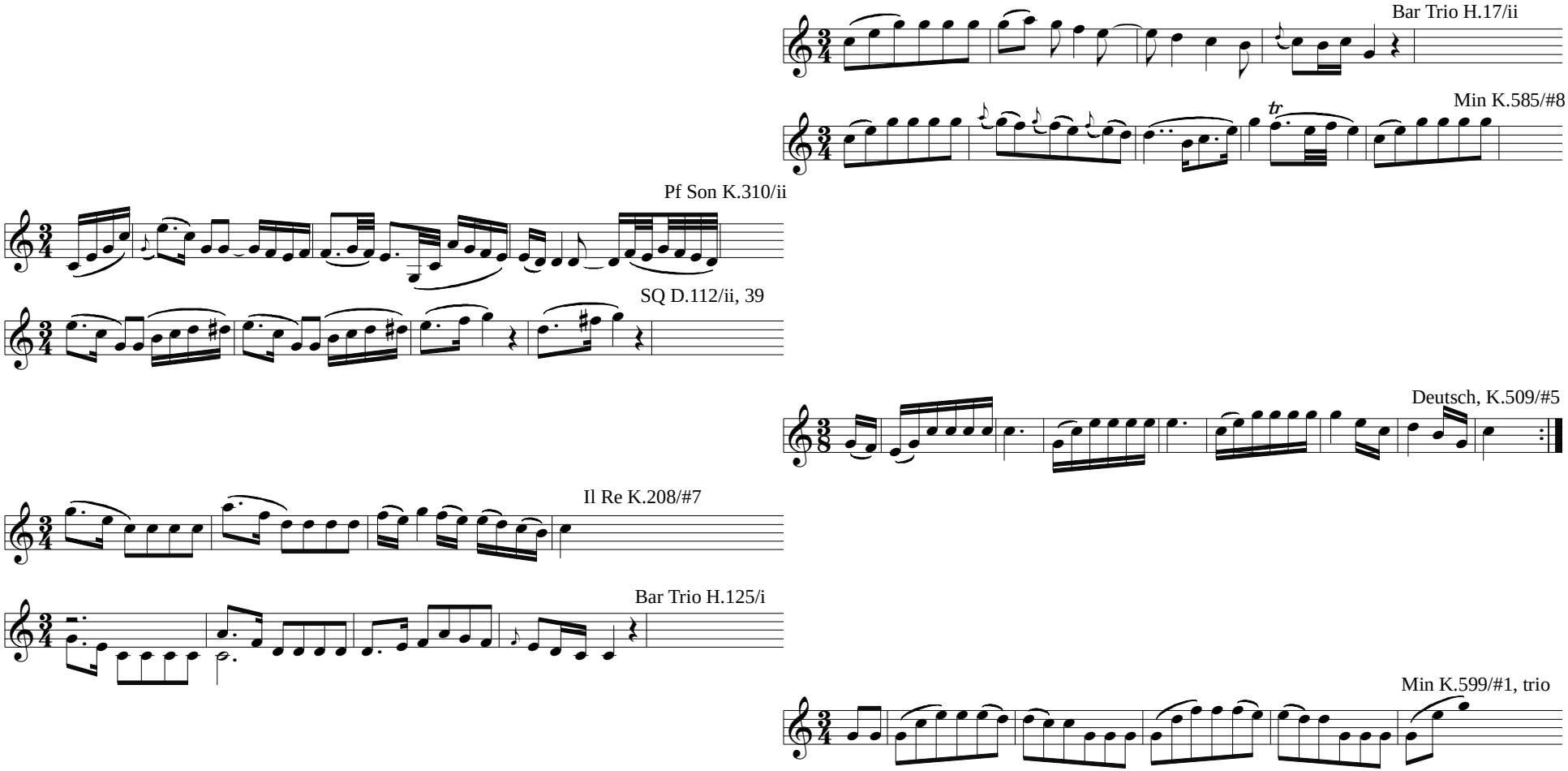
Pf Son K.333/iii



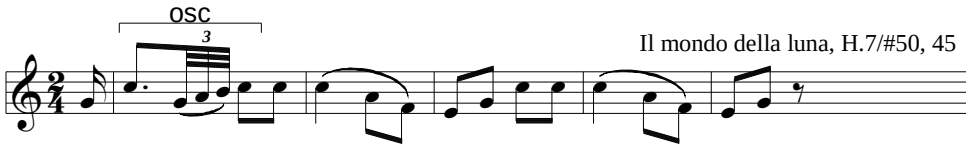
Fl 4t K.285/i, 12



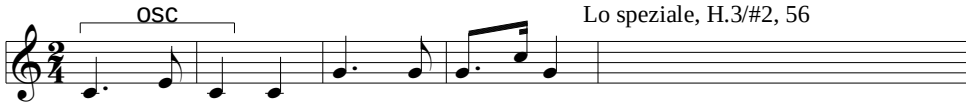
(Z3^K, ARP+{--RR}, triple-metered)



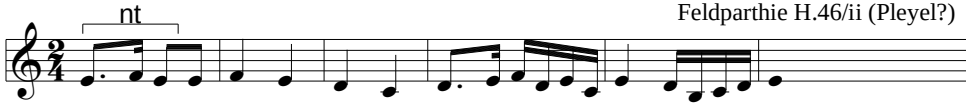
Z3^K, {--RR} - the rest



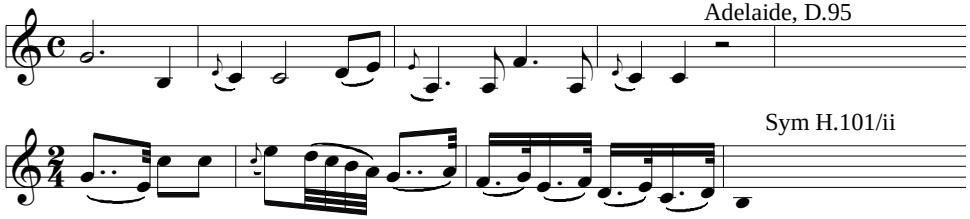
Il mondo della luna, H.7/#50, 45



Lo speziale, H.3/#2, 56

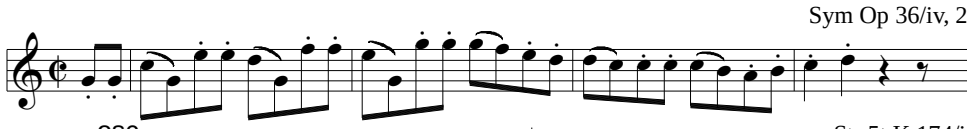


Feldparthie H.46/ii (Pleyel?)

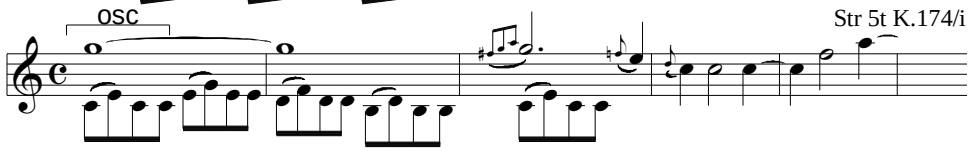


Adelaide, D.95

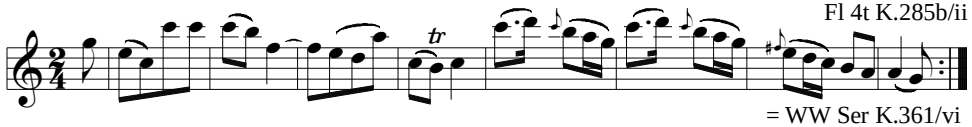
Sym H.101/ii



Sym Op 36/iv, 2

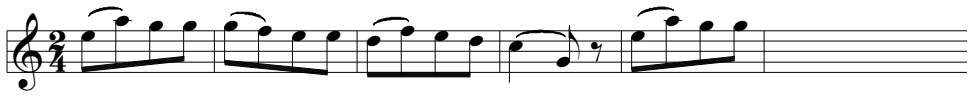


Str 5t K.174/i

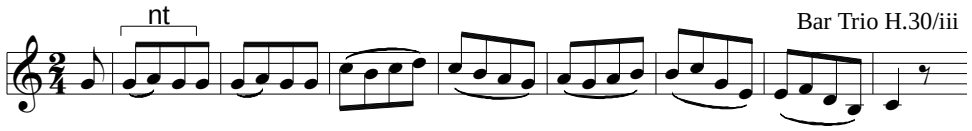


Fl 4t K.285b/ii

= WW Ser K.361/vi

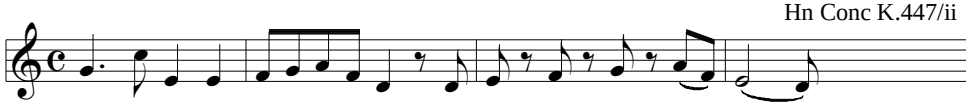


Lachen und Weinen, D.777, 9

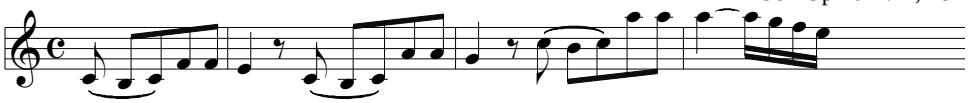


Bar Trio H.30/iii

Hn Conc K.447/ii

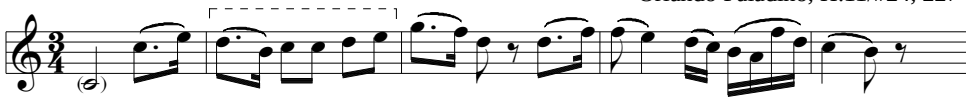


Pf Son Op 10#1/iii, 28

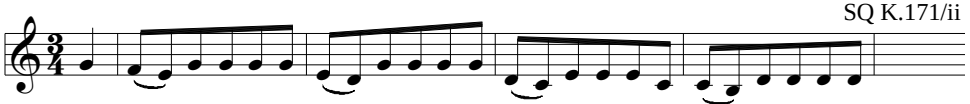


(triple-metered instances)

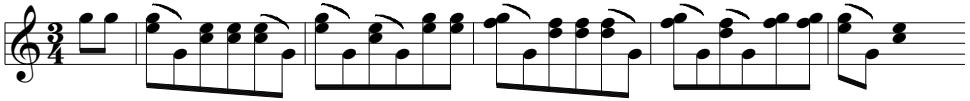
Orlando Paladino, H.11/#24, 227



SQ K.171/ii

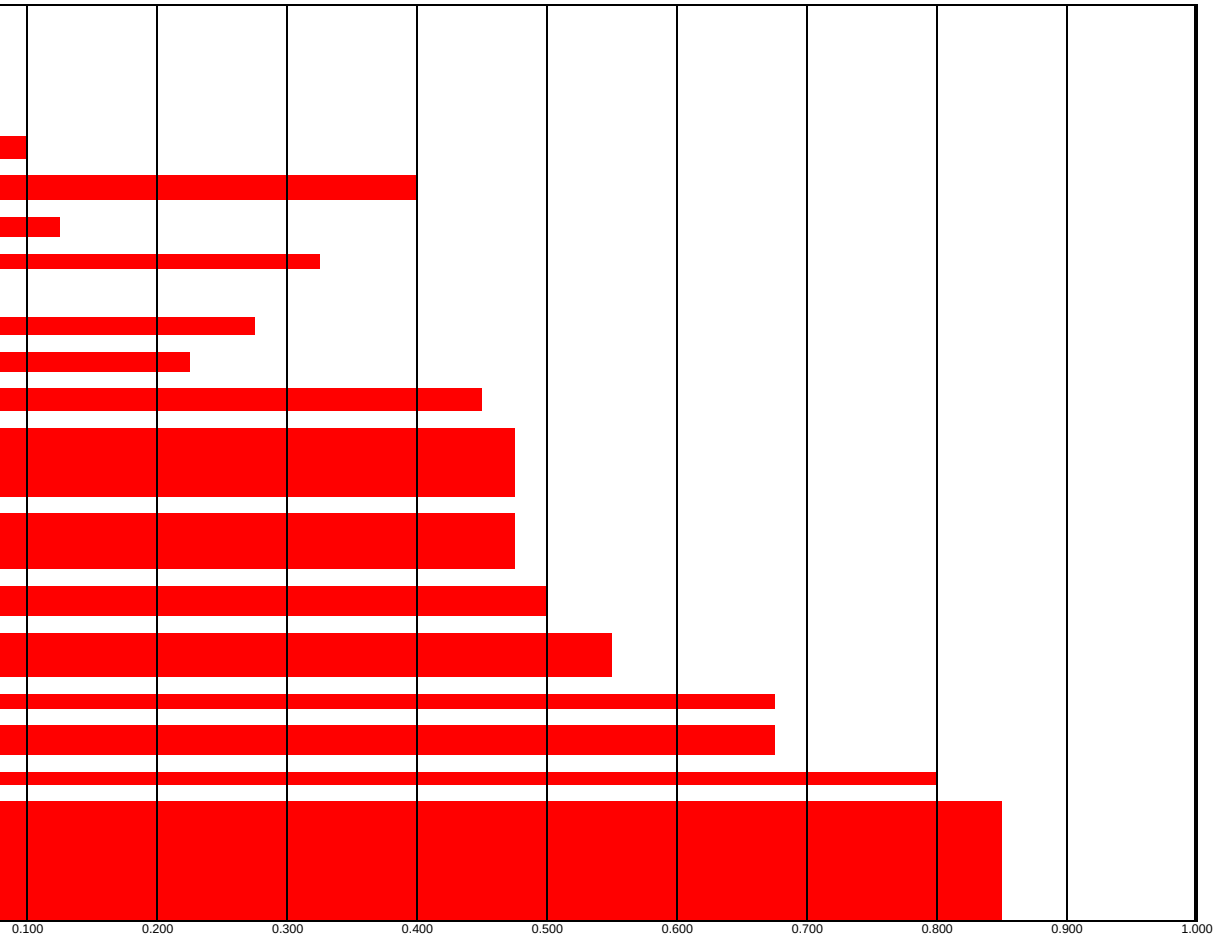


Deutsch, D.841/#2

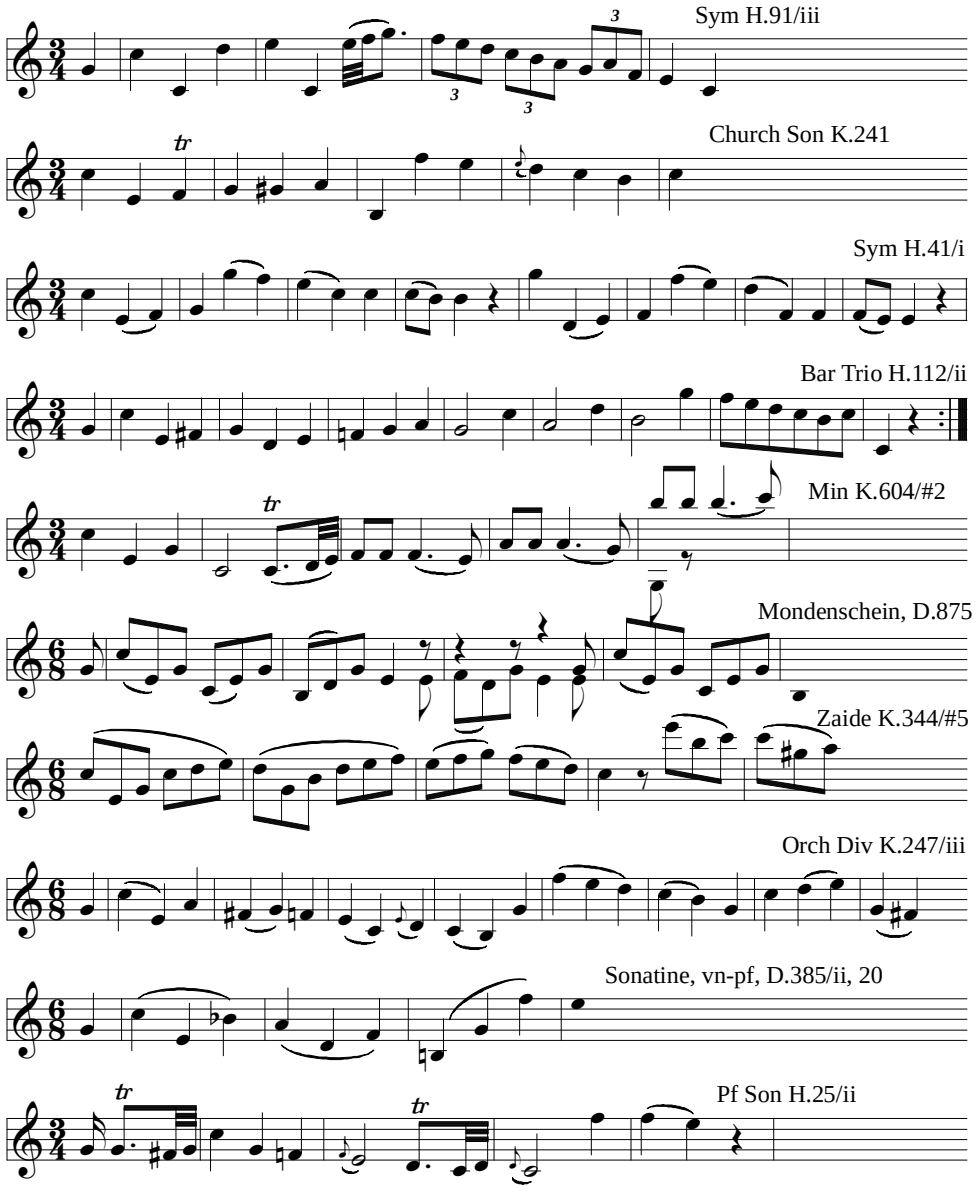


Z3^K

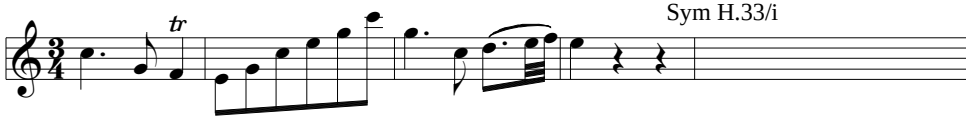
contour	population	dotted ratio	%	C-value (° from ambiguity)
4L+RP	39	0/39=	0.000	12
-RRR+NT	6	0/6=	0.000	11
3ARP+L	9	1/9=	0.111	10
3P+L	10	4/10=	0.400	10
-RR+L	8	1/8=	0.125	8
OSC+L	6	2/6=	0.333	8
4ARP+L	6	0/6=	0.000	7
4P+NT	7	2/7=	0.286	7
NT+ARP	9	2/9=	0.222	5
3P+OSC	9	4/9=	0.444	4
3ARP+2P	28	13/28=	0.464	4
2P+L	23	11/23=	0.478	4
3L+ARP	12	6/12=	0.500	4
2P+NT	18	10/18=	0.556	4
-RR+ARP	6	4/6=	0.667	4
2P+ARP	12	8/12=	0.667	4
2P+OSC	5	4/5=	0.800	4
3L+2P	50	43/50=	0.860	2



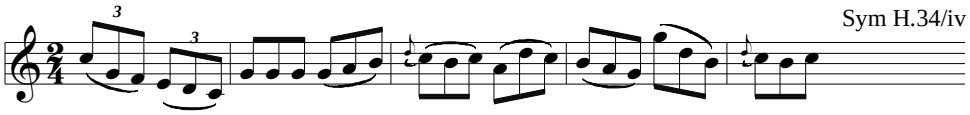
EX 26:
Δ2^B1, miscellaneous contours



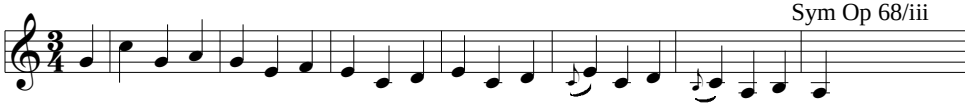
Sym H.33/i



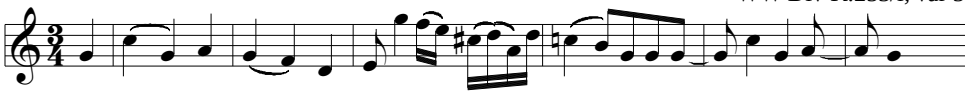
Sym H.34/iv



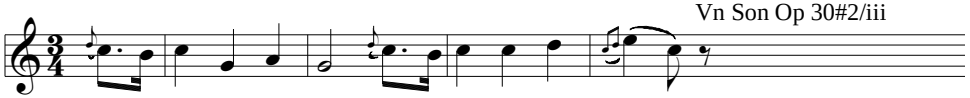
Sym Op 68/iii



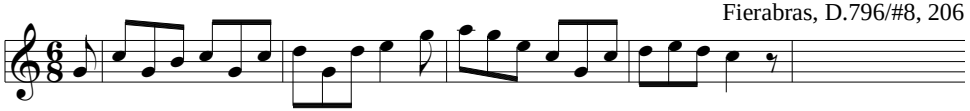
WW Div K.253/i, var 5



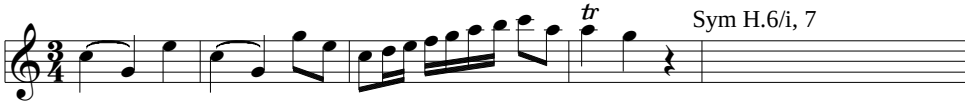
Vn Son Op 30#2/iii



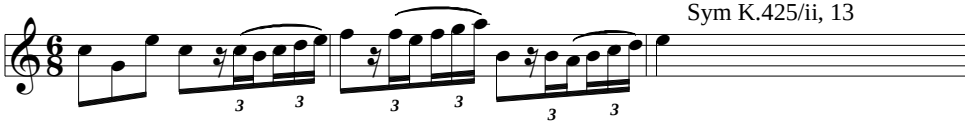
Fierabras, D.796/#8, 206



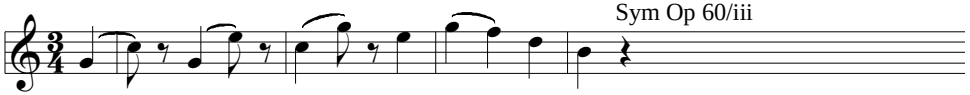
Sym H.6/i, 7



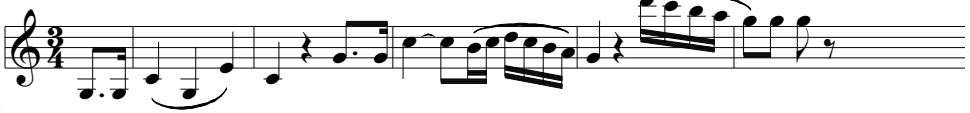
Sym K.425/ii, 13



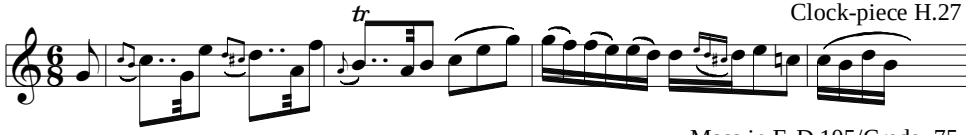
Sym Op 60/iii



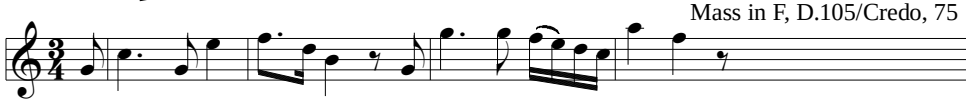
Pf Trio H.13/ii

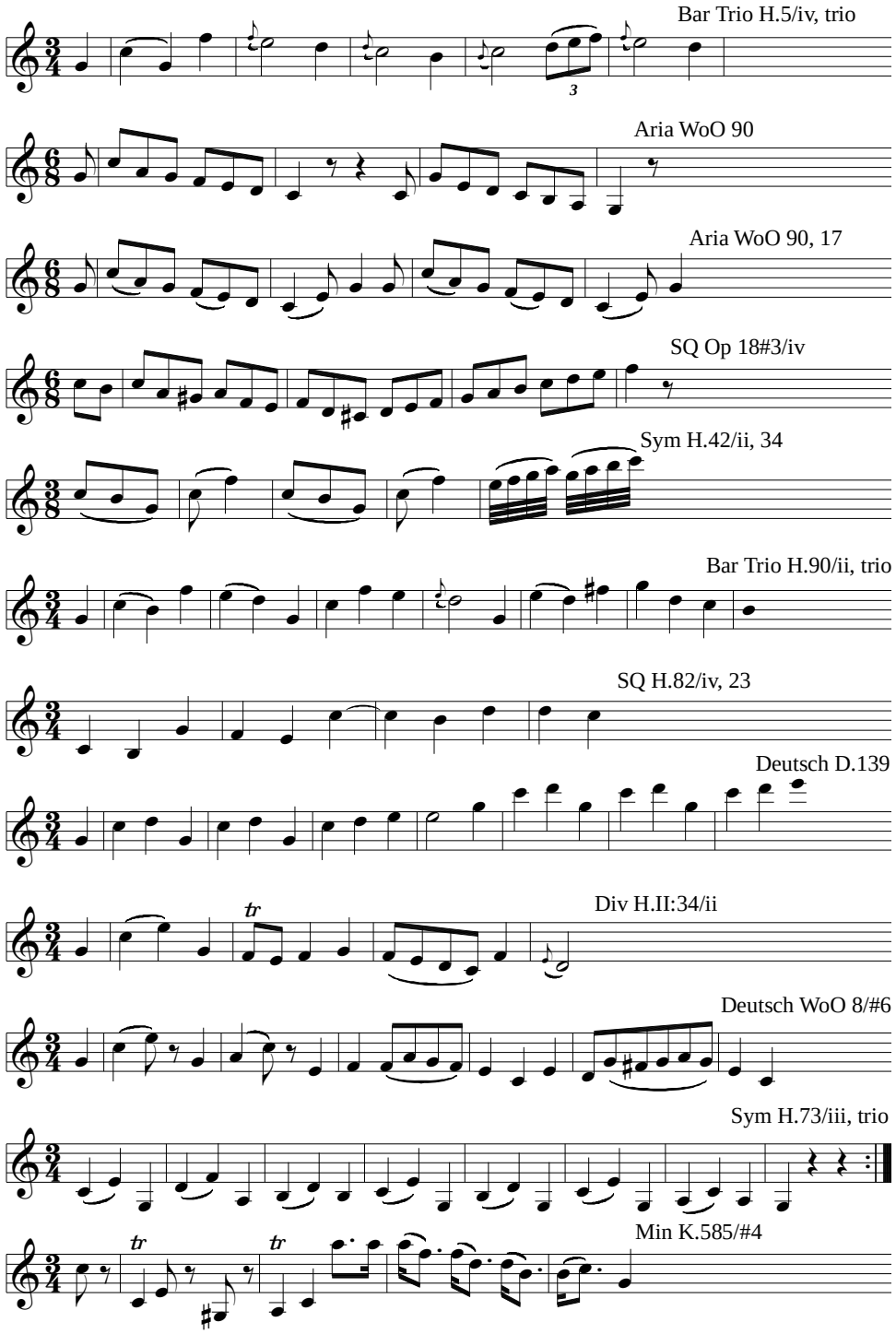


Clock-piece H.27

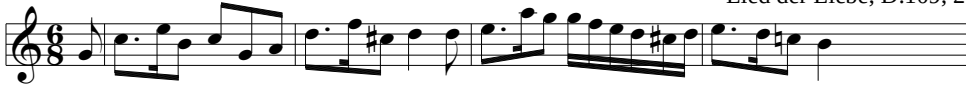


Mass in F, D.105/Credo, 75

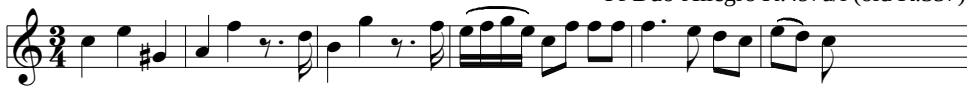



Bar Trio H.5/iv, trio
Aria WoO 90
Aria WoO 90, 17
SQ Op 18#3/iv
Sym H.42/ii, 34
Bar Trio H.90/ii, trio
SQ H.82/iv, 23
Deutsch D.139
Div H.II:34/ii
Deutsch WoO 8/#6
Sym H.73/iii, trio
Min K.585/#4

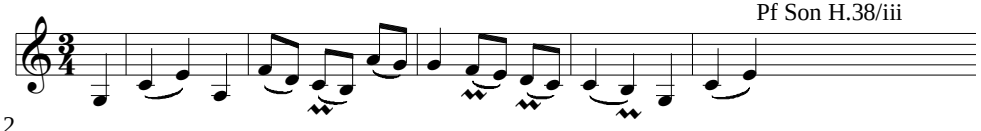
Lied der Liebe, D.109, 2



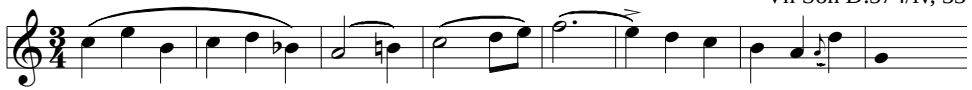
Pf Duo-Allegro K.497a/i (old K.357)



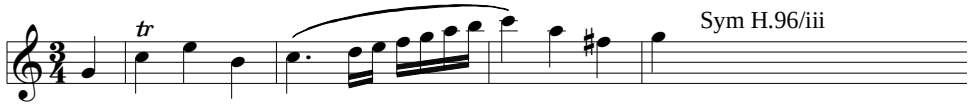
Pf Son H.38/iii



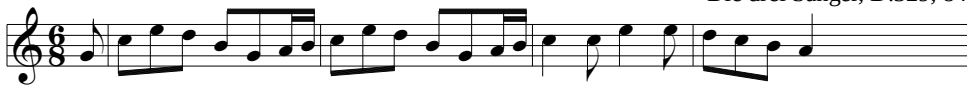
Vn Son D.574/iv, 33



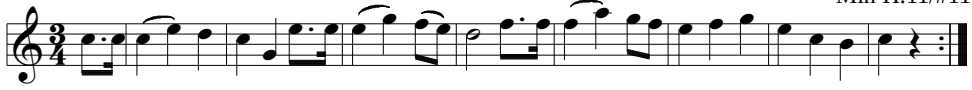
Sym H.96/iii



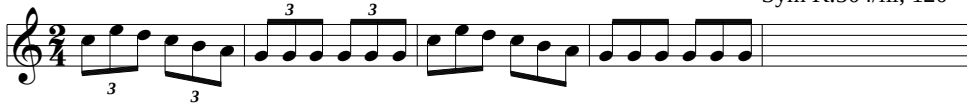
Die drei Sänger, D.329, 84



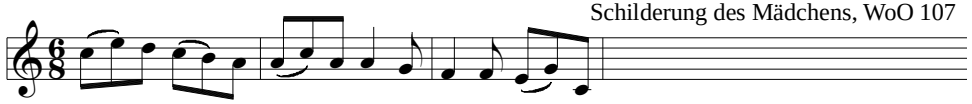
Min H.11/#11



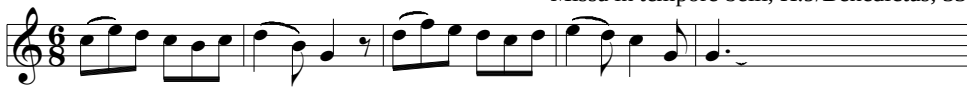
Sym K.504/iii, 120



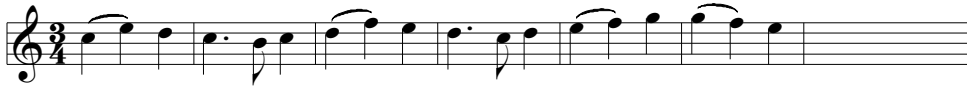
Schilderung des Mädchens, WoO 107



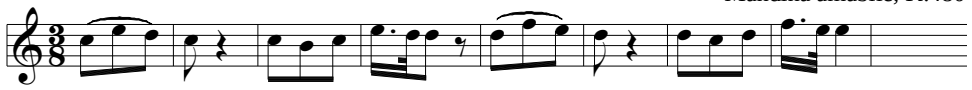
Missa in tempore belli, H.9/Benedictus, 33

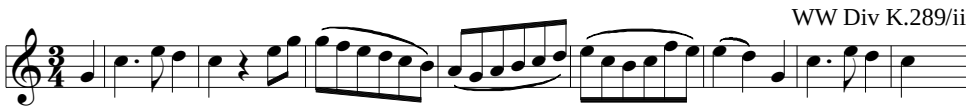


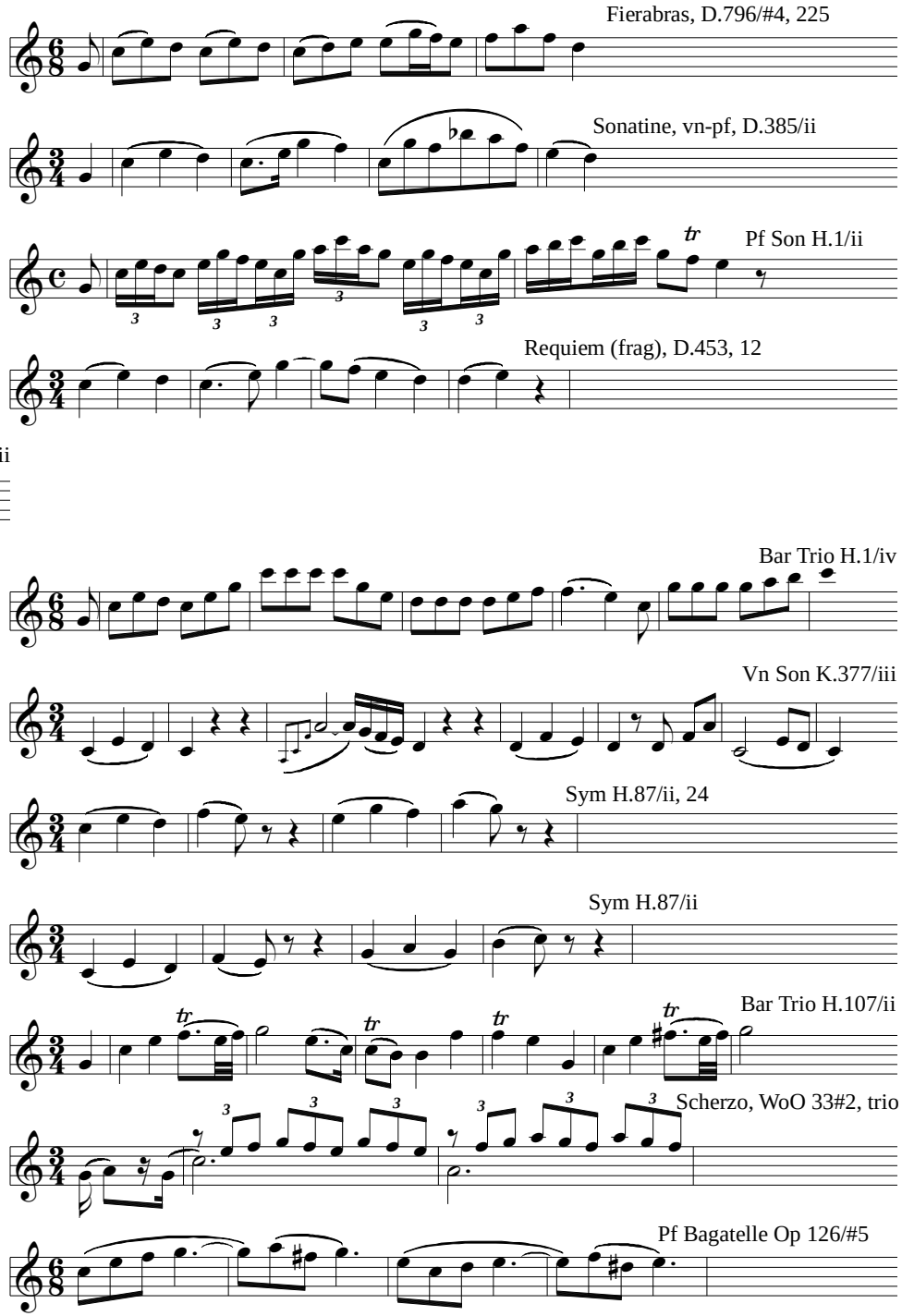
Heiligmesse, H.10/Credo, 166

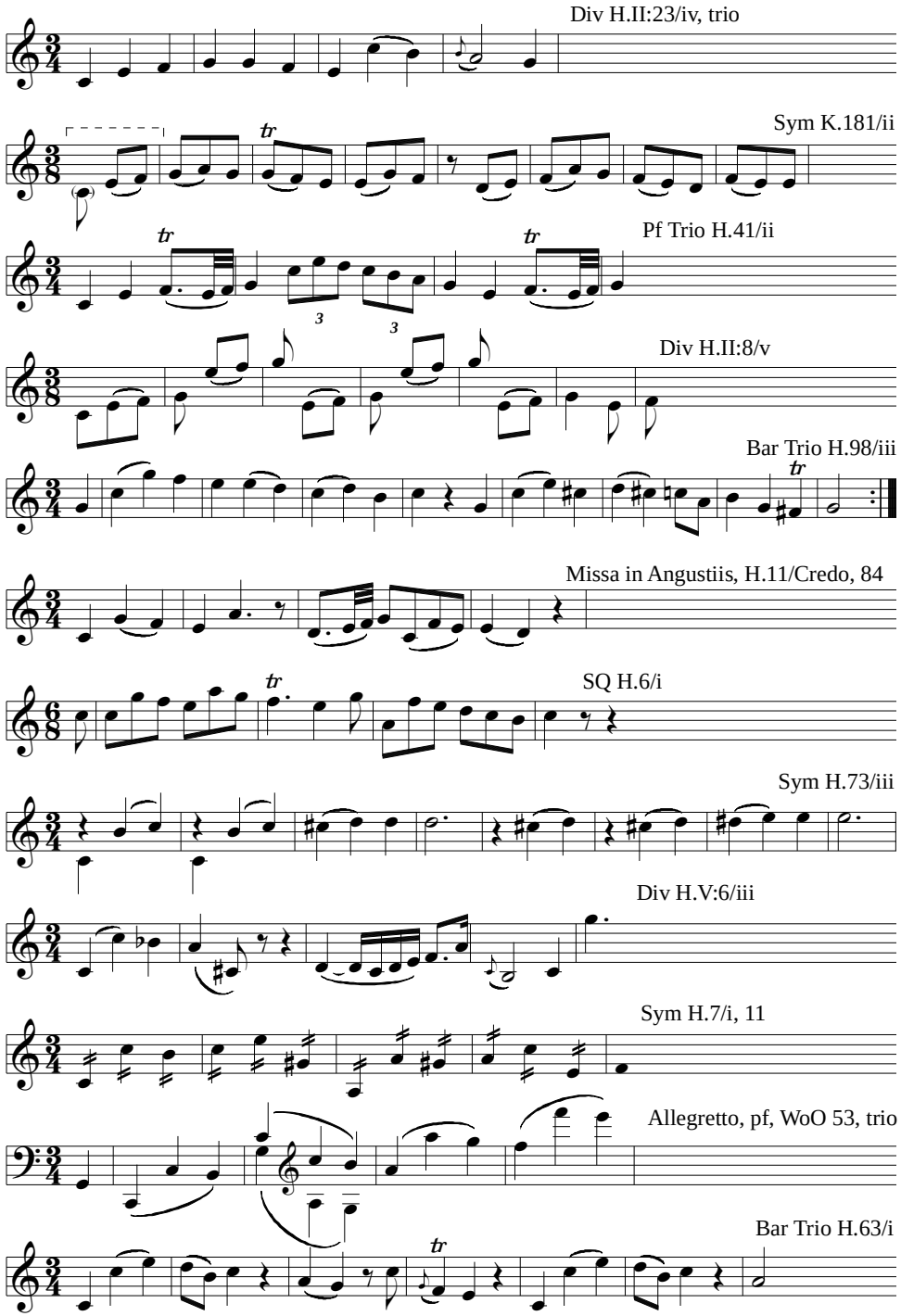


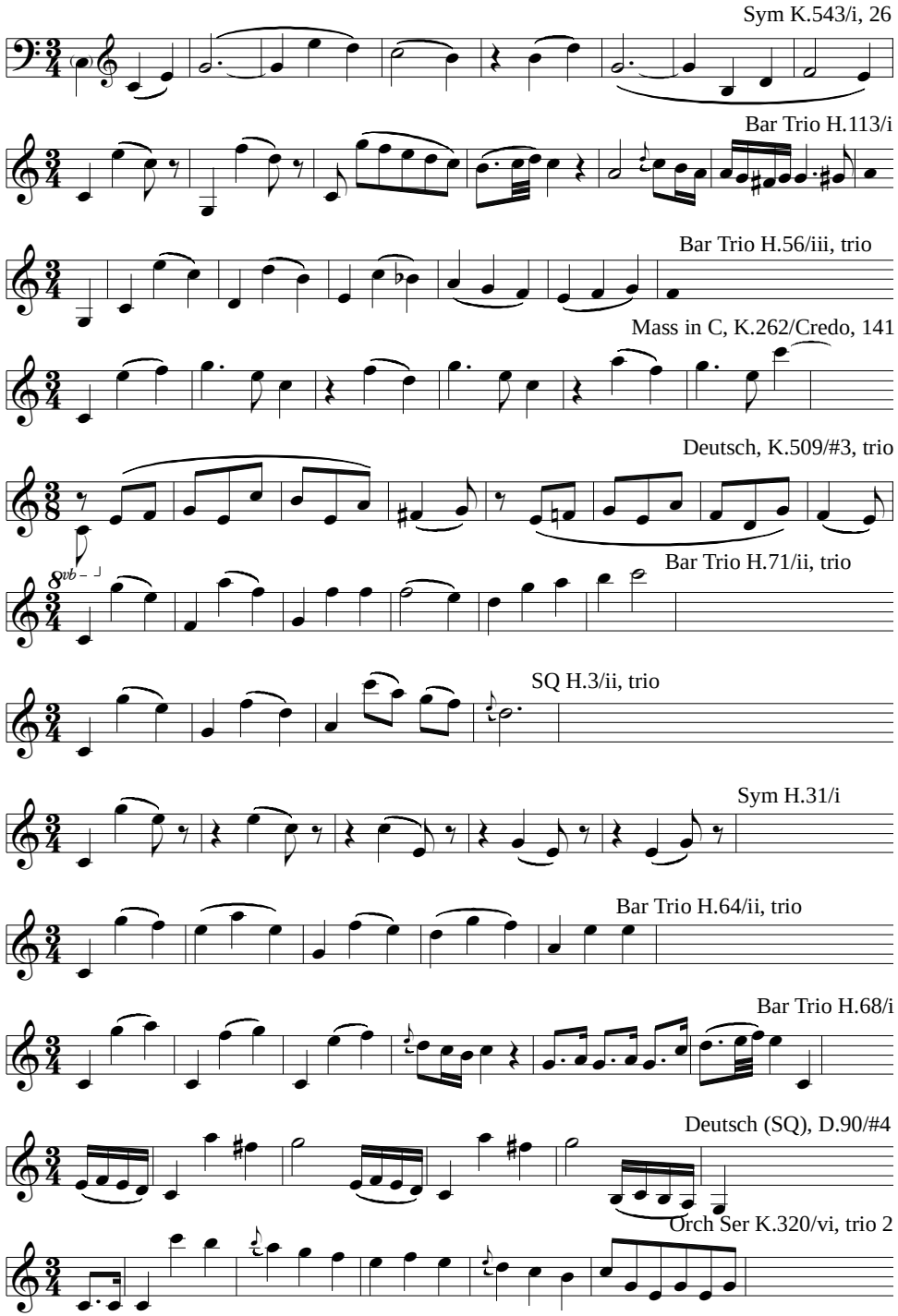
Mandina amabile, K.480

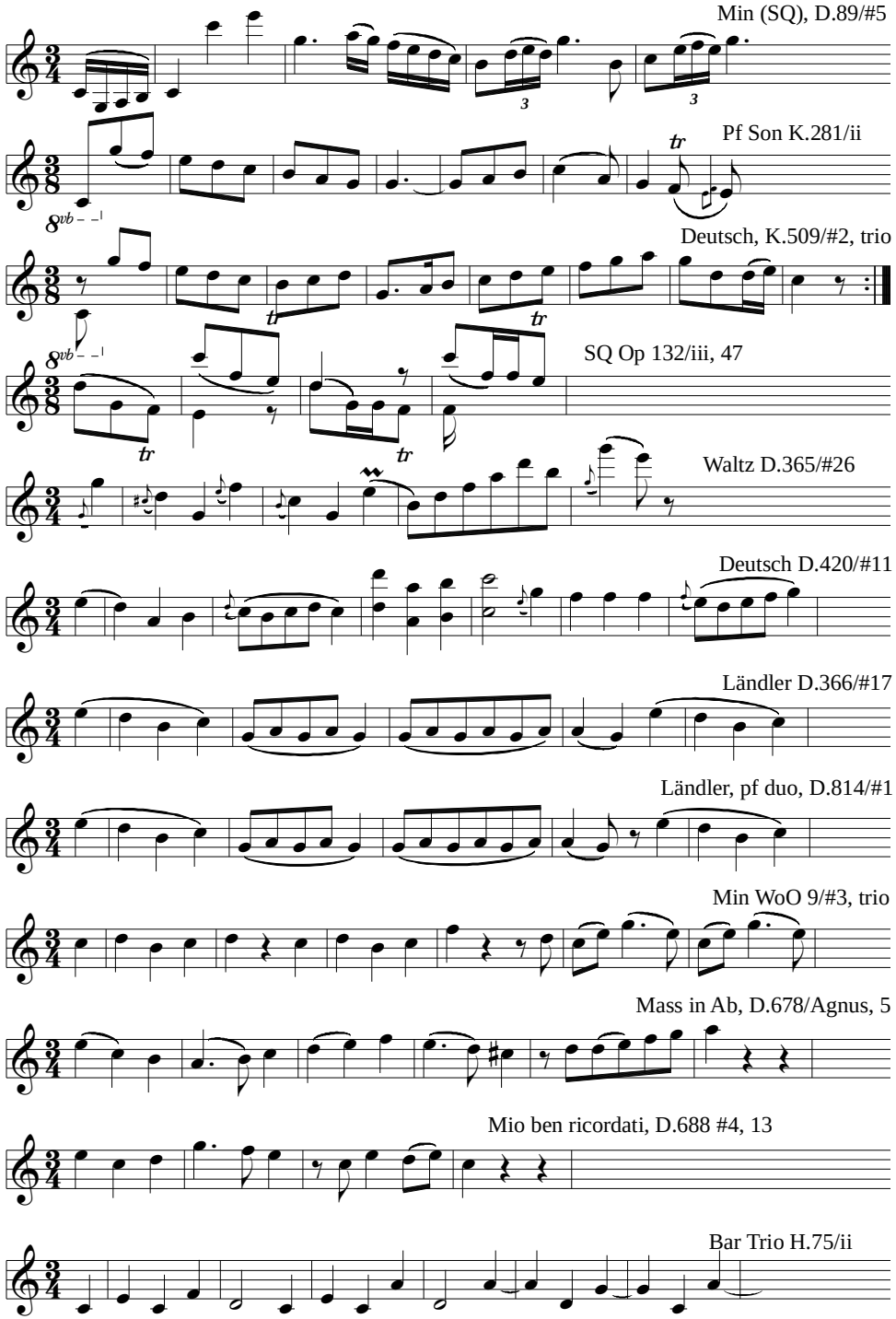


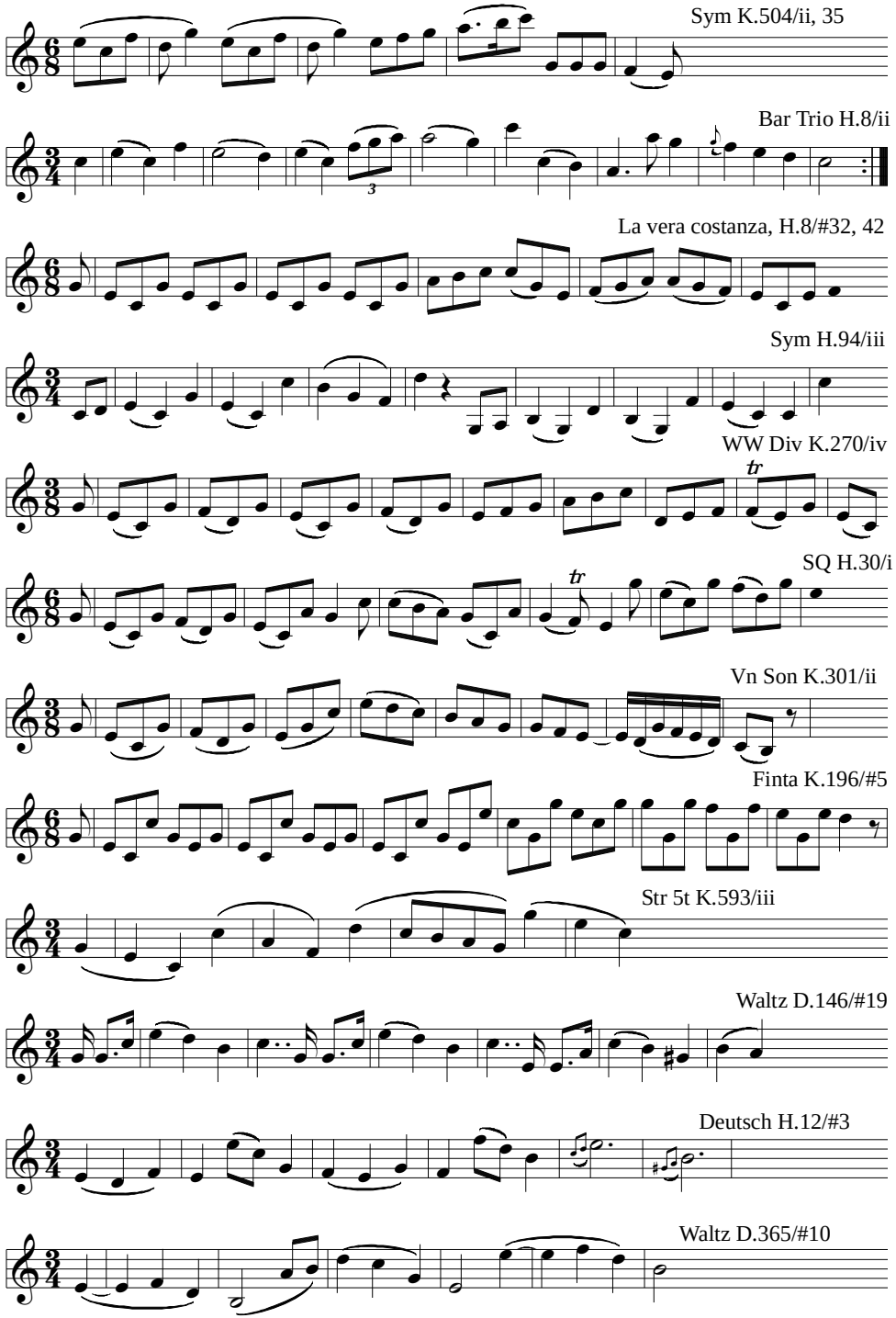

WW Div K.289/ii


Fierabras, D.796/#4, 225
Sonatine, vn-pf, D.385/ii
Pf Son H.1/ii
Requiem (frag), D.453, 12
Bar Trio H.1/iv
Vn Son K.377/iii
Sym H.87/ii, 24
Sym H.87/ii
Bar Trio H.107/ii
Scherzo, WoO 33#2, trio
Pf Bagatelle Op 126/#5


Div H.II:23/iv, trio
Sym K.181/ii
Pf Trio H.41/ii
Div H.II:8/v
Bar Trio H.98/iii
Missa in Angustiis, H.11/Credo, 84
SQ H.6/i
Sym H.73/iii
Div H.V:6/iii
Sym H.7/i, 11
Allegretto, pf, WoO 53, trio
Bar Trio H.63/i


Sym K.543/i, 26
Bar Trio H.113/i
Bar Trio H.56/iii, trio
Mass in C, K.262/Credo, 141
Deutsch, K.509/#3, trio
Bar Trio H.71/ii, trio
SQ H.3/ii, trio
Sym H.31/i
Bar Trio H.64/ii, trio
Bar Trio H.68/i
Deutsch (SQ), D.90/#4
Orch Ser K.320/vi, trio 2


Min (SQ), D.89/#5
Pf Son K.281/ii
Deutsch, K.509/#2, trio
SQ Op 132/iii, 47
Waltz D.365/#26
Deutsch D.420/#11
Ländler D.366/#17
Ländler, pf duo, D.814/#1
Min WoO 9/#3, trio
Mass in Ab, D.678/Agnus, 5
Mio ben ricordati, D.688 #4, 13
Bar Trio H.75/ii


Sym K.504/ii, 35
Bar Trio H.8/ii
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Sym H.94/iii
WW Div K.270/iv
SQ H.30/i
Vn Son K.301/ii
Finta K.196/#5
Str 5t K.593/iii
Waltz D.146/#19
Deutsch H.12/#3
Waltz D.365/#10

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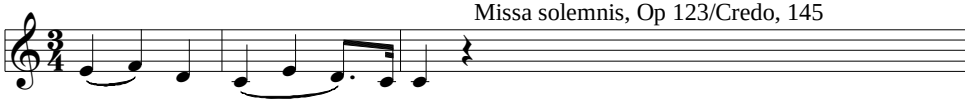
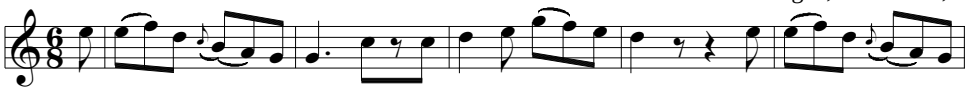
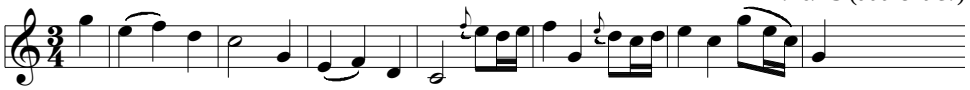


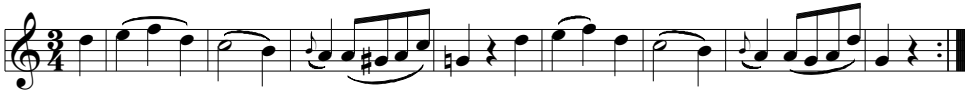
Tränenregen, D.795/#10, 4



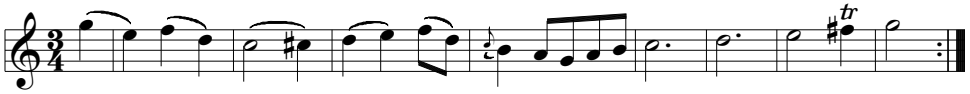
Min H.20/#5 (authentic?)



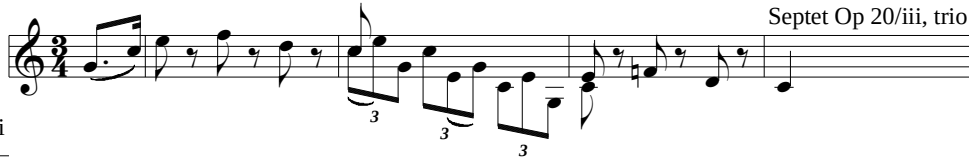
Min H.16/#1, trio



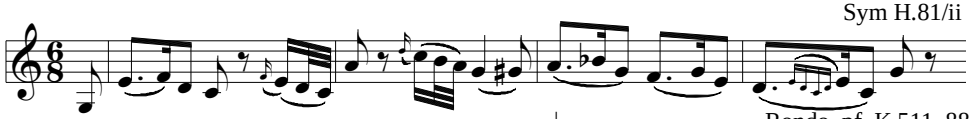
Min K.176/#13, trio



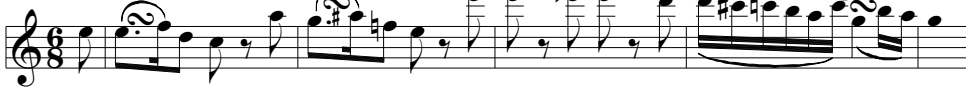
Septet Op 20/iii, trio



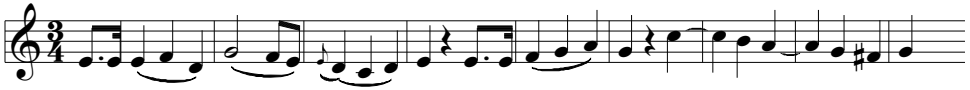
Sym H.81/ii



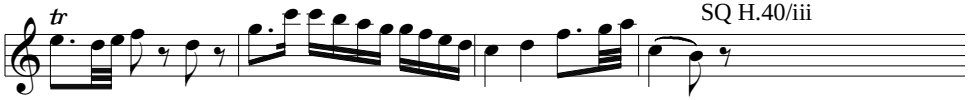
Rondo, pf, K.511, 88



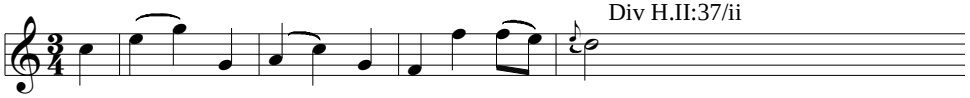
Lira Conc H.3/iii



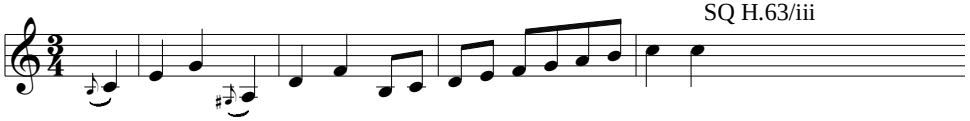
SQ H.40/iii

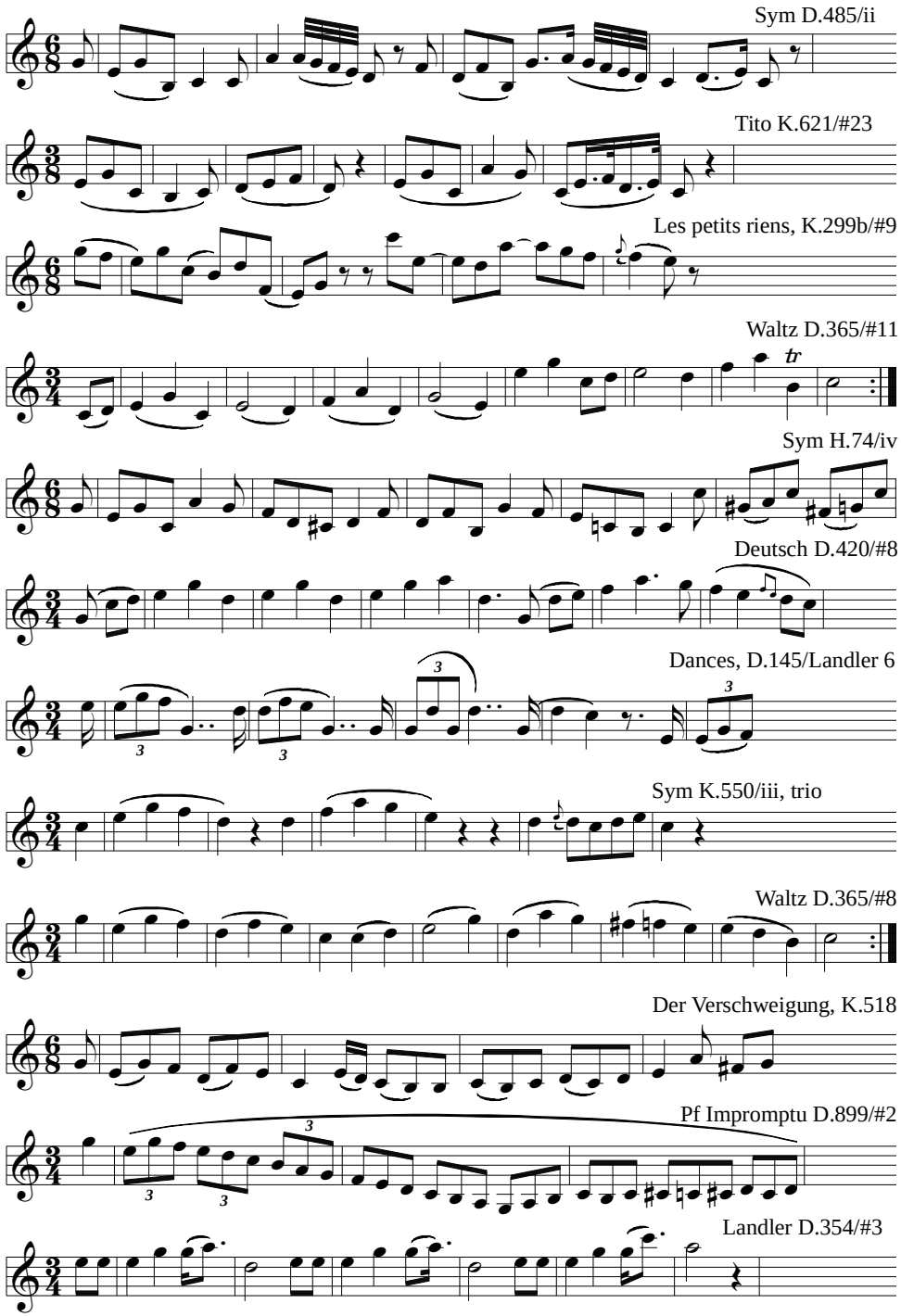


Div H.II:37/ii

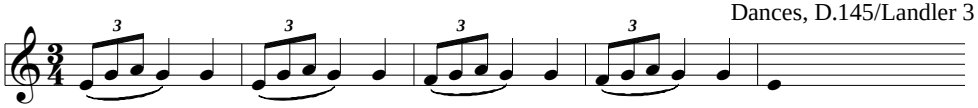


SQ H.63/iii

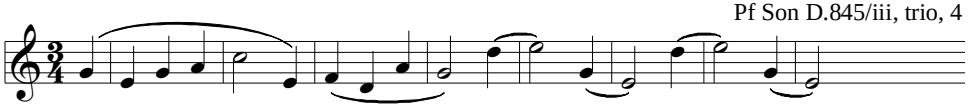



Sym D.485/ii
Tito K.621/#23
Les petits riens, K.299b/#9
Waltz D.365/#11
Sym H.74/iv
Deutsch D.420/#8
Dances, D.145/Landler 6
Sym K.550/iii, trio
Waltz D.365/#8
Der Verschweigung, K.518
Pf Impromptu D.899/#2
Landler D.354/#3

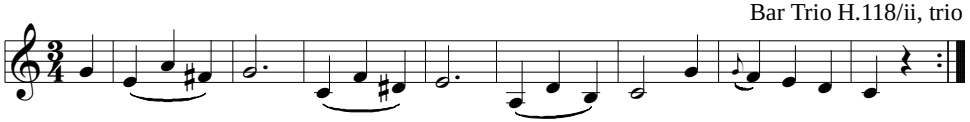
Dances, D.145/Landler 3



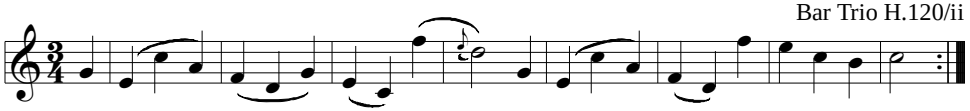
Pf Son D.845/iii, trio, 4



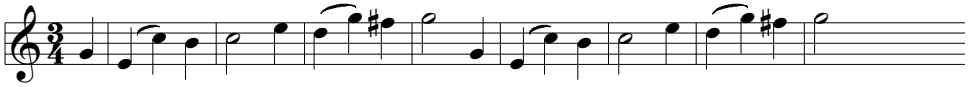
Bar Trio H.118/ii, trio



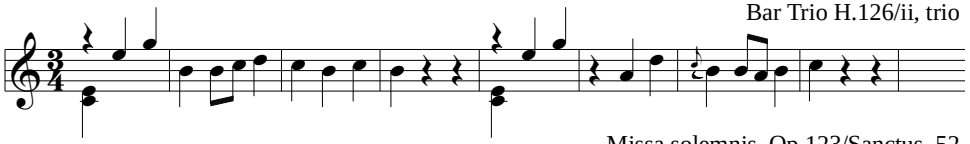
Bar Trio H.120/ii



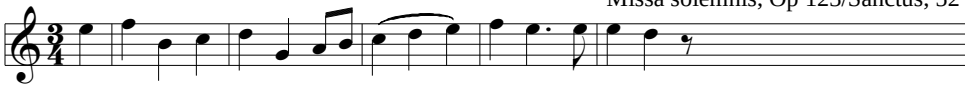
Bar Trio H.118/ii



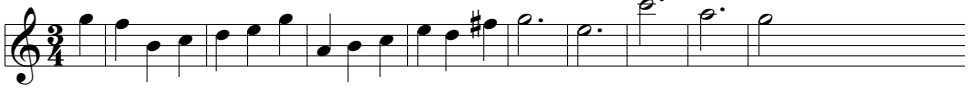
Bar Trio H.126/ii, trio



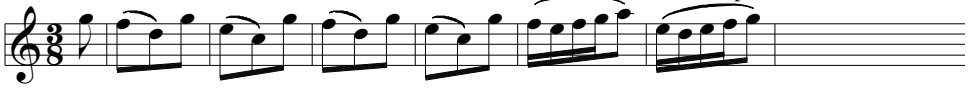
Missa solemnis, Op 123/Sanctus, 52



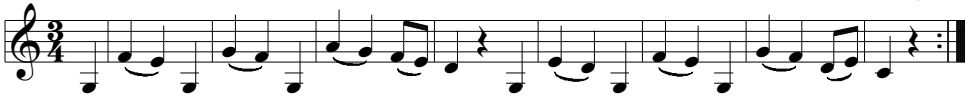
Grand Duo, D.812/iii



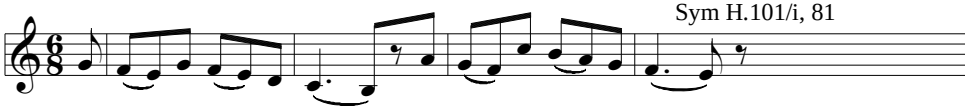
Les petits riens, K.299b/#11



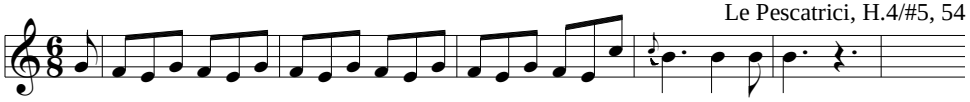
Deutsch K.605/#1, trio

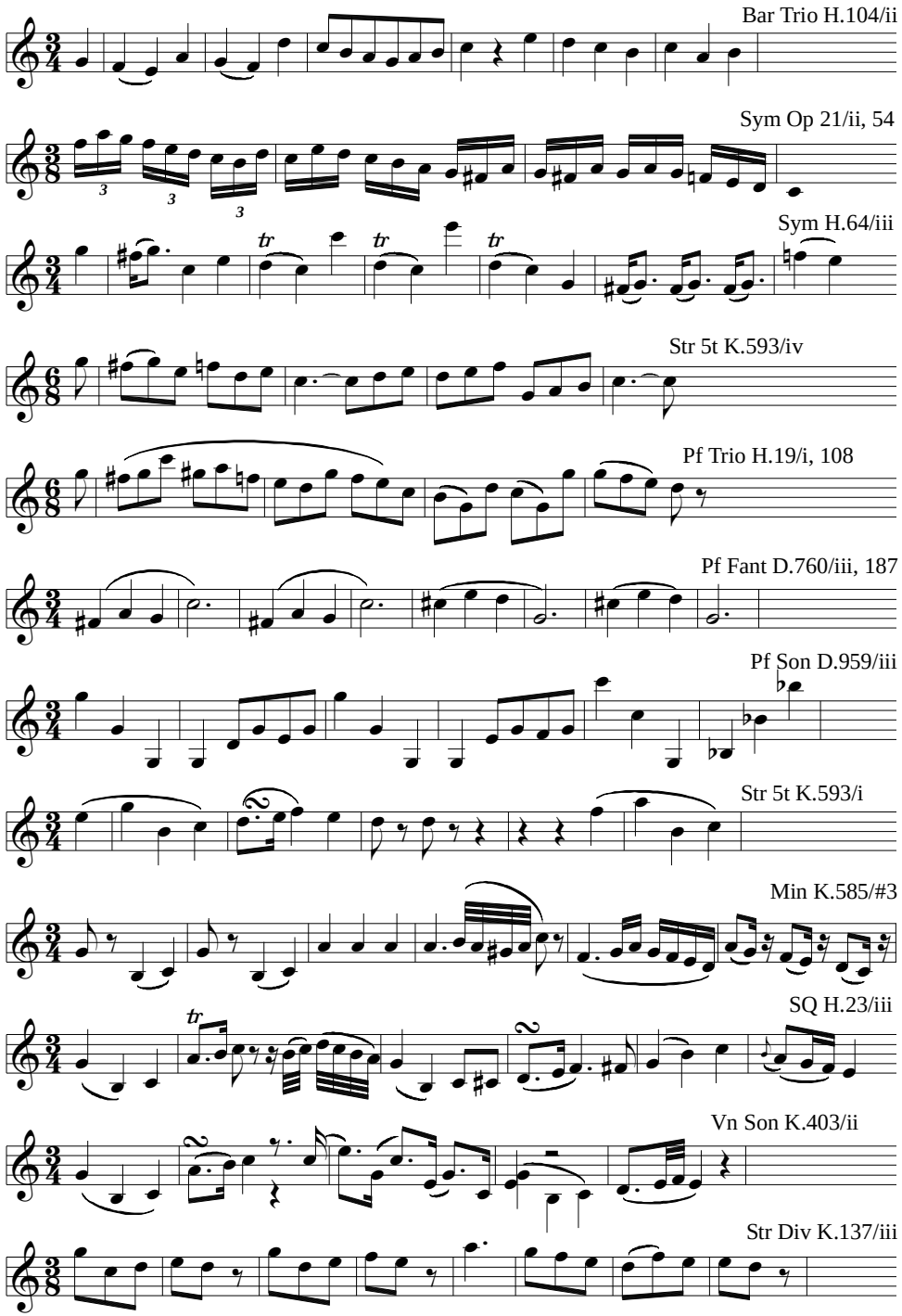


Sym H.101/i, 81



Le Pescatrici, H.4/#5, 54




Bar Trio H.104/ii
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Str 5t K.593/i
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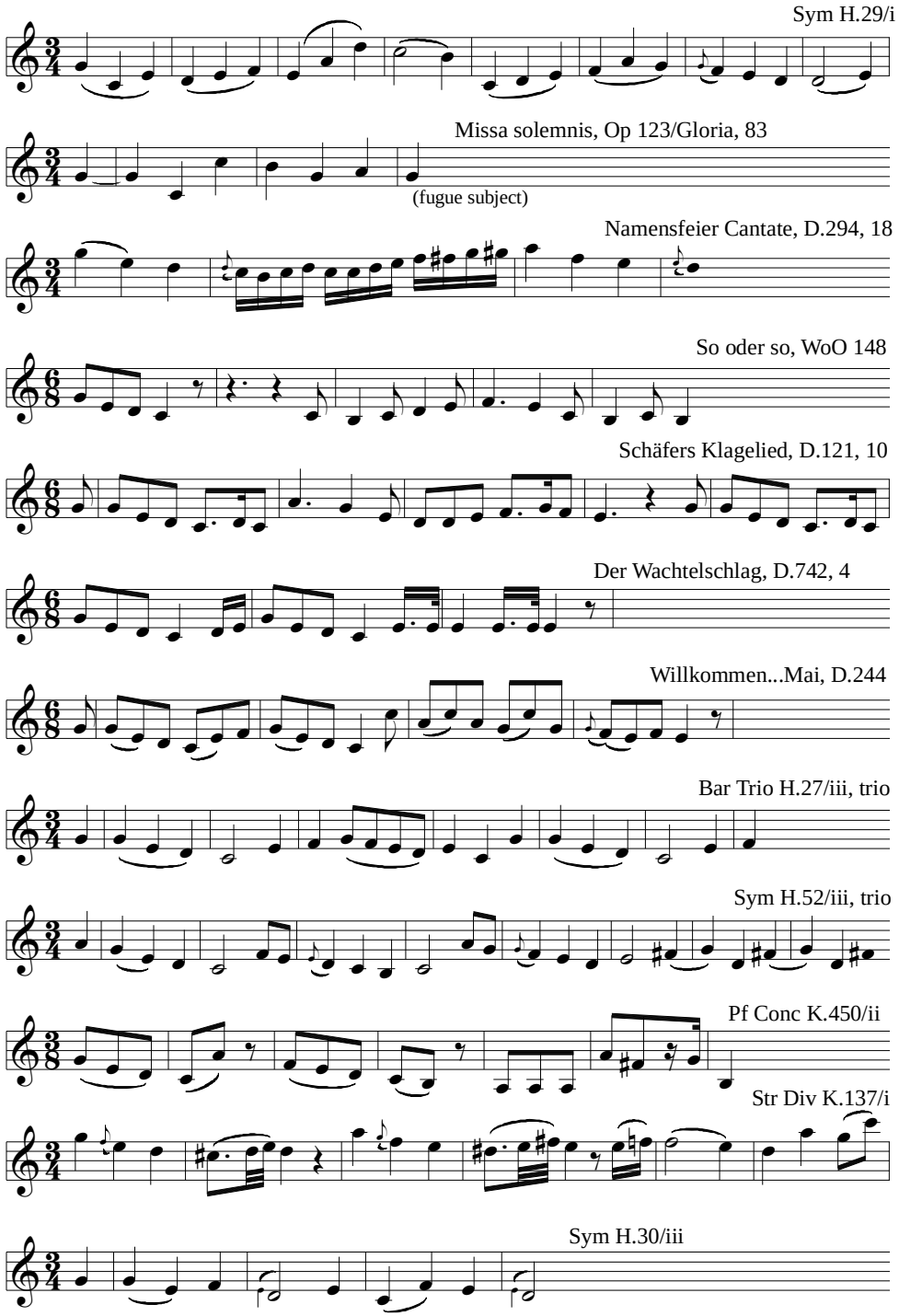
SQ H.23/iii
Vn Son K.403/ii
Str Div K.137/iii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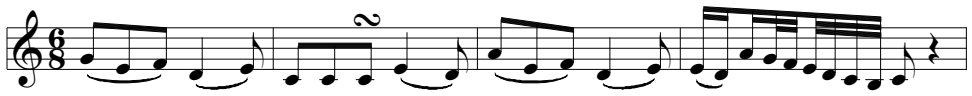
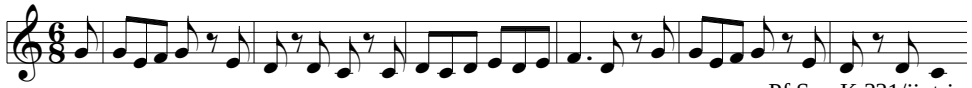
Sym H.52/iii, trio
Pf Conc K.450/ii
Str Div K.137/i
Sym H.30/iii

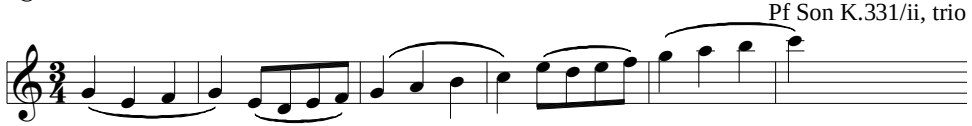
Sinf Conc H.105/ii



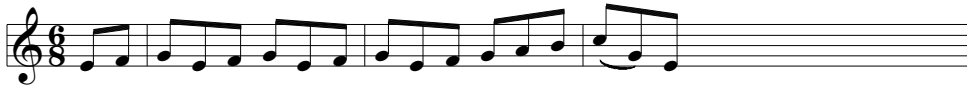
Lira Notturno H.27/iii



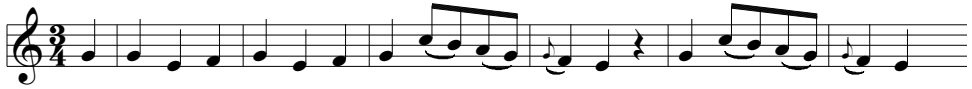
Pf Son K.331/ii, trio



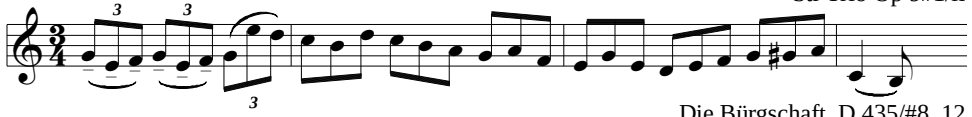
Don G K.527/#5



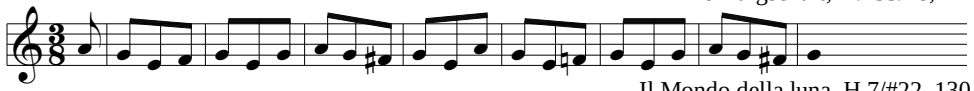
Finta K.196/#23, 235



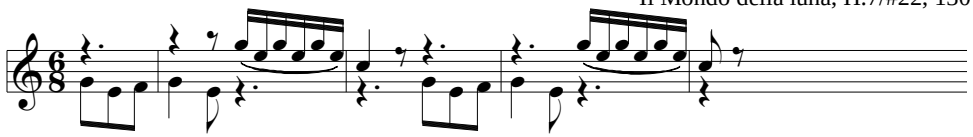
Str Trio Op 9#1/ii



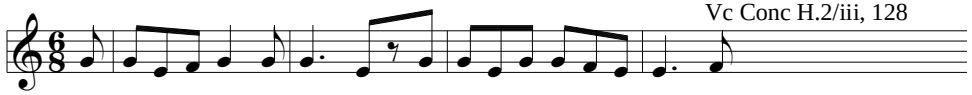
Die Bürgschaft, D.435/#8, 12



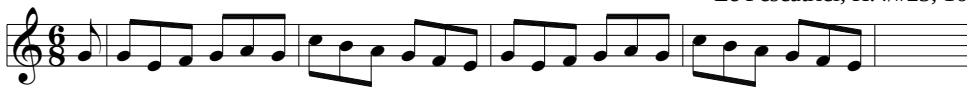
Il Mondo della luna, H.7/#22, 130



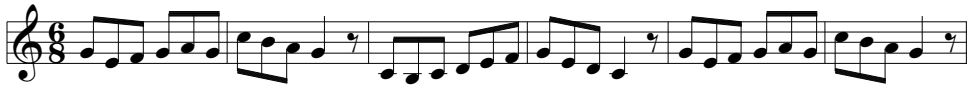
Vc Conc H.2/iii, 128



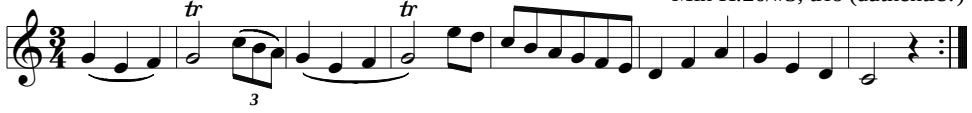
Le Pescatrici, H.4/#25, 16



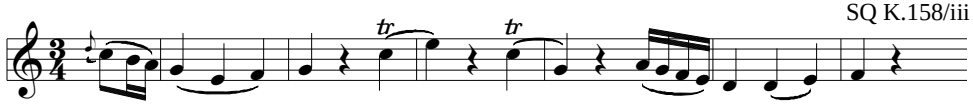
Bar Trio H.89/iii



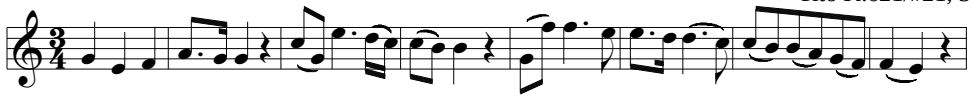
Min H.20/#3, trio (authentic?)



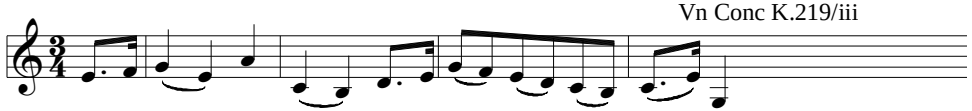
SQ K.158/iii



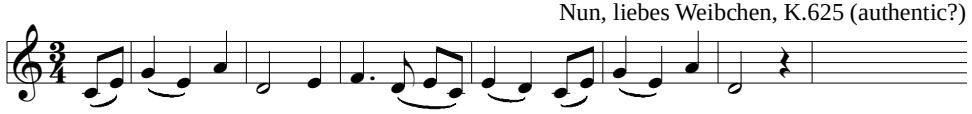
Tito K.621/#21, 3



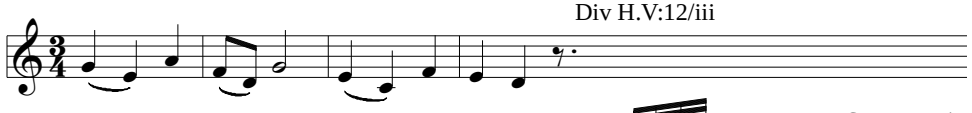
Vn Conc K.219/iii



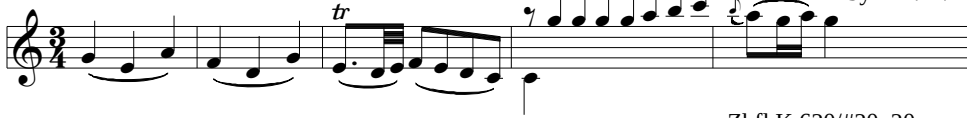
Nun, liebes Weibchen, K.625 (authentic?)



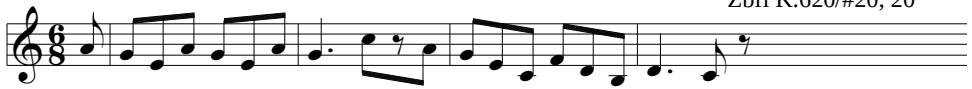
Div H.V:12/iii



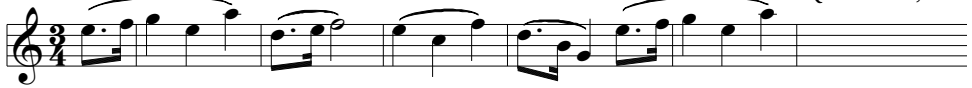
Sym H.21/i



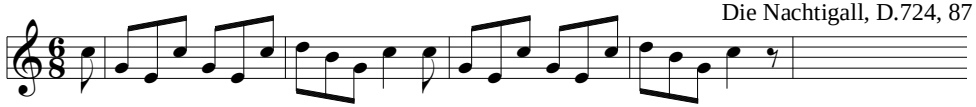
Zbfl K.620/#20, 20



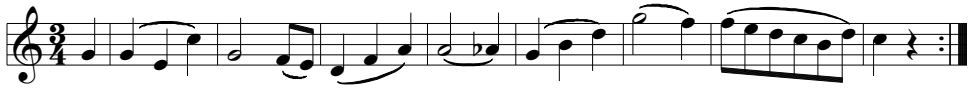
SQ D.353/iii, trio



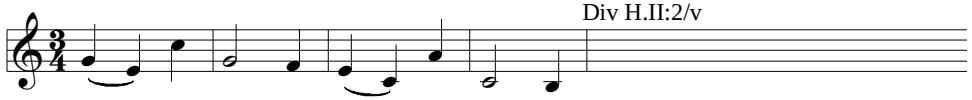
Die Nachtigall, D.724, 87



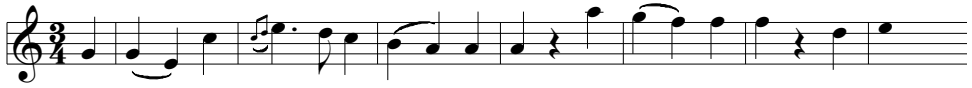
Waltz D.146/#4, trio

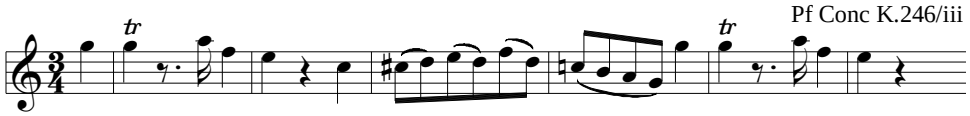


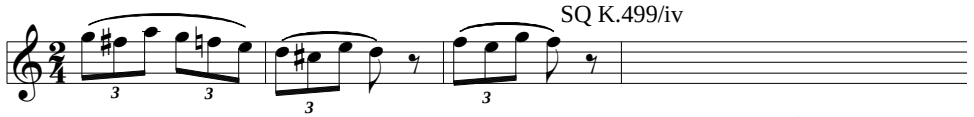
Div H.II:2/v

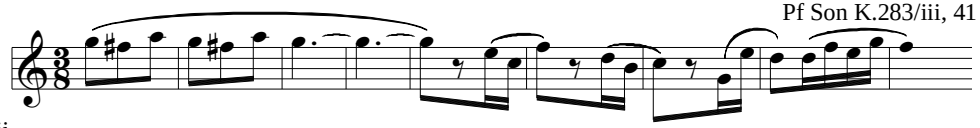


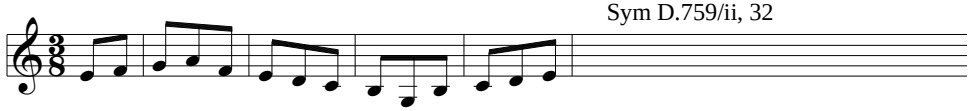
Deutsch K.586/#4

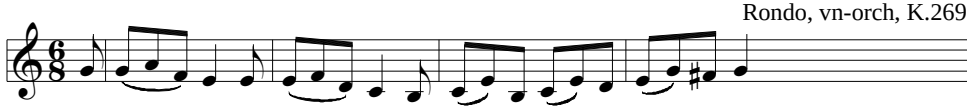


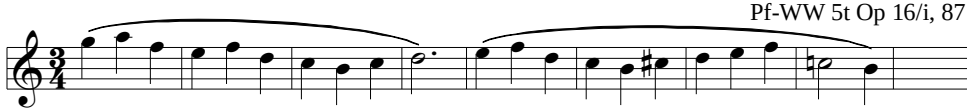

Pf Conc K.246/iii

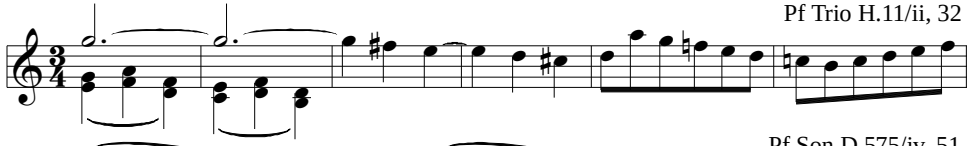

SQ K.499/iv

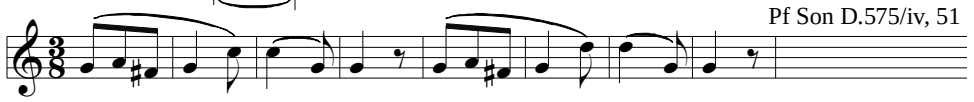

Pf Son K.283/iii, 41

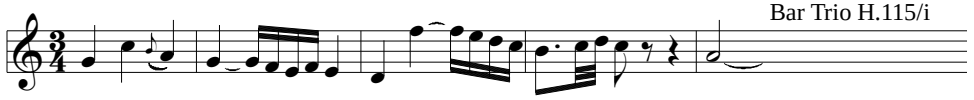

Sym D.759/ii, 32

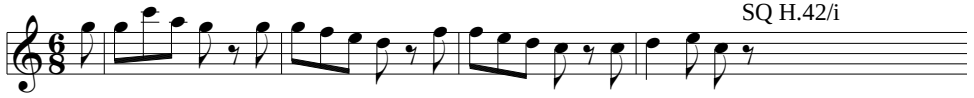

Rondo, vn-orch, K.269

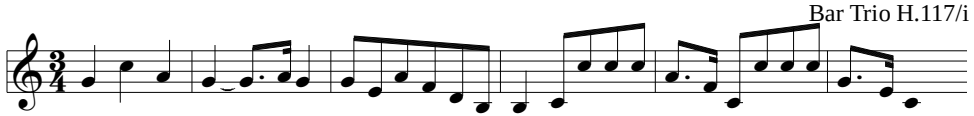

Pf-WW 5t Op 16/i, 87

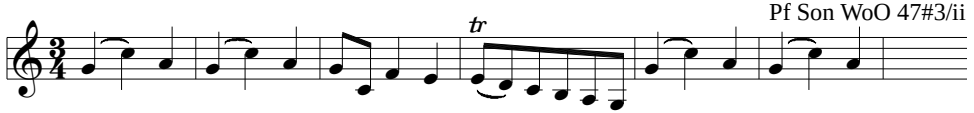

Pf Trio H.11/ii, 32


Pf Son D.575/iv, 51

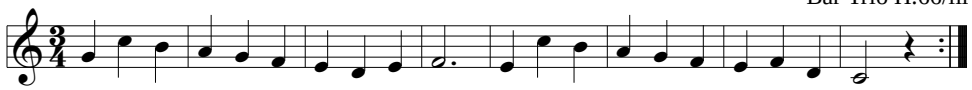

Bar Trio H.115/i


SQ H.42/i

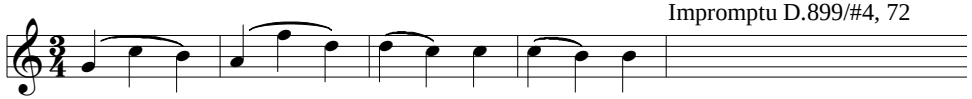

Bar Trio H.117/i


Pf Son WoO 47#3/ii

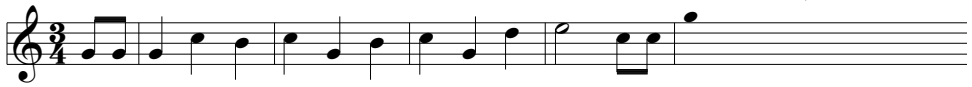
Bar Trio H.66/iii



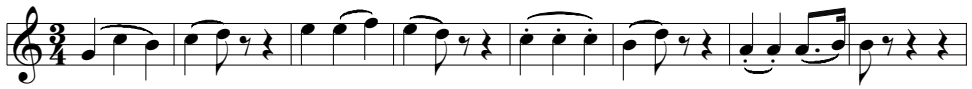
Impromptu D.899/#4, 72



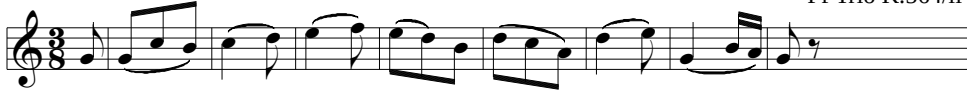
38 Dances, D.145/Waltz #1



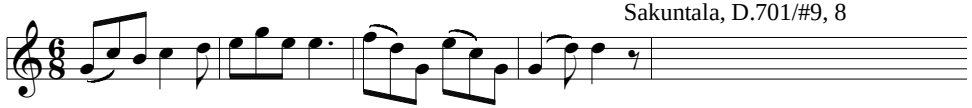
Sym H.75/ii



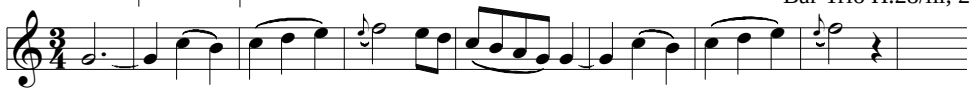
Pf Trio K.564/ii



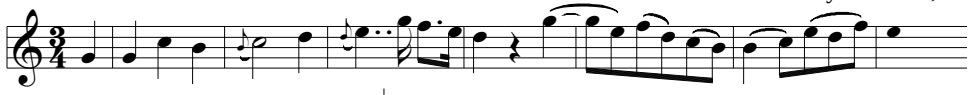
Sakuntala, D.701/#9, 8



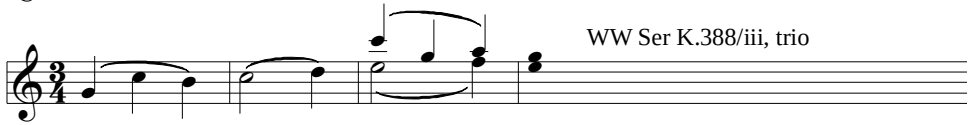
Bar Trio H.28/iii, 2



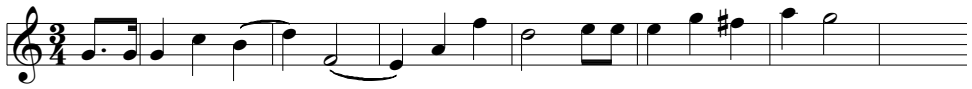
Sym H.59/ii, 36



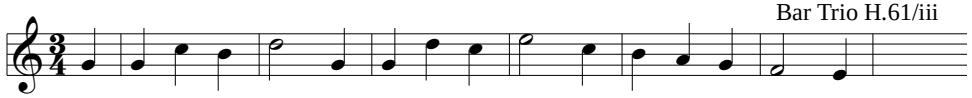
WW Ser K.388/iii, trio



Deutsch D.420/#9

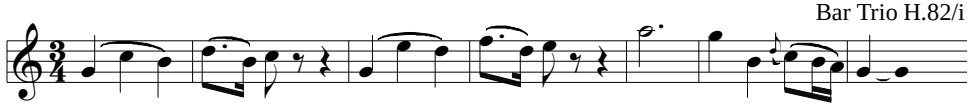


Bar Trio H.61/iii

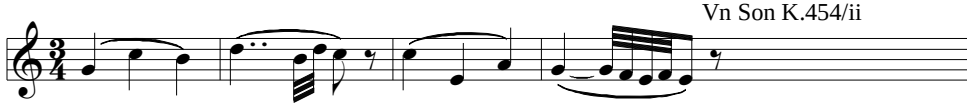


Fierabras, D.796/#4, 216

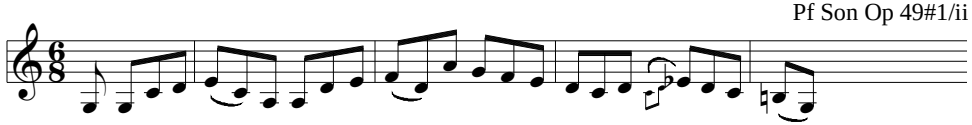
Bar Trio H.82/i



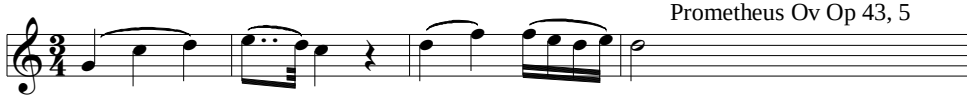
Vn Son K.454/ii



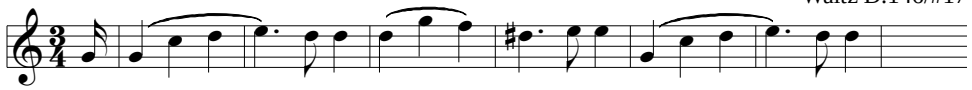
Pf Son Op 49#1/ii



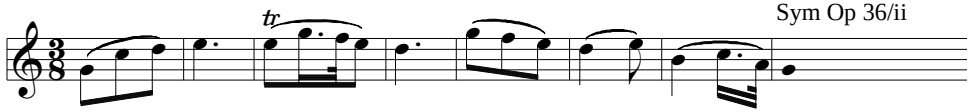
Prometheus Ov Op 43, 5



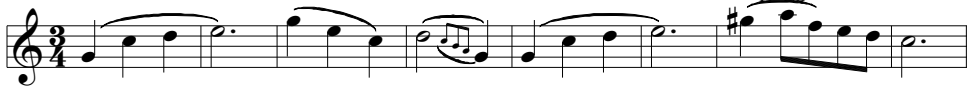
Waltz D.146/#17



Sym Op 36/ii

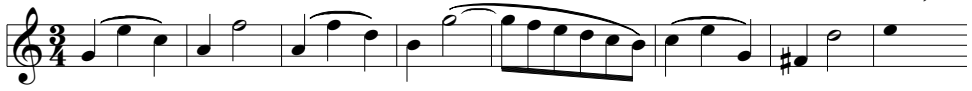


Arpeggione, D.821/ii, 4

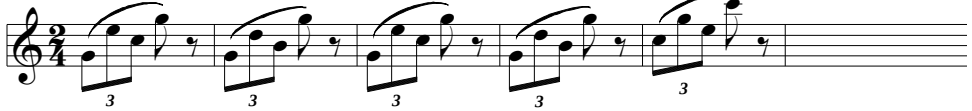


Pf Bagatelle, Op 33/#1

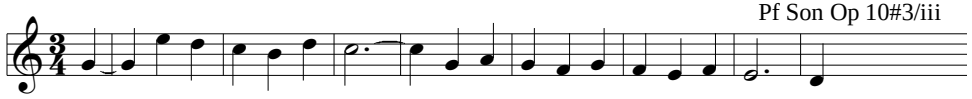
WW Div K.439b#4/iii, trio



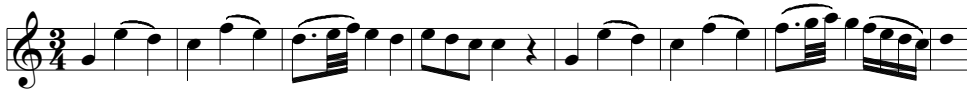
Ecossaise D.299/#7



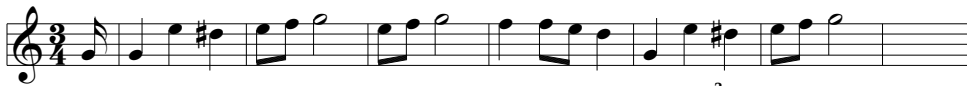
Pf Son Op 10#3/iii



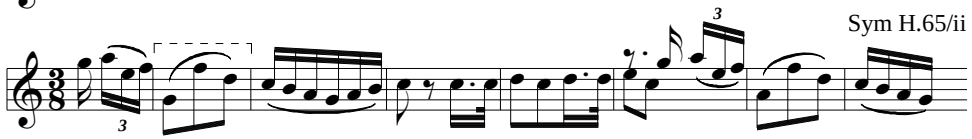
Bar Trio H.44/ii



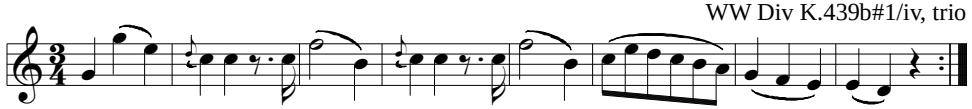
Deutsch D.971/#3



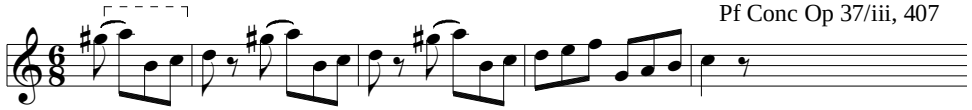
Sym H.65/ii



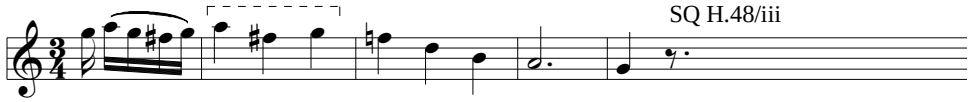
WW Div K.439b#1/iv, trio



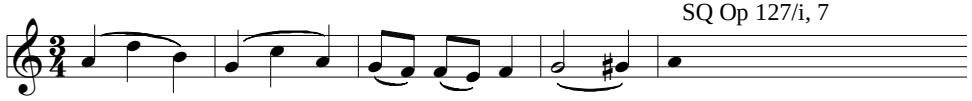
Pf Conc Op 37/iii, 407



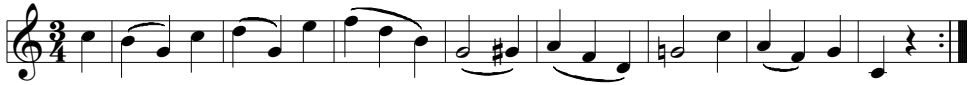
SQ H.48/iii



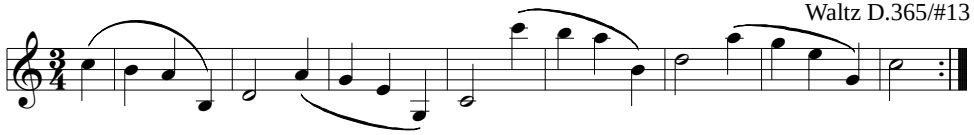
SQ Op 127/i, 7



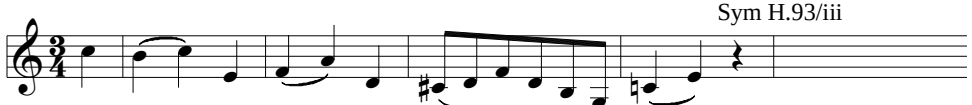
Min H.16/#13



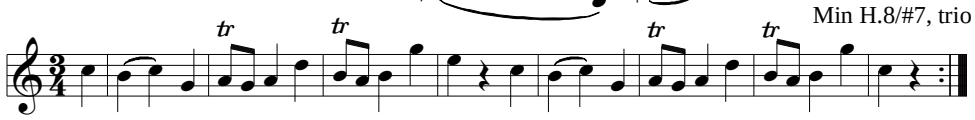
Waltz D.365/#13



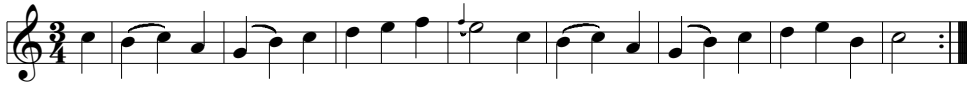
Sym H.93/iii



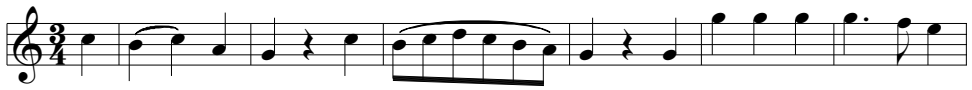
Min H.8/#7, trio

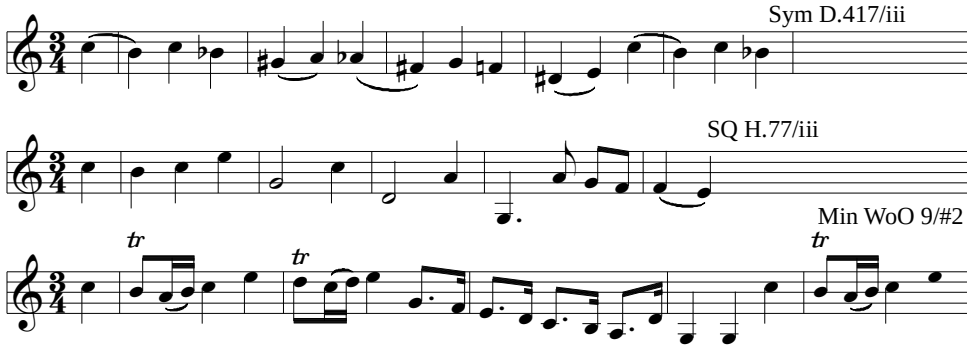


Div H.II:1/iii

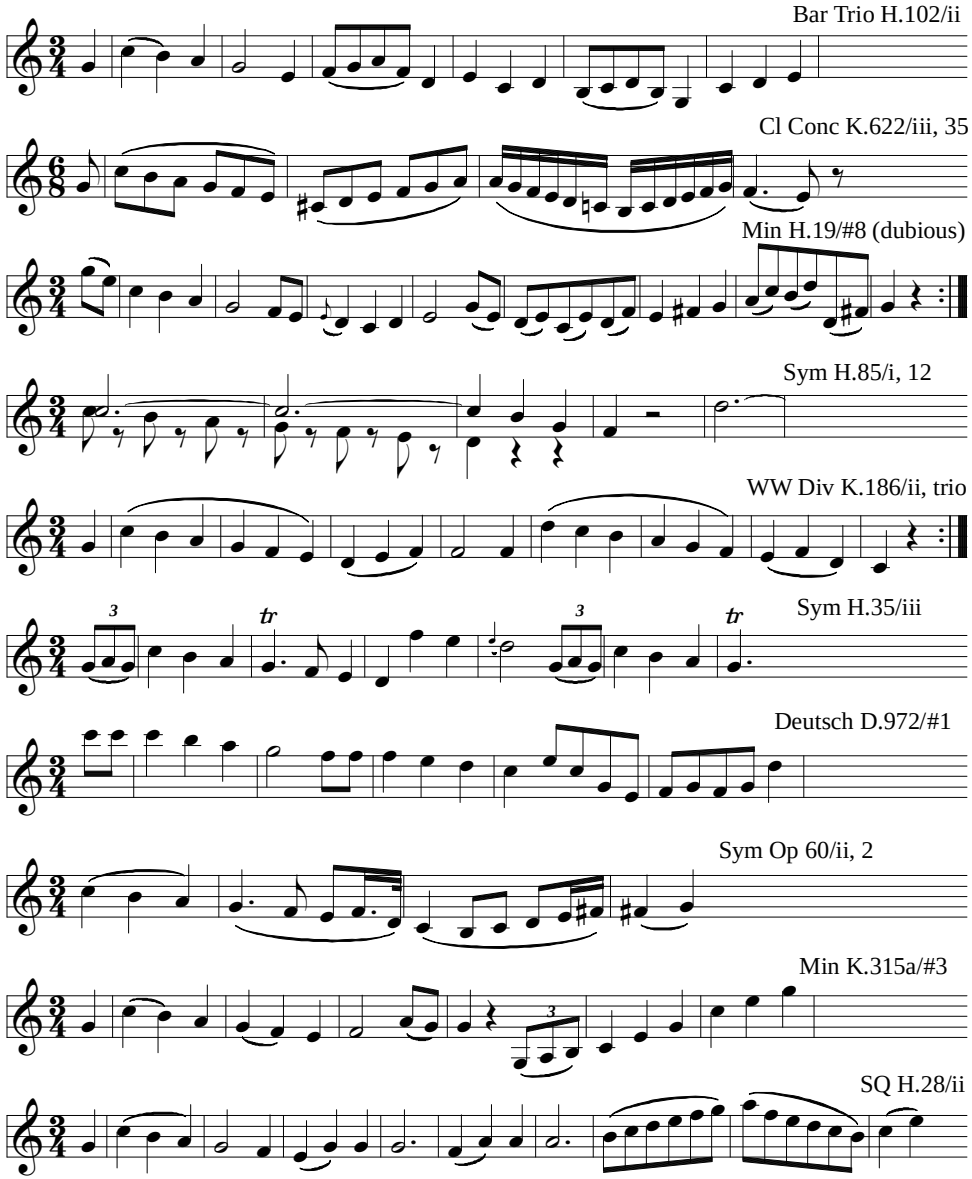


Deutsch WoO 8/#7, trio

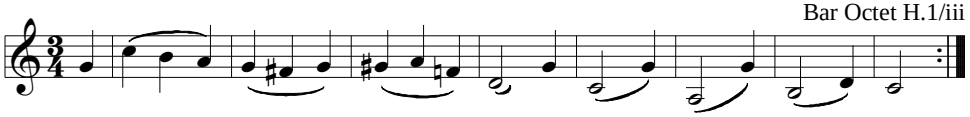



Sym D.417/iii
SQ H.77/iii
Min WoO 9/#2

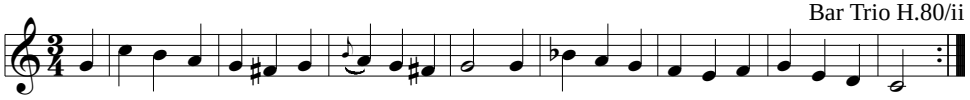
EX 27:
Δ2^B1, 4-linear



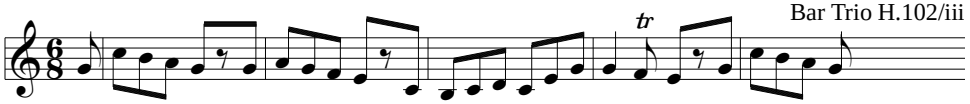
Bar Octet H.1/iii



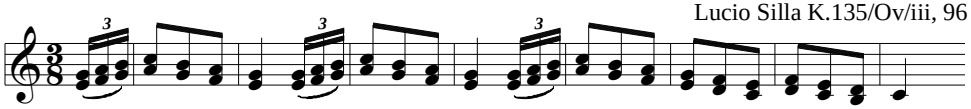
Bar Trio H.80/ii



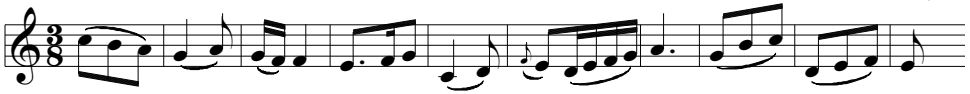
Bar Trio H.102/iii



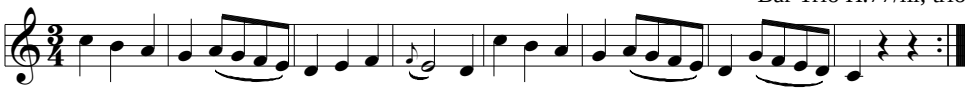
Lucio Silla K.135/Ov/iii, 96



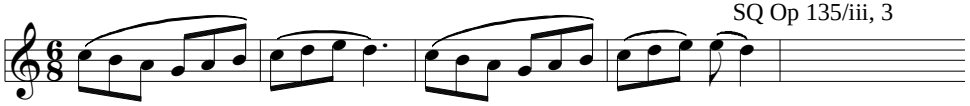
Idomeneo K.366/#30a, 56



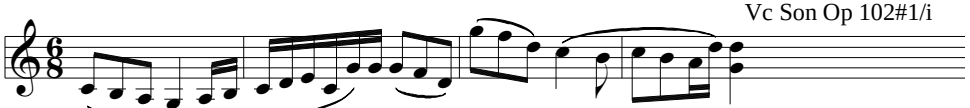
Bar Trio H.77/iii, trio



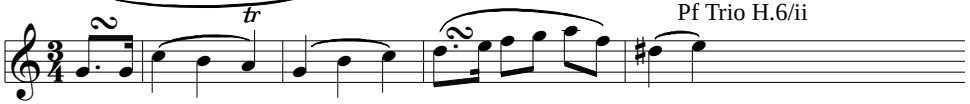
SQ Op 135/iii, 3



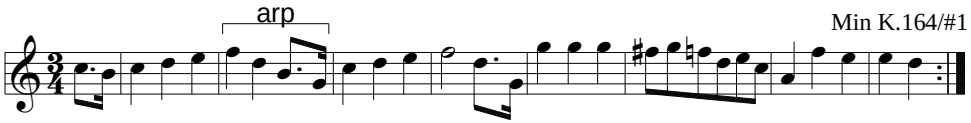
Vc Son Op 102#1/i



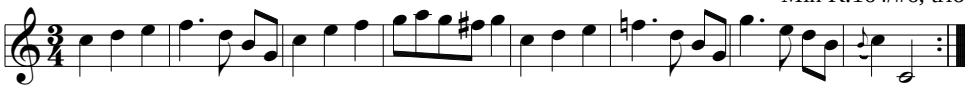
Pf Trio H.6/ii



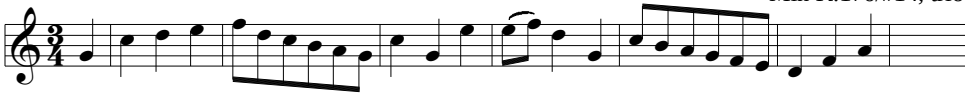
Min K.164/#1



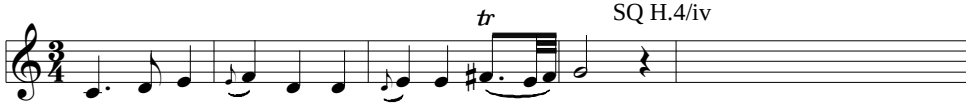
Min K.164/#6, trio



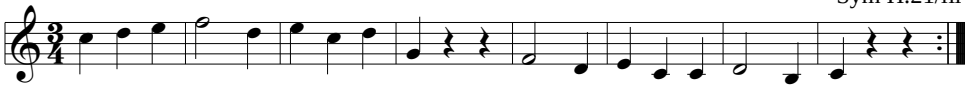
Min K.176/#14, trio



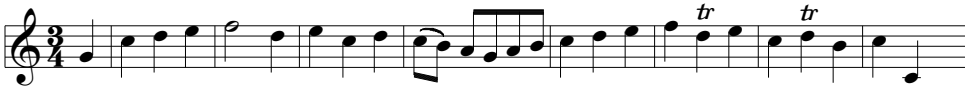
SQ H.4/iv



Sym H.21/iii



Serenade K.525/iii



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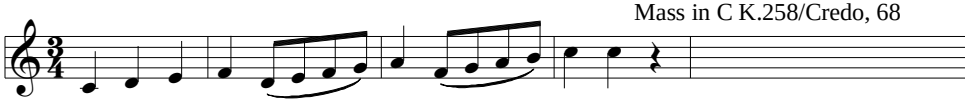
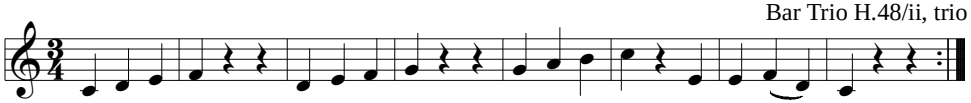
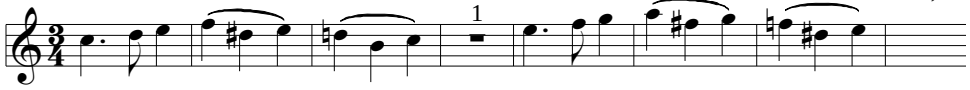


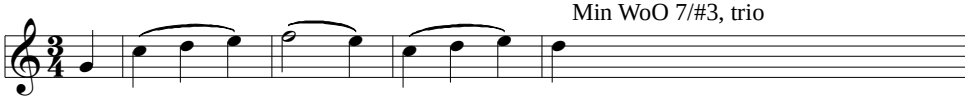
Bar Trio H.48/ii, trio



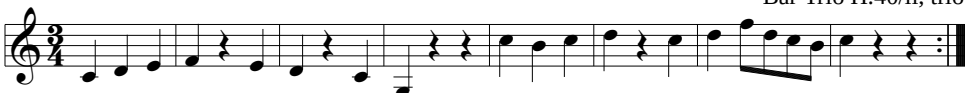
Pf Conc K.449/i, 37



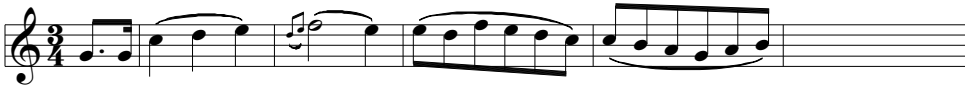
Min WoO 7/#3, trio



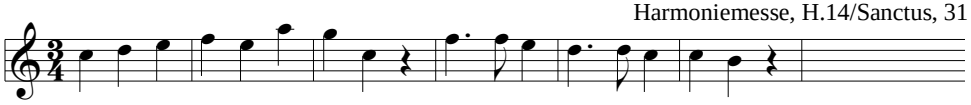
Bar Trio H.40/ii, trio



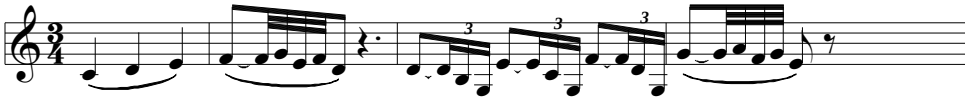
Pf Trio H.13/ii, 74



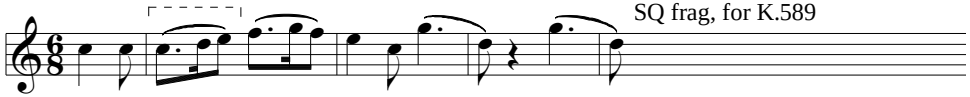
Harmoniemesse, H.14/Sanctus, 31

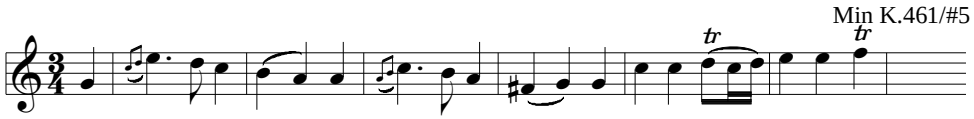


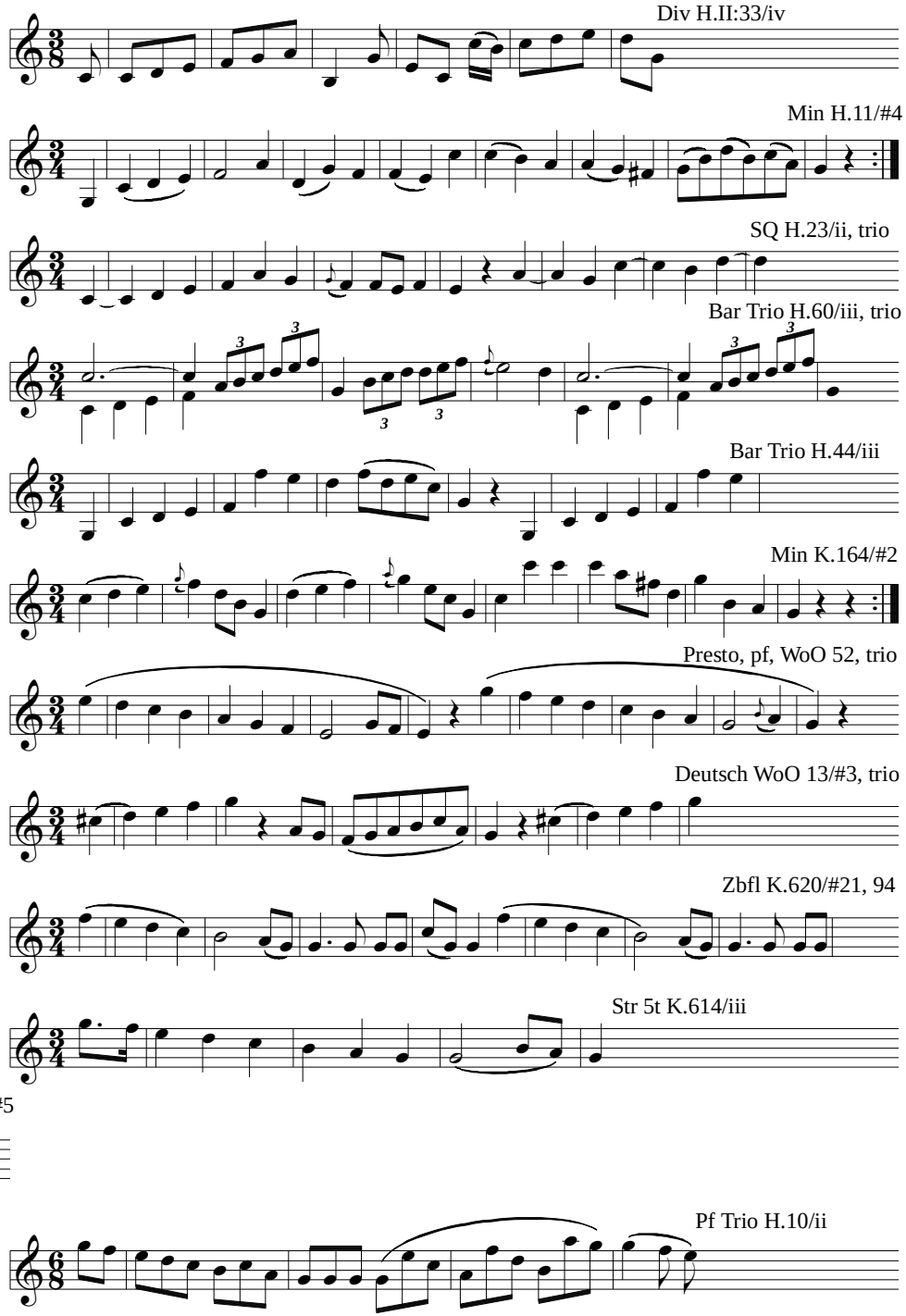
Sym K.551/ii, 28

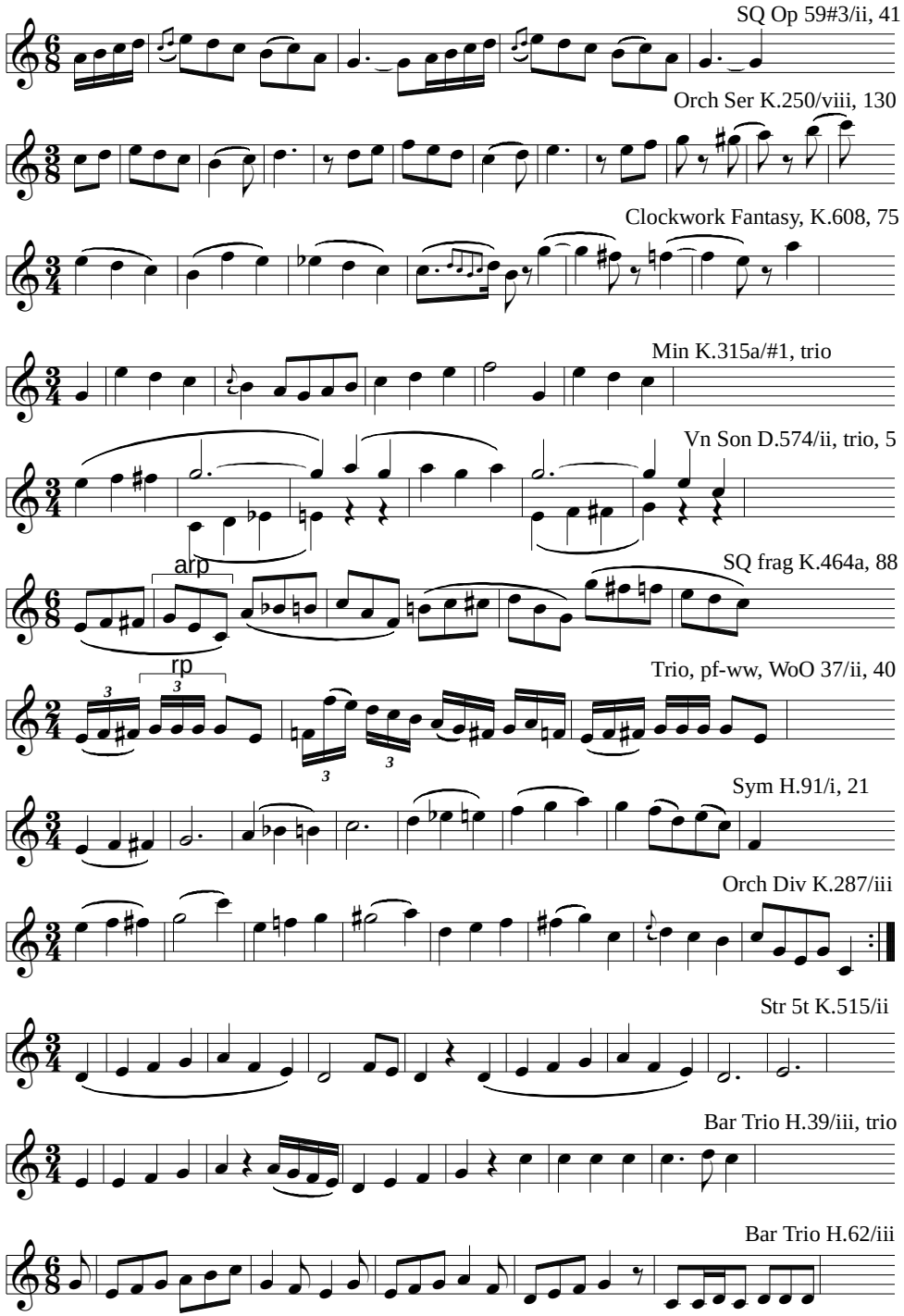


SQ frag, for K.589




Min K.461/#5


Div H.II:33/iv
Min H.11/#4
SQ H.23/ii, trio
Bar Trio H.60/iii, trio
Bar Trio H.44/iii
Min K.164/#2
Presto, pf, WoO 52, trio
Deutsch WoO 13/#3, trio
Zbfl K.620/#21, 94
Str 5t K.614/iii
Pf Trio H.10/ii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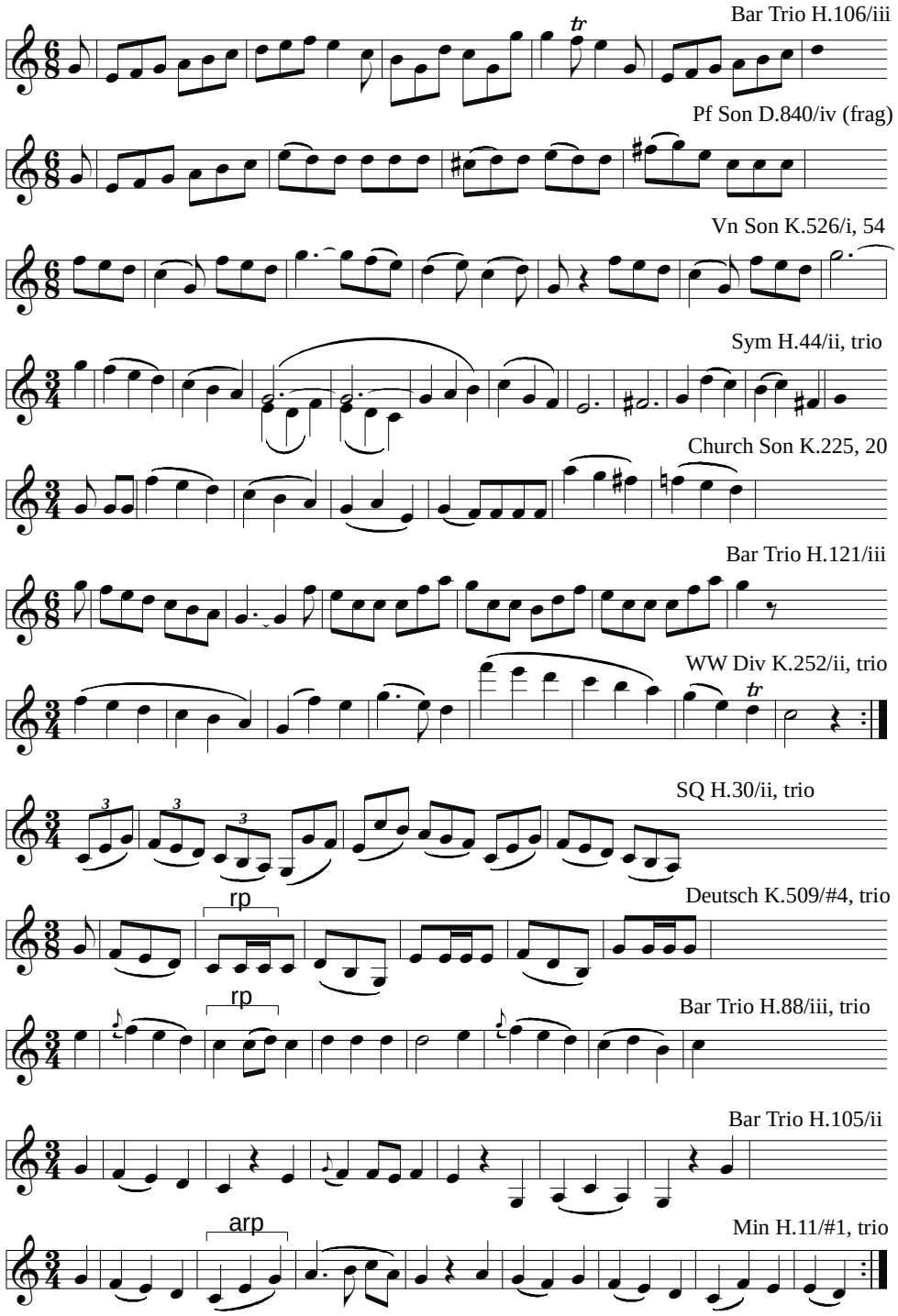
Bar Trio H.62/iii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Bar Trio H.121/iii
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tr
SQ H.30/ii, trio
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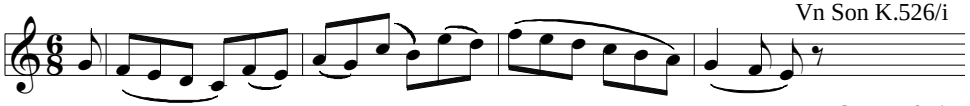
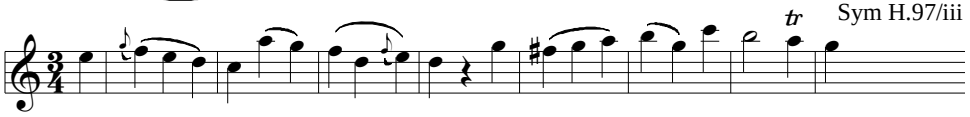
3
3
Deutsch K.509/#4, trio
rp
Bar Trio H.88/iii, trio
rp
Bar Trio H.105/ii
Min H.11/#1, trio
arp

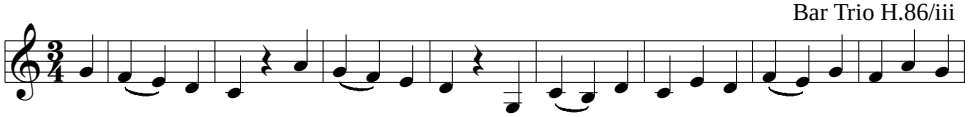
Vn Son K.526/i



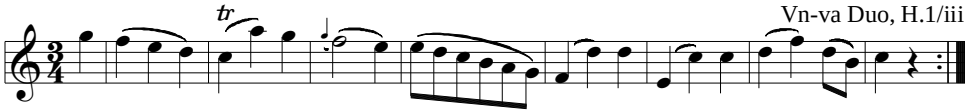
Sym H.97/iii



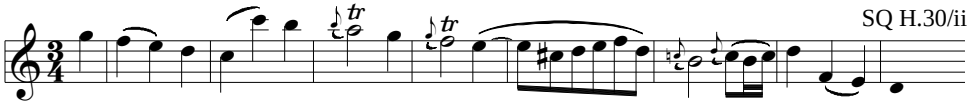
Bar Trio H.86/iii



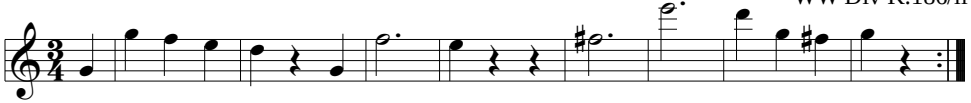
Vn-va Duo, H.1/iii



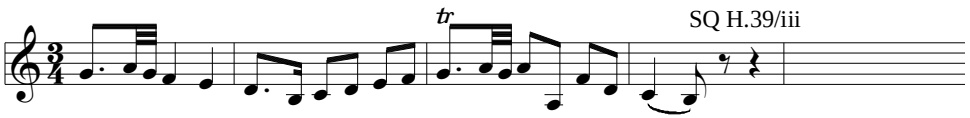
SQ H.30/ii



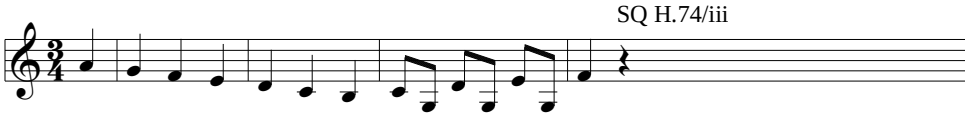
WW Div K.186/ii



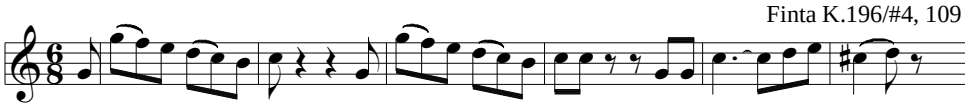
SQ H.39/iii



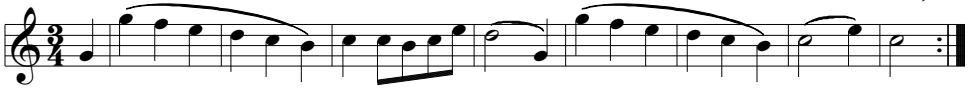
SQ H.74/iii



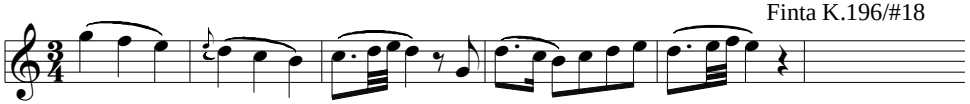
Finta K.196/#4, 109



Min K.164/#1, trio

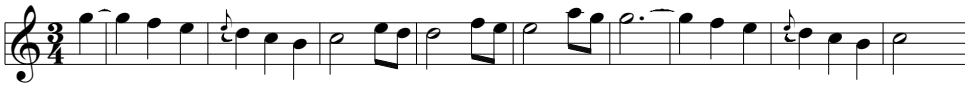


Finta K.196/#18

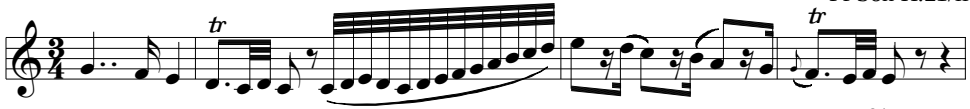


Lo speziale, H.3/#7

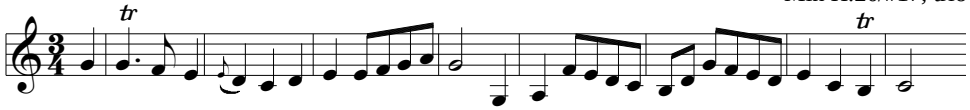
Bar Trio H.82/iii



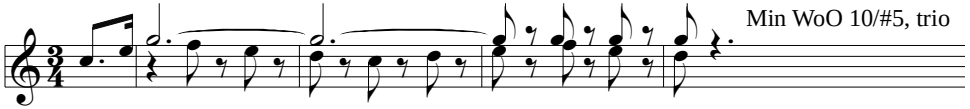
Pf Son H.21/ii



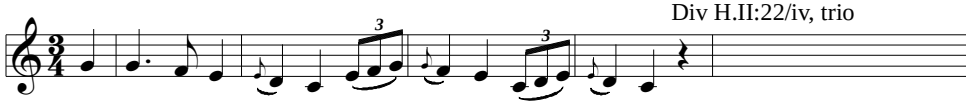
Min H.20/#17, trio



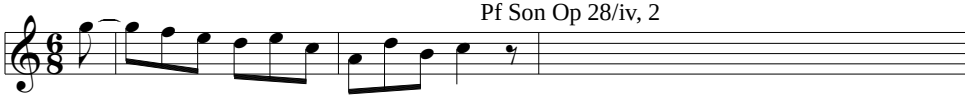
Min WoO 10/#5, trio



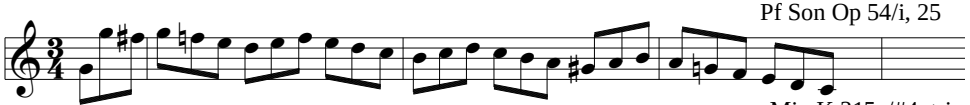
Div H.II:22/iv, trio



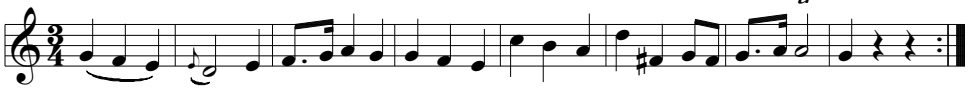
Pf Son Op 28/iv, 2



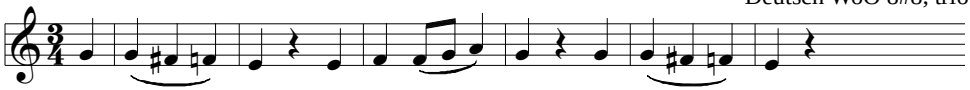
Pf Son Op 54/i, 25



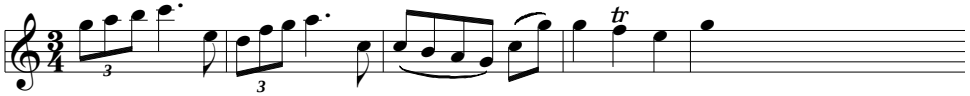
Min K.315a/#4, trio



Deutsch WoO 8#8, trio

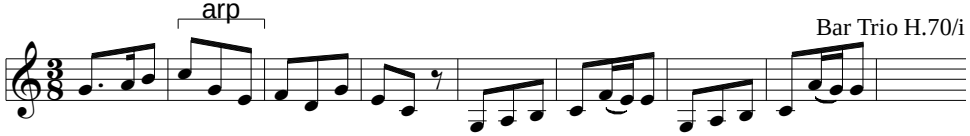


Concertone, 2 vn + orch, K.190/iii, 85

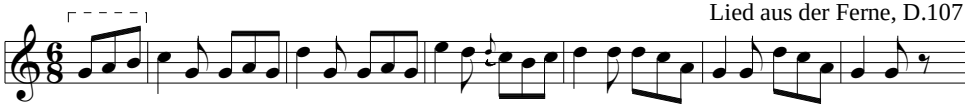


arp

Bar Trio H.70/i

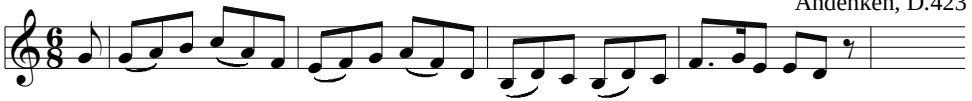


Lied aus der Ferne, D.107

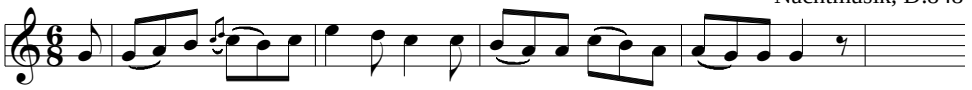


arp

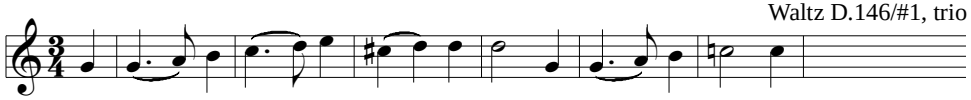
Andenken, D.423



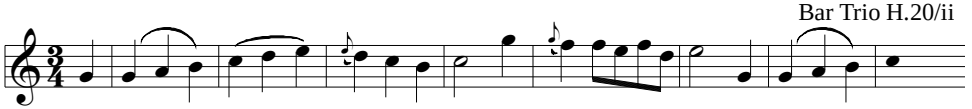
Nachtmusik, D.848



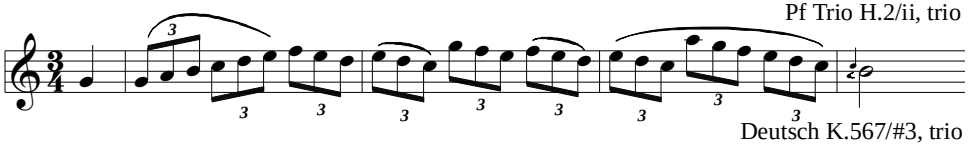
Waltz D.146/#1, trio



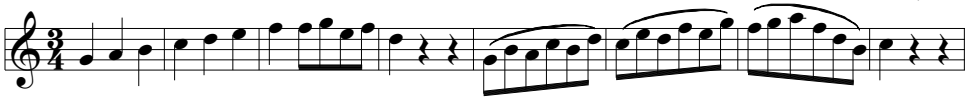
Bar Trio H.20/ii



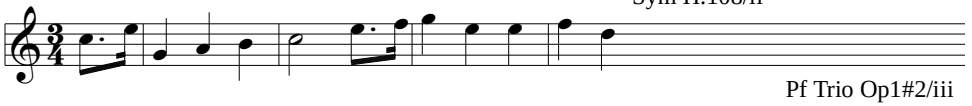
Pf Trio H.2/ii, trio



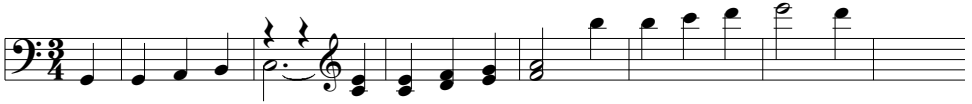
Deutsch K.567/#3, trio



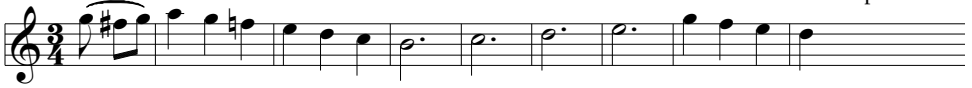
Sym H.108/ii



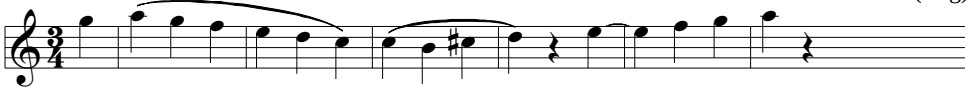
Pf Trio Op1#2/iii



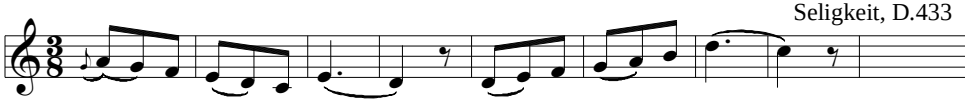
Pf Son Op 2#3/iii



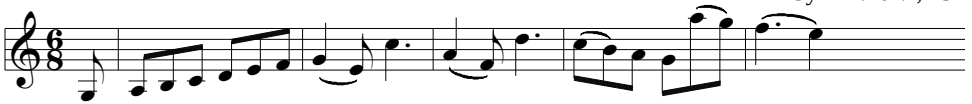
Pf Son D.840/iii (frag)

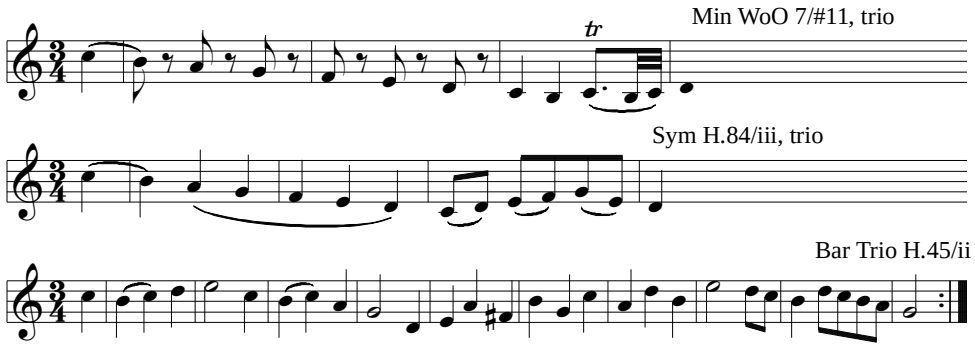


Seligkeit, D.433

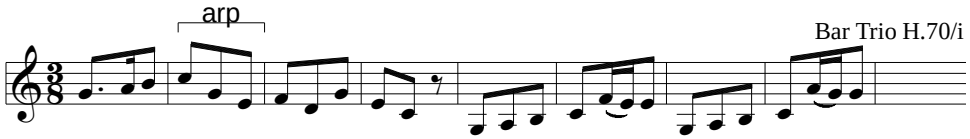


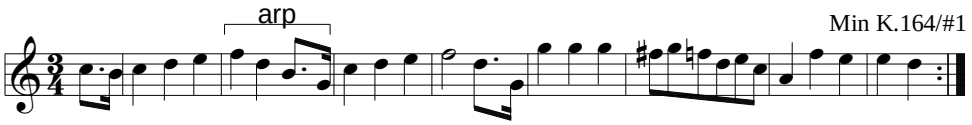
Sym H.101/i, 23

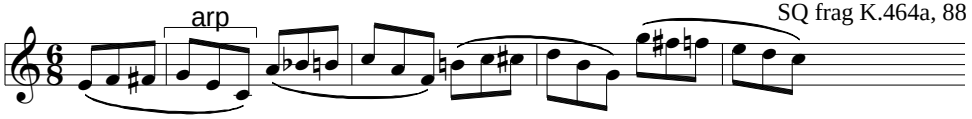



Min WoO 7/#11, trio
tr
Sym H.84/iii, trio
Bar Trio H.45/ii

Δ2^B1, 4L+ARP


arp
Bar Trio H.70/i


arp
Min K.164/#1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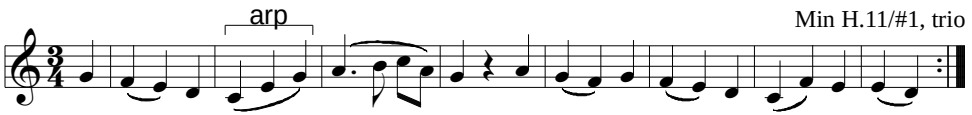
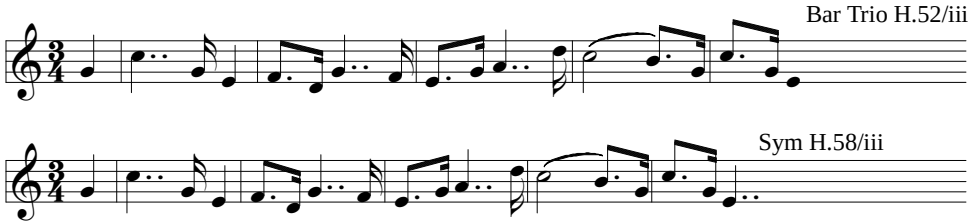
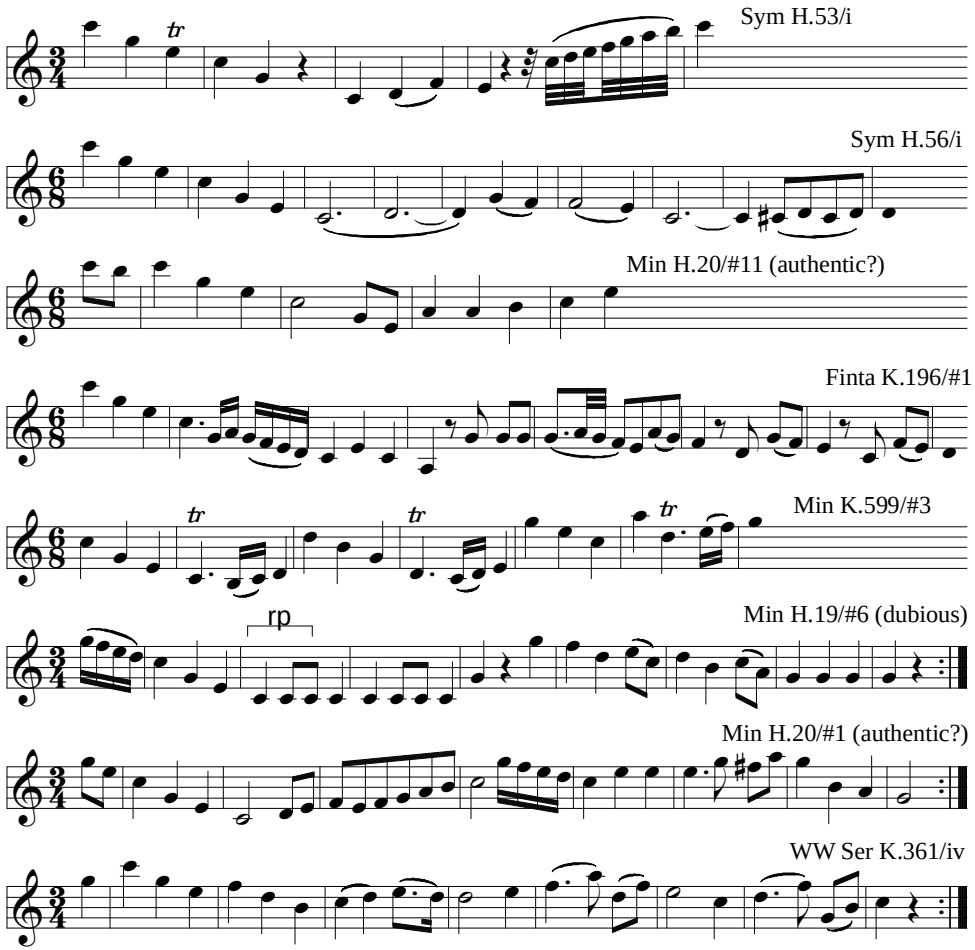
SQ frag K.464a, 88


arp
Min H.11/#1, trio

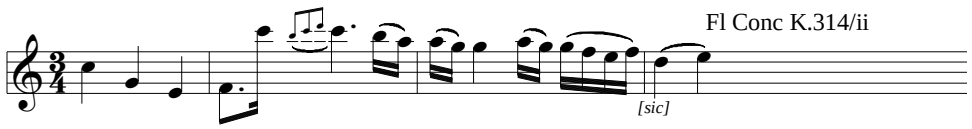
arp
Andenken, D.423

EX 28:
Δ2^B1, ARP

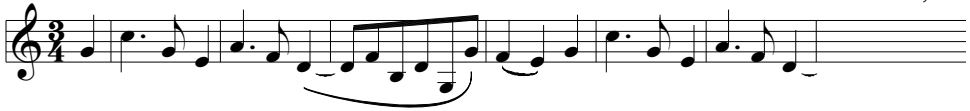




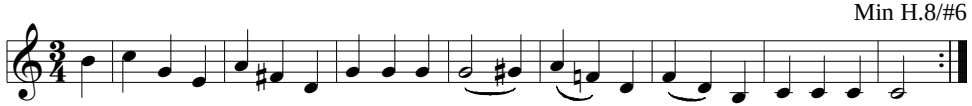
Fl Conc K.314/ii



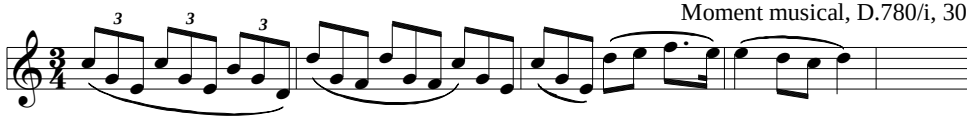
Min K.176/#2, trio



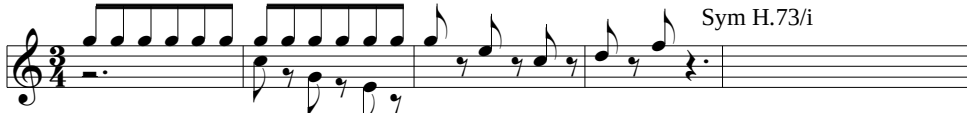
Min H.8/#6



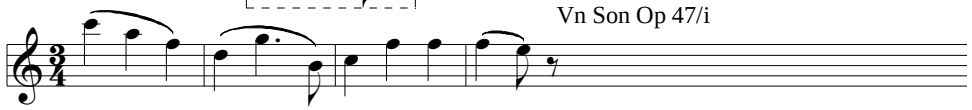
Moment musical, D.780/i, 30



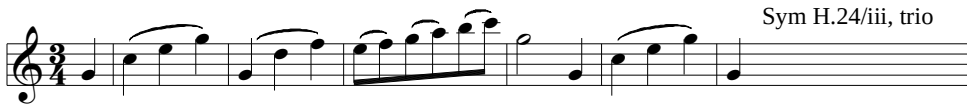
Sym H.73/i



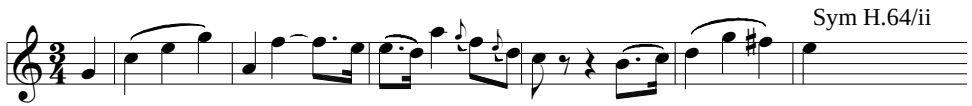
Vn Son Op 47/i



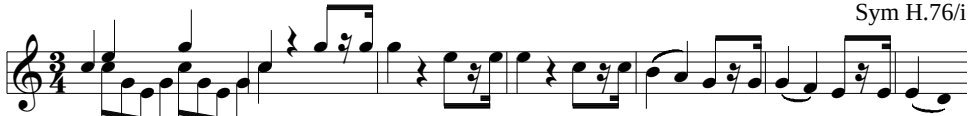
Sym H.24/iii, trio



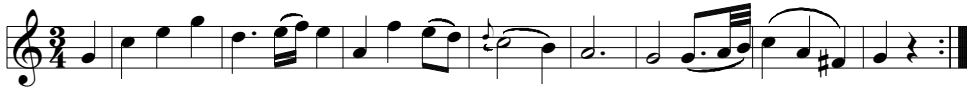
Sym H.64/ii



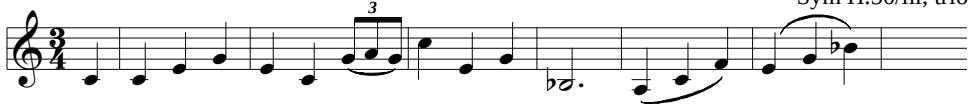
Sym H.76/i



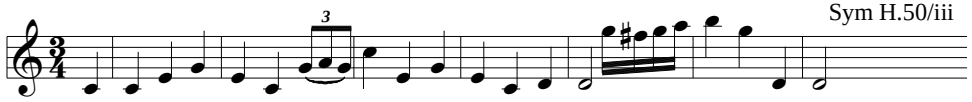
Min H.19/#12 (dubious)

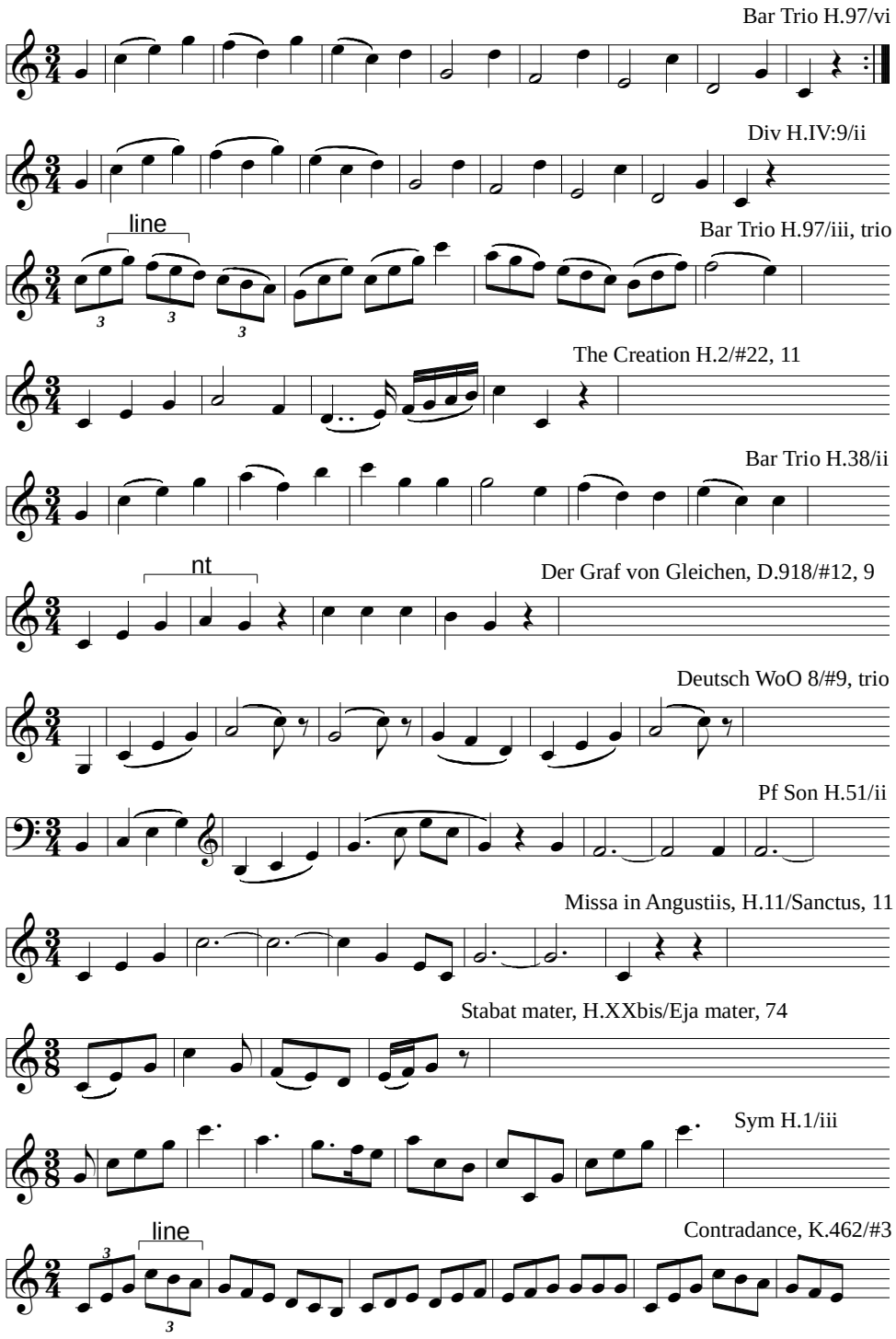


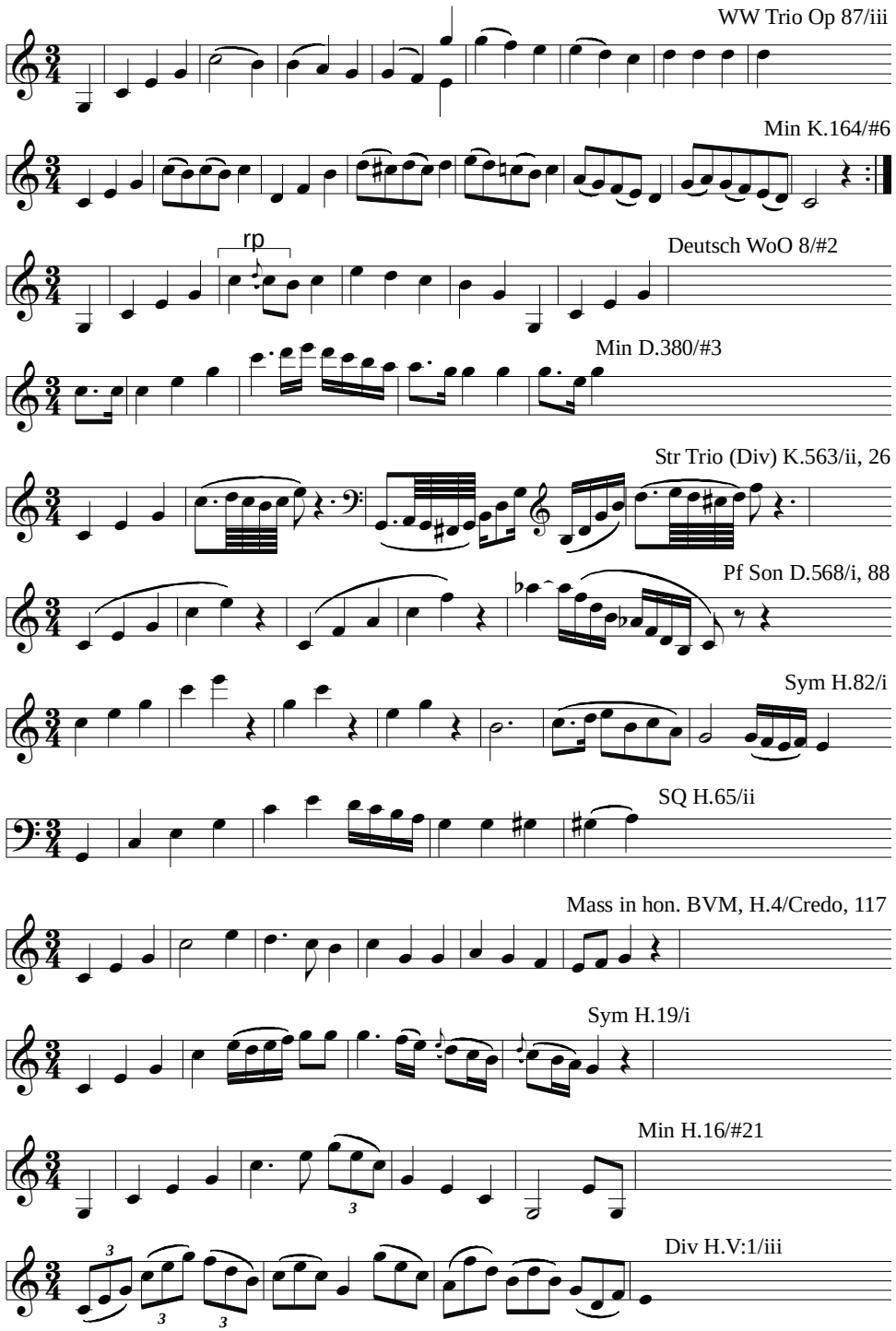
Sym H.50/iii, trio

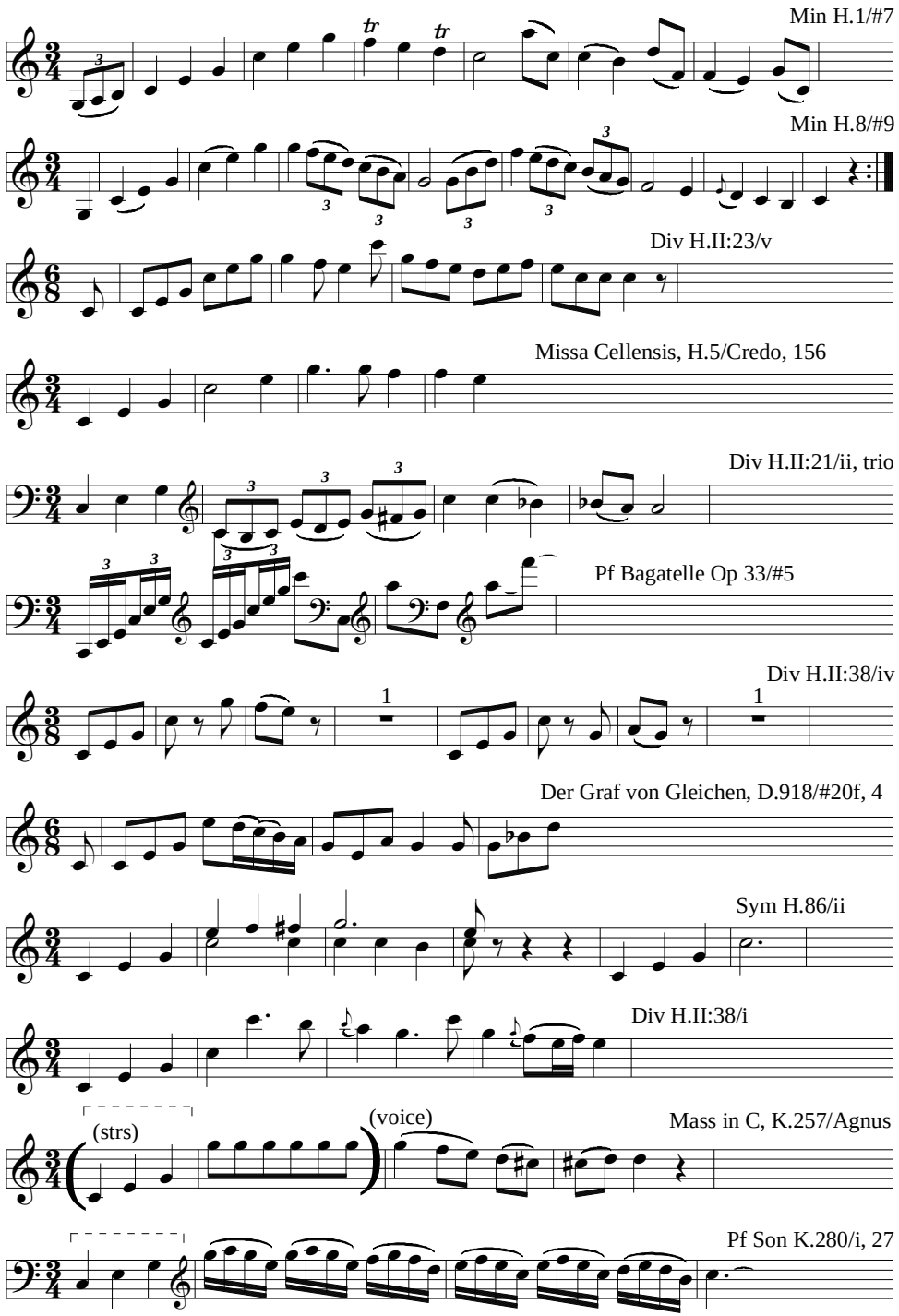


Sym H.50/iii

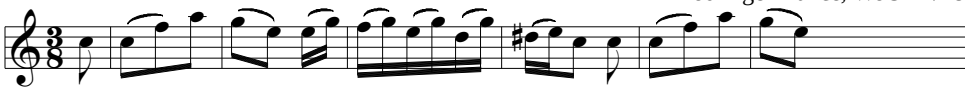



Bar Trio H.97/vi
Div H.IV:9/ii
line
Bar Trio H.97/iii, trio
The Creation H.2/#22, 11
Bar Trio H.38/ii
nt
Der Graf von Gleichen, D.918/#12, 9
Deutsch WoO 8/#9, trio
Pf Son H.51/ii
Missa in Angustiis, H.11/Sanctus, 11
Stabat mater, H.XXbis/Eja mater, 74
Sym H.1/iii
line
Contradance, K.462/#3

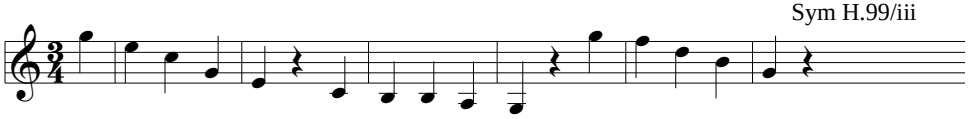

WW Trio Op 87/iii
Min K.164/#6
rp
Deutsch WoO 8/#2
Min D.380/#3
Str Trio (Div) K.563/ii, 26
Pf Son D.568/i, 88
Sym H.82/i
SQ H.65/ii
Mass in hon. BVM, H.4/Credo, 117
Sym H.19/i
Min H.16/#21
Div H.V:1/iii


Min H.1/#7
Min H.8/#9
Div H.II:23/v
Missa Cellensis, H.5/Credo, 156
Div H.II:21/ii, trio
Pf Bagatelle Op 33/#5
Div H.II:38/iv
Der Graf von Gleichen, D.918/#20f, 4
Sym H.86/ii
Div H.II:38/i
(strs)
(voice)
Mass in C, K.257/Agnus
Pf Son K.280/i, 27

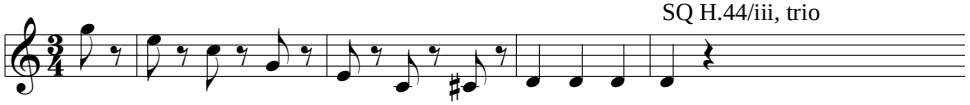
Modlinger Dance, WoO 17/#8



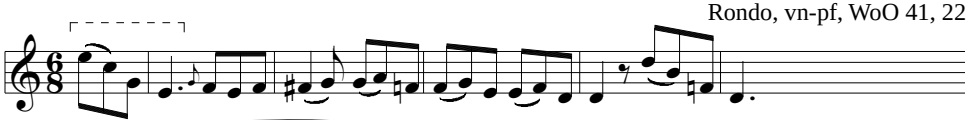
Sym H.99/iii



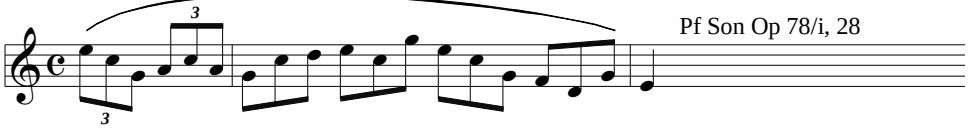
SQ H.44/iii, trio



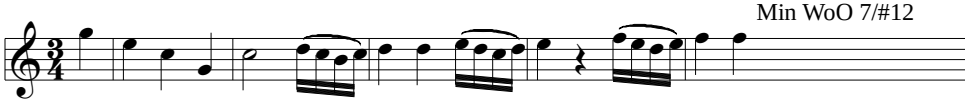
Rondo, vn-pf, WoO 41, 22



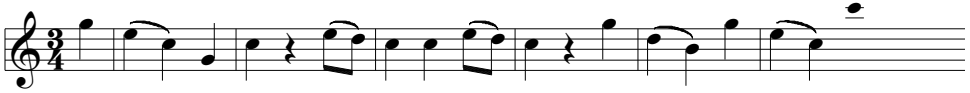
Pf Son Op 78/i, 28



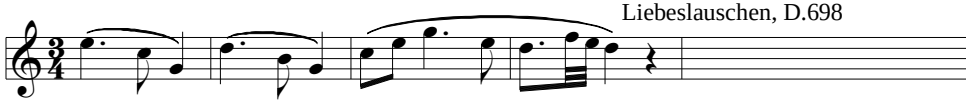
Min WoO 7/#12



Bar Trio H.33/ii

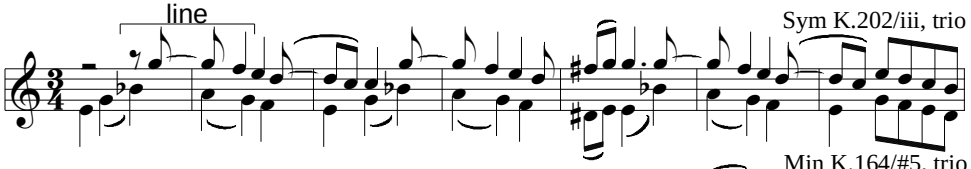


Liebeslauschen, D.698

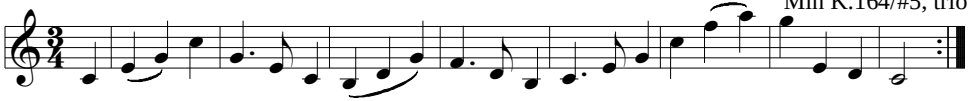


line

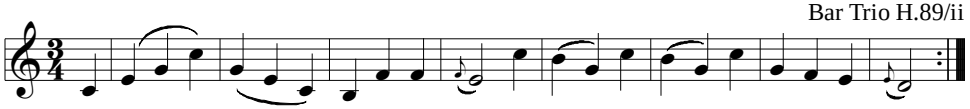
Sym K.202/iii, trio



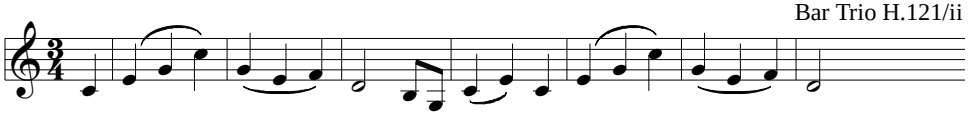
Min K.164/#5, trio

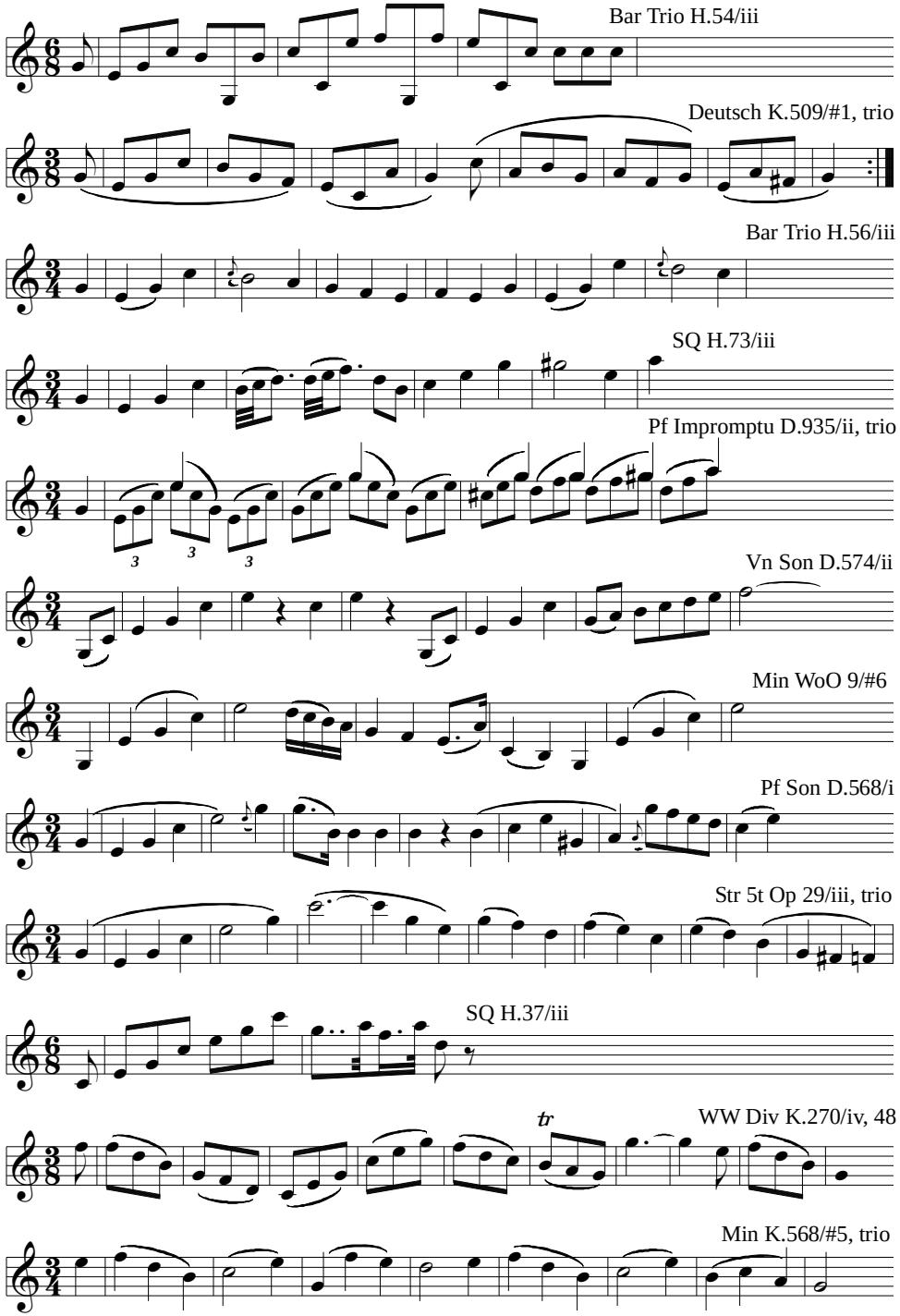


Bar Trio H.89/ii



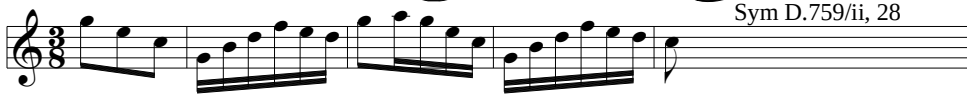
Bar Trio H.121/ii



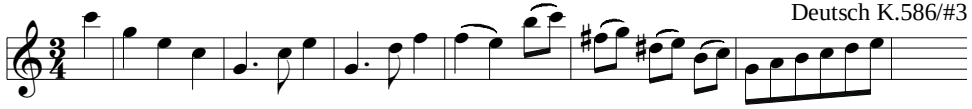

Bar Trio H.54/iii
Deutsch K.509/#1, trio
Bar Trio H.56/iii
SQ H.73/iii
Pf Impromptu D.935/ii, trio
Vn Son D.574/ii
Min WoO 9/#6
Pf Son D.568/i
Str 5t Op 29/iii, trio
SQ H.37/iii
WW Div K.270/iv, 48
Min K.568/#5, trio

Min H.16/#6

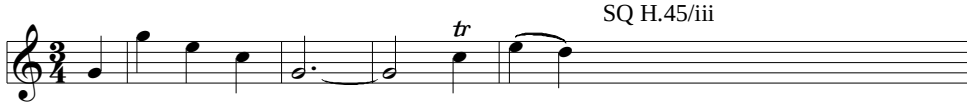
Sym D.759/ii, 28



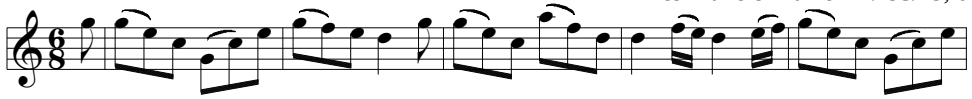
Deutsch K.586/#3



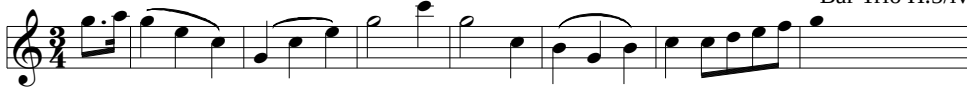
SQ H.45/iii



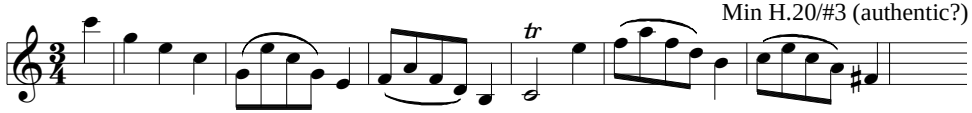
Des Müllers Blumen D.795/#9, 6



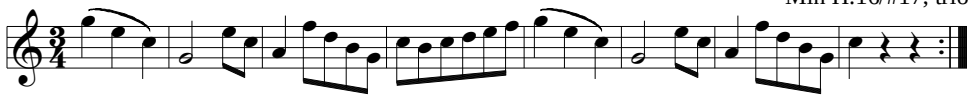
Bar Trio H.5/iv



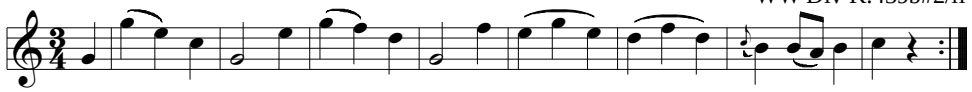
Min H.20/#3 (authentic?)



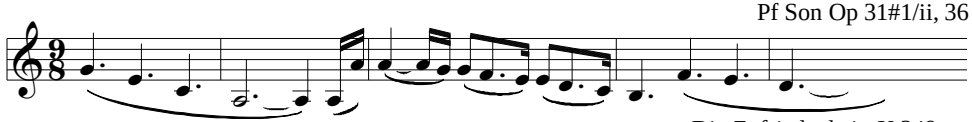
Min H.16/#17, trio



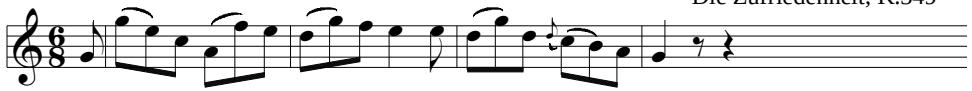
WW Div K.439b#2/ii



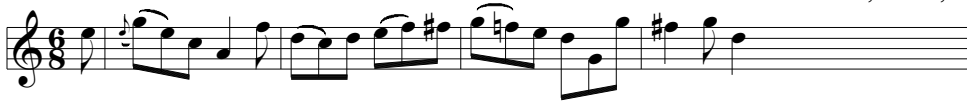
Pf Son Op 31#1/ii, 36

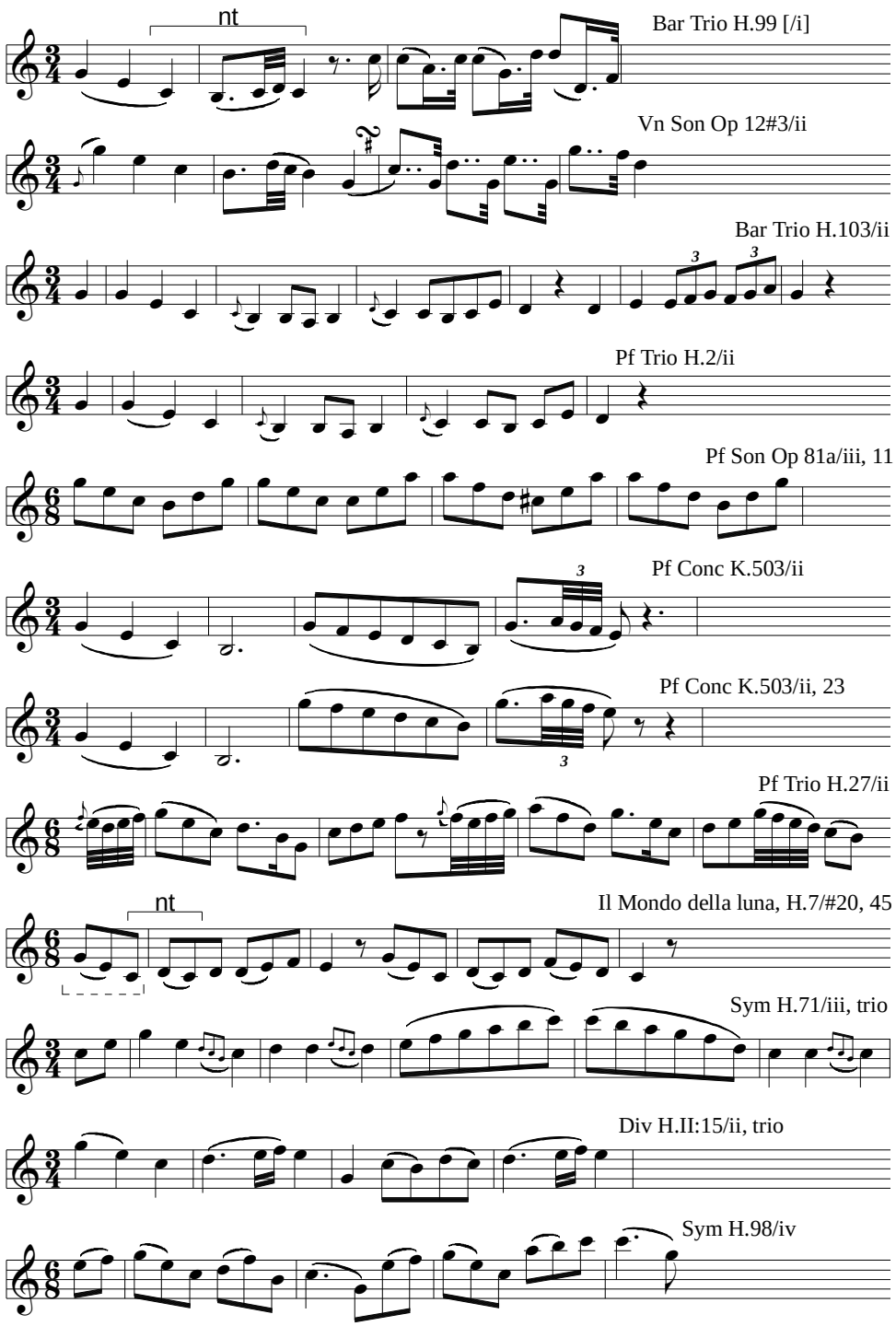


Die Zufriedenheit, K.349

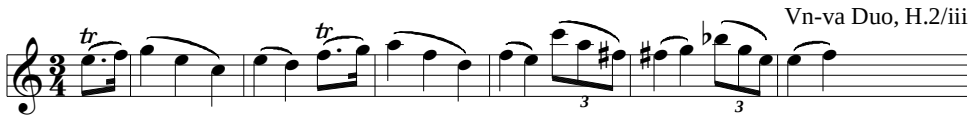


Mein Gruss an den Mai, D.305, 4

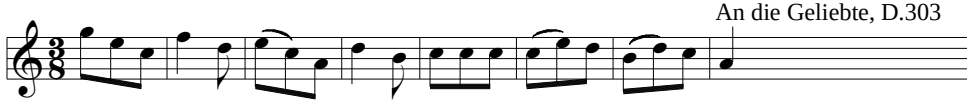



nt
Bar Trio H.99 [/i]
Vn Son Op 12#3/ii
Bar Trio H.103/ii
Pf Trio H.2/ii
Pf Son Op 81a/iii, 11
Pf Conc K.503/ii
Pf Conc K.503/ii, 23
Pf Trio H.27/ii
nt
Il Mondo della luna, H.7/#20, 45
Sym H.71/iii, trio
Div H.II:15/ii, trio
Sym H.98/iv

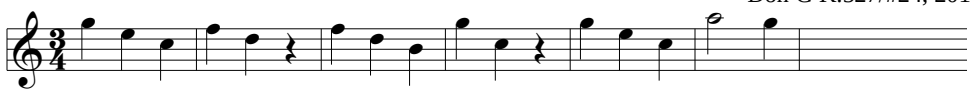
Vn-va Duo, H.2/iii



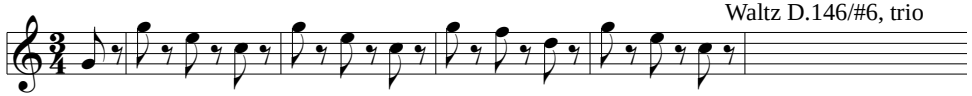
An die Geliebte, D.303



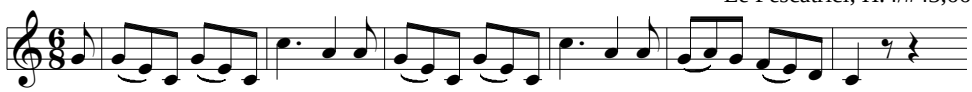
Don G K.527/#24, 201



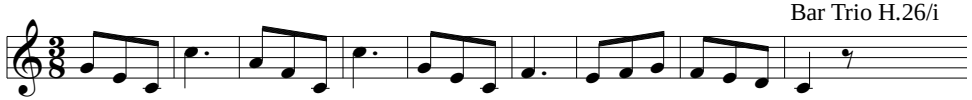
Waltz D.146/#6, trio



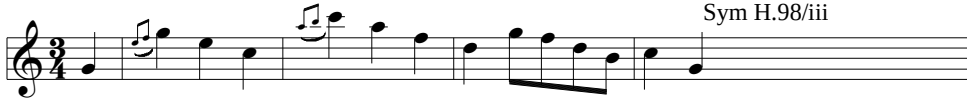
Le Pescatrici, H.4/#43,66



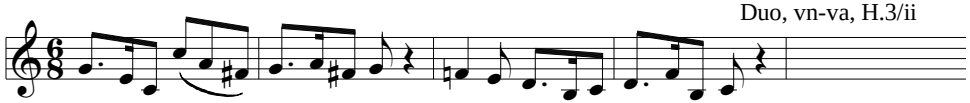
Bar Trio H.26/i



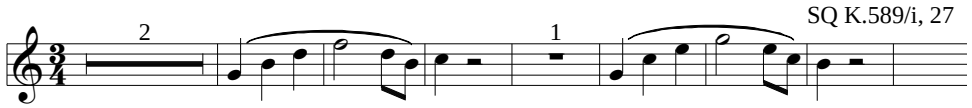
Sym H.98/iii



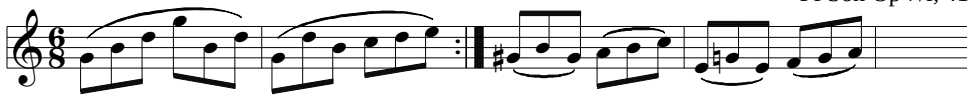
Duo, vn-va, H.3/ii



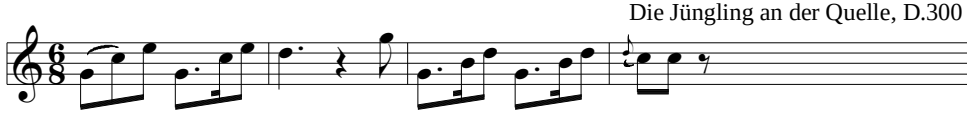
SQ K.589/i, 27



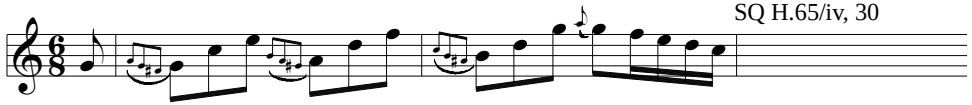
Pf Son Op 7/i, 41

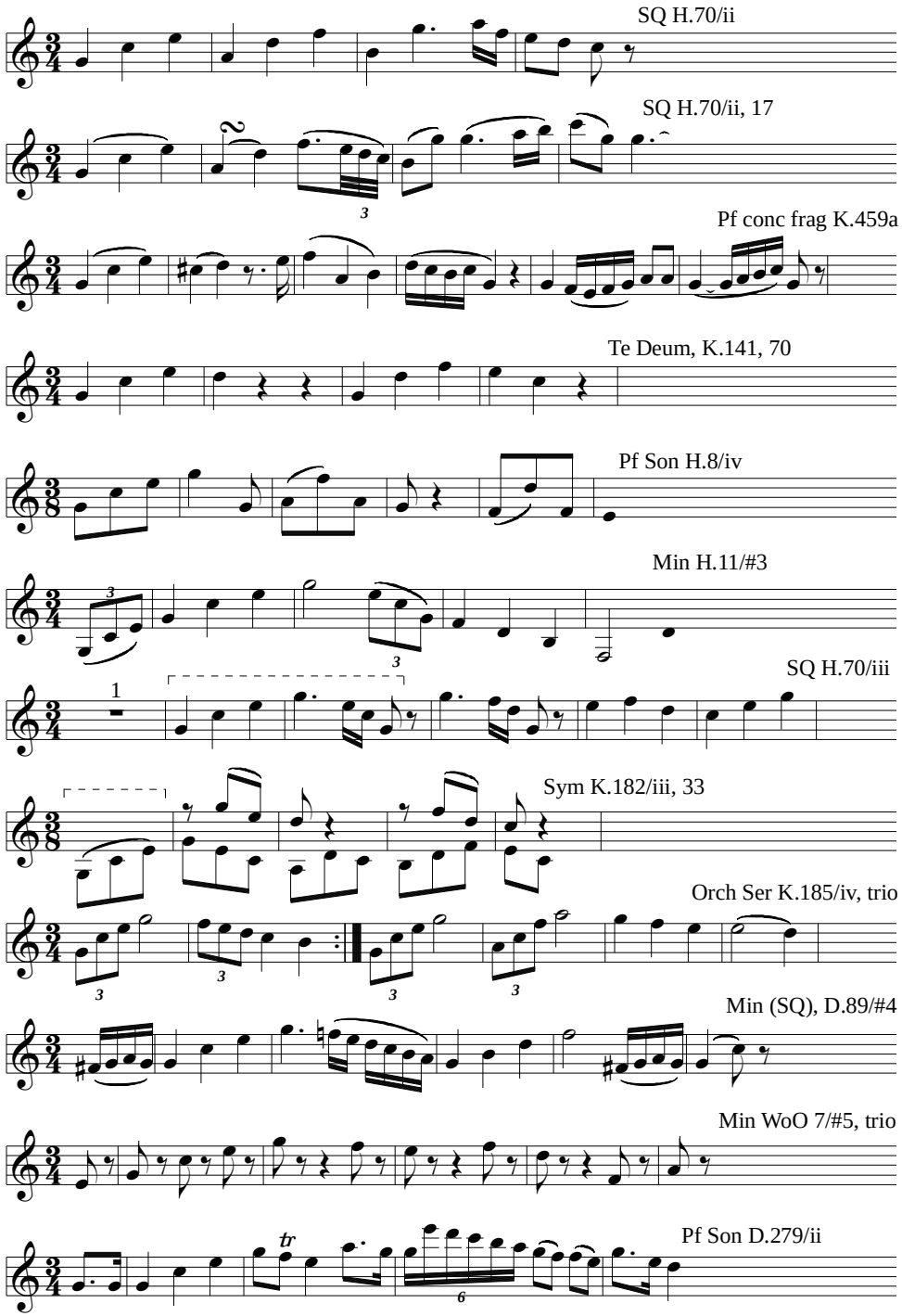


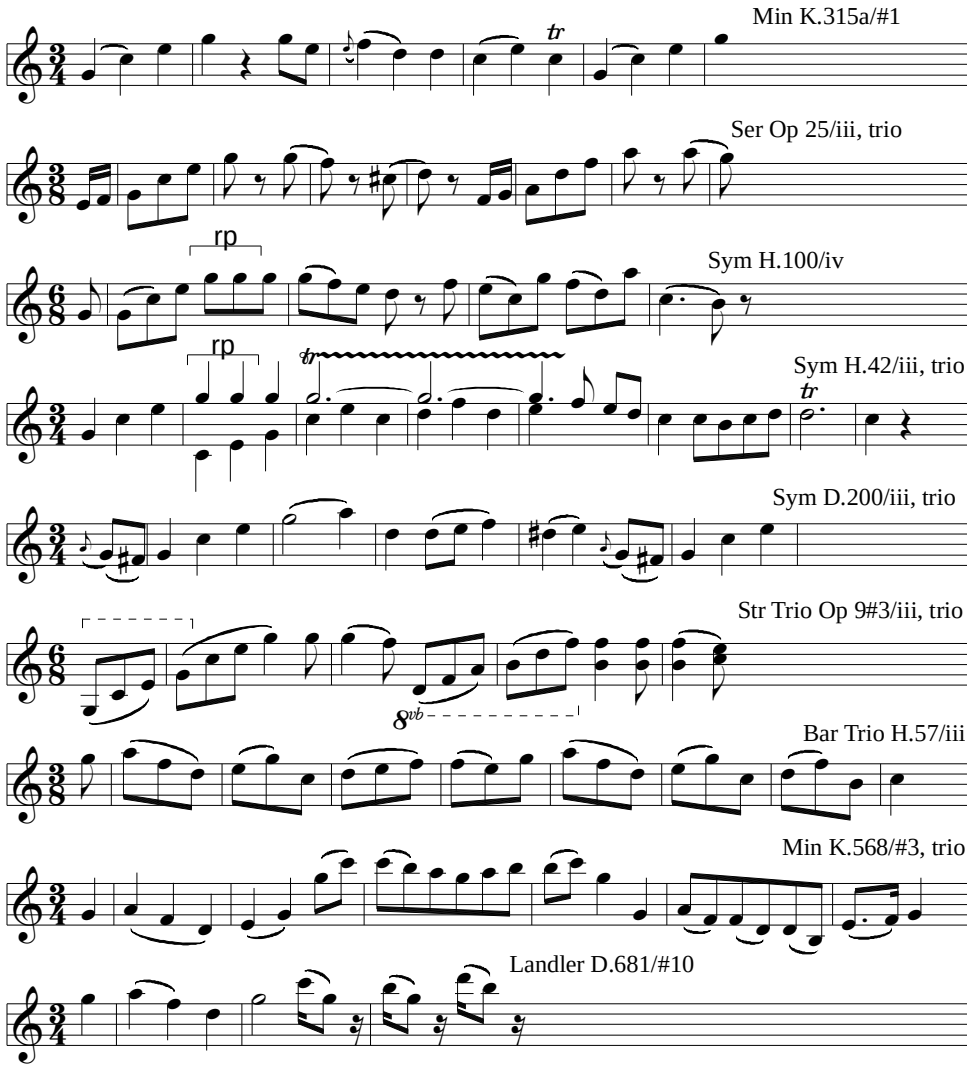
Die Jüngling an der Quelle, D.300



SQ H.65/iv, 30

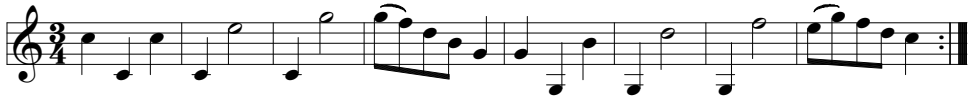



SQ H.70/ii
SQ H.70/ii, 17
Pf conc frag K.459a
Te Deum, K.141, 70
Pf Son H.8/iv
Min H.11/#3
SQ H.70/iii
Sym K.182/iii, 33
Orch Ser K.185/iv, trio
Min (SQ), D.89/#4
Min WoO 7/#5, trio
Pf Son D.279/ii

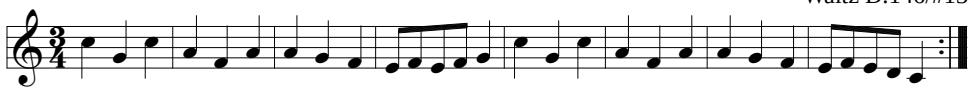

Min K.315a/#1
Ser Op 25/iii, trio
rp
Sym H.100/iv
rp
Sym H.42/iii, trio
Sym D.200/iii, trio
Str Trio Op 9#3/iii, trio
8vb
Bar Trio H.57/iii
Min K.568/#3, trio
Landler D.681/#10

EX 29:
Δ2^B1, OSC

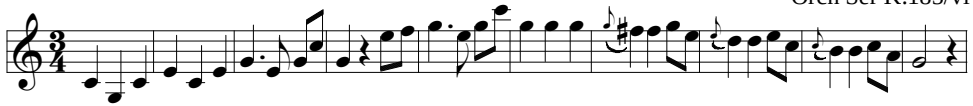
Deutsch K.536/#4



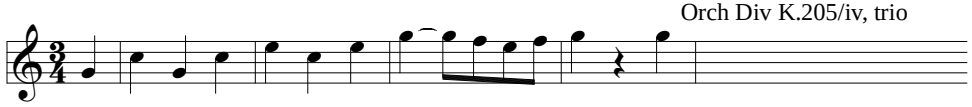
Waltz D.146/#13



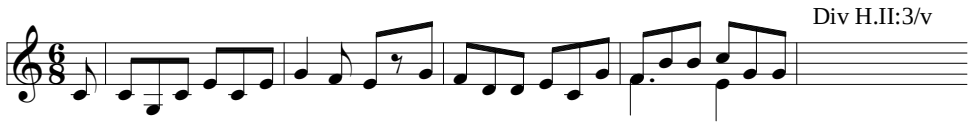
Orch Ser K.185/vi



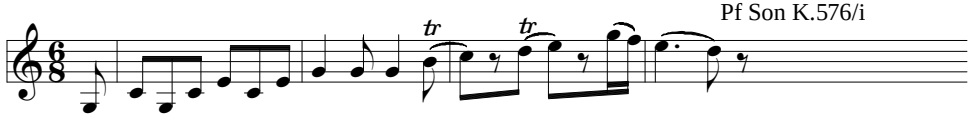
Orch Div K.205/iv, trio



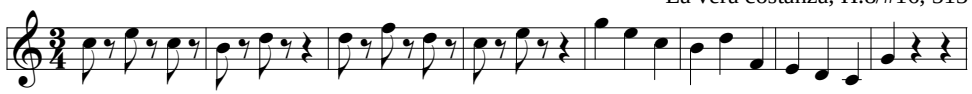
Div H.II:3/v



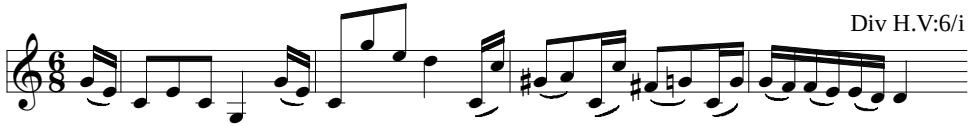
Pf Son K.576/i



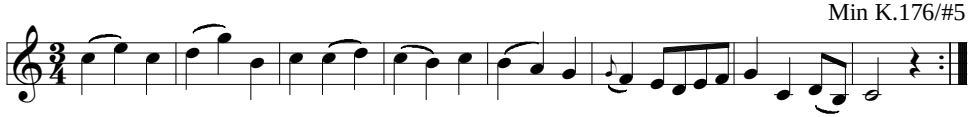
La vera costanza, H.8/#16, 513



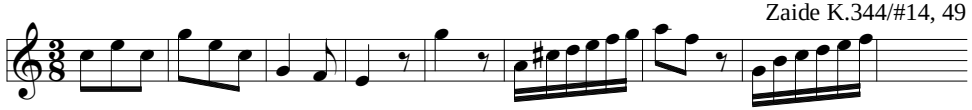
Div H.V:6/i



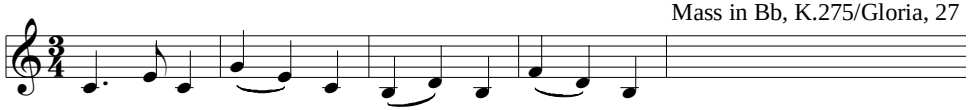
Min K.176/#5



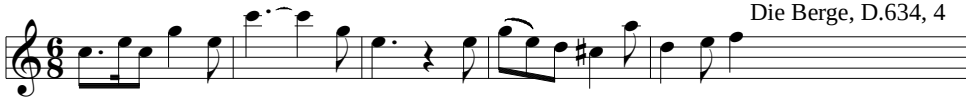
Zaide K.344/#14, 49



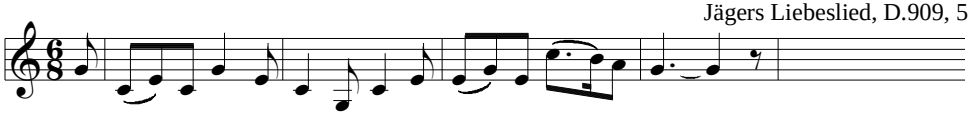
Mass in Bb, K.275/Gloria, 27



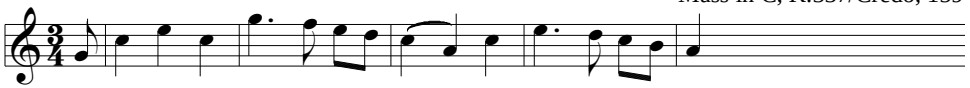
Die Berge, D.634, 4



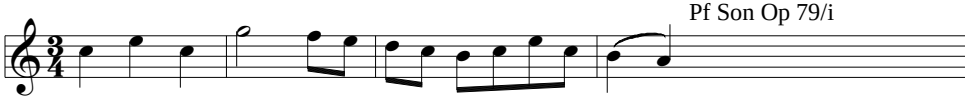
Jägers Liebeslied, D.909, 5



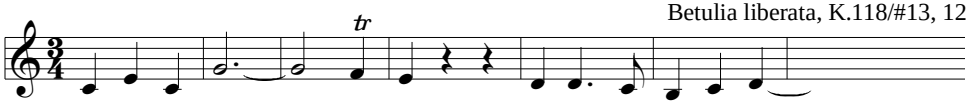
Mass in C, K.337/Credo, 159



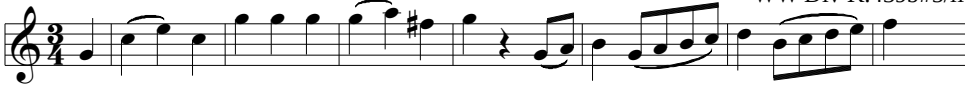
Pf Son Op 79/i



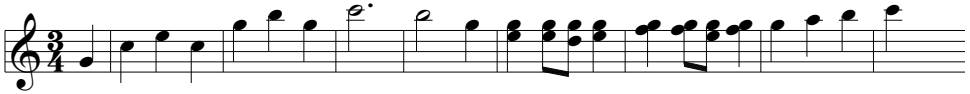
Betulia liberata, K.118/#13, 12



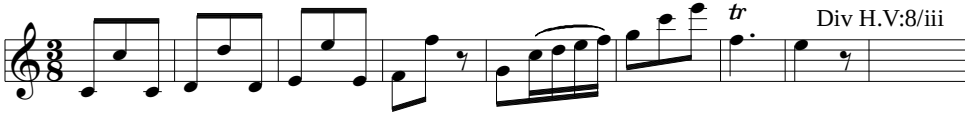
WW Div K.439b#5/ii



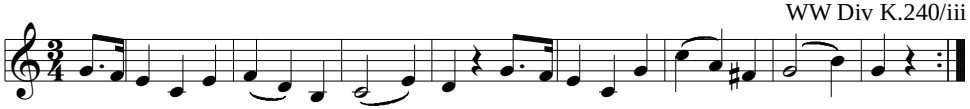
WW Div K.188/v



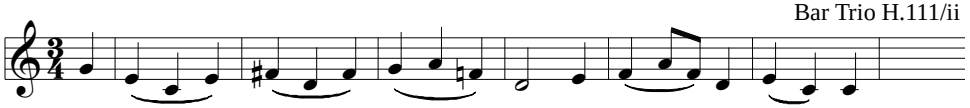
Div H.V:8/iii



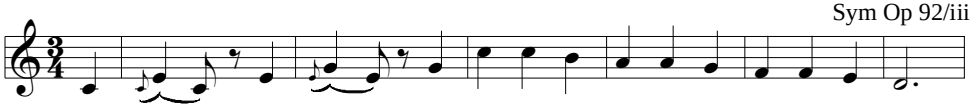
WW Div K.240/iii

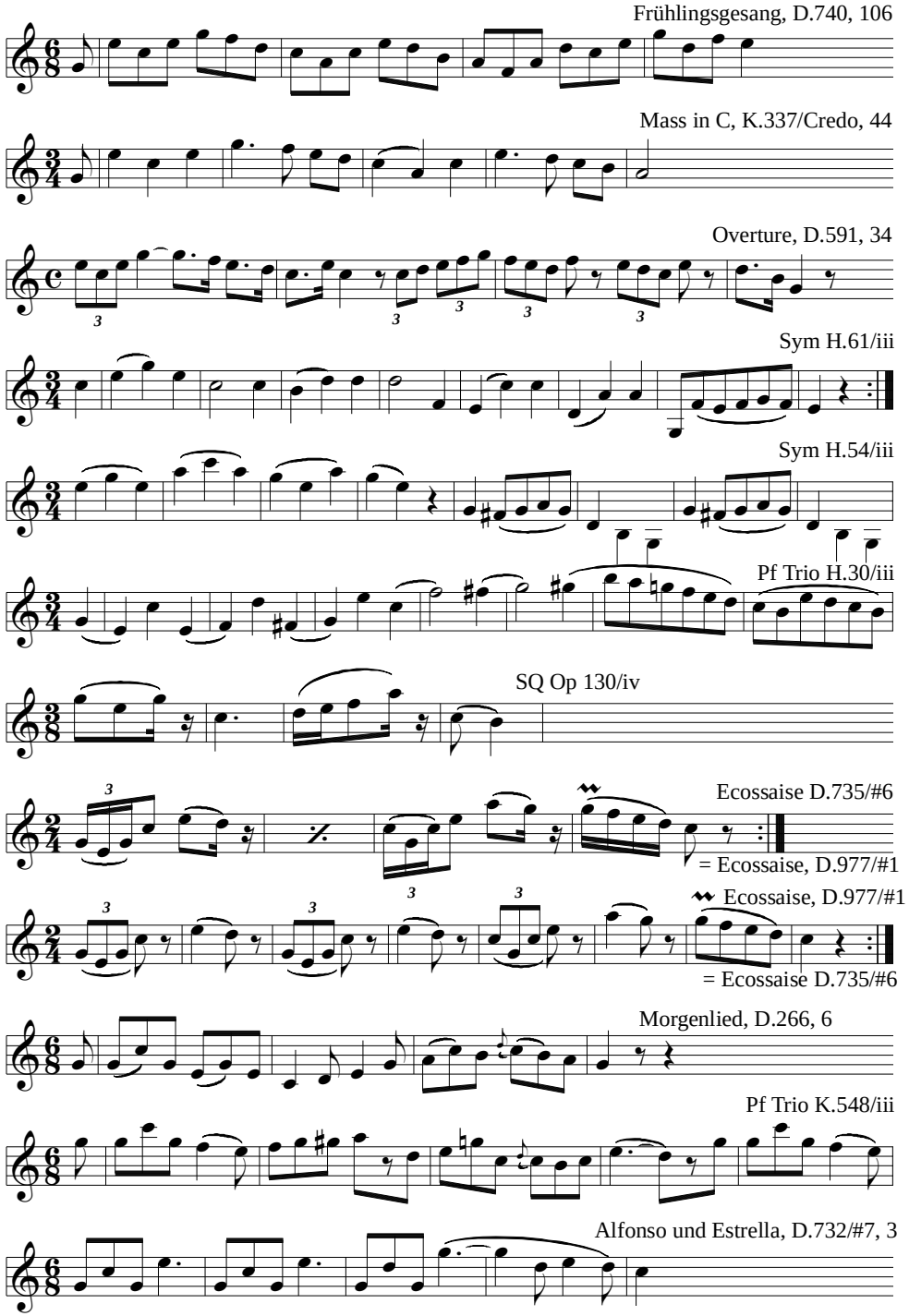


Bar Trio H.111/ii



Sym Op 92/iii




Frühlingsgesang, D.740, 106
Mass in C, K.337/Credo, 44
Overture, D.591, 34
Sym H.61/iii
Sym H.54/iii
Pf Trio H.30/iii
SQ Op 130/iv
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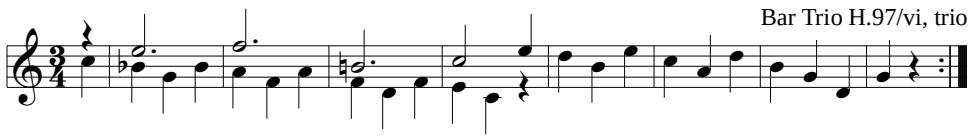
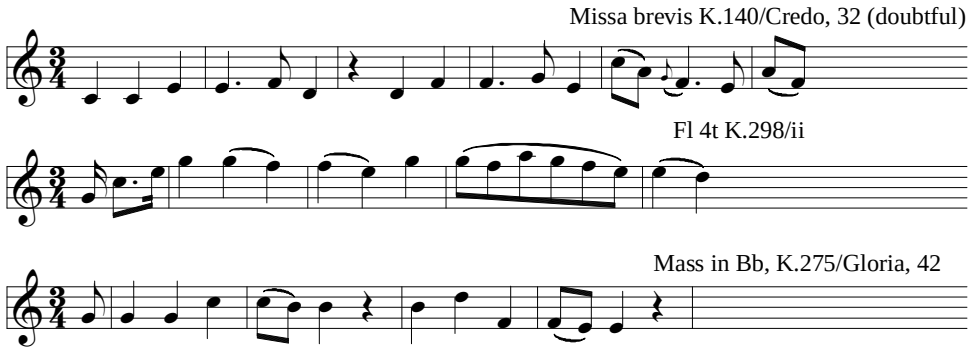
= Ecossaise, D.977/#1
Ecossaise, D.977/#1
= Ecossaise D.735/#6
Morgenlied, D.266, 6
Pf Trio K.548/iii
Alfonso und Estrella, D.732/#7, 3



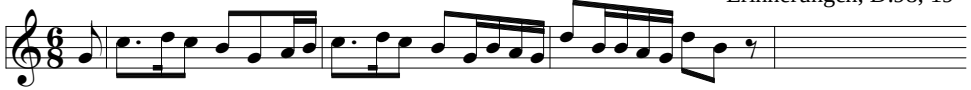
EX 30:
Δ2^B1, {RRS|S}



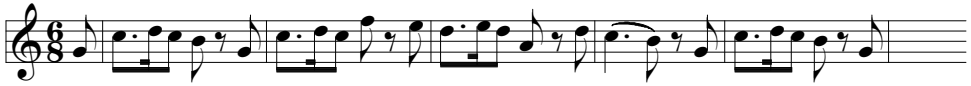
EX 31:
Δ2^B1, NT

Δ2^B1, upper whole-step NT

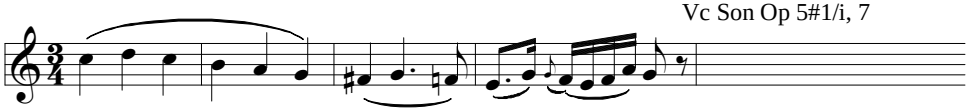
Erinnerungen, D.98, 19



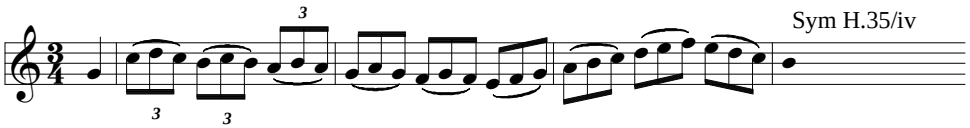
Pf Trio K.564/iii



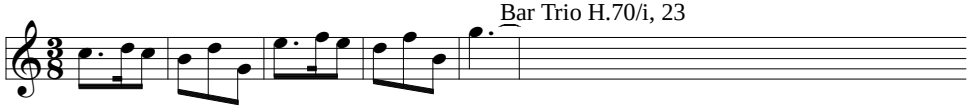
Vc Son Op 5#1/i, 7



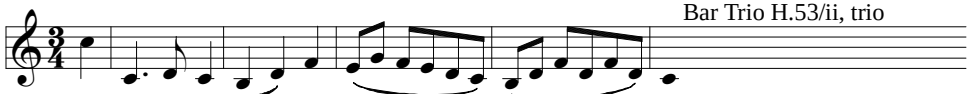
Sym H.35/iv



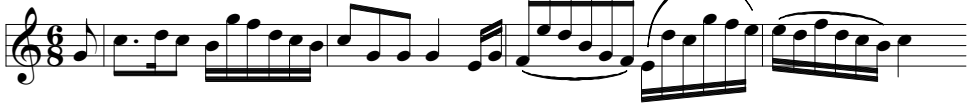
Bar Trio H.70/i, 23



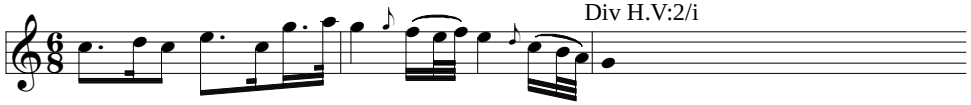
Bar Trio H.53/ii, trio



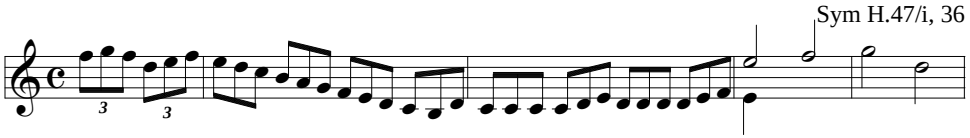
Bar Trio H.5/ii



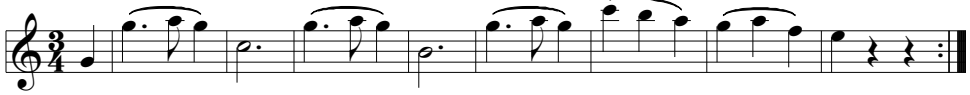
Div H.V:2/i



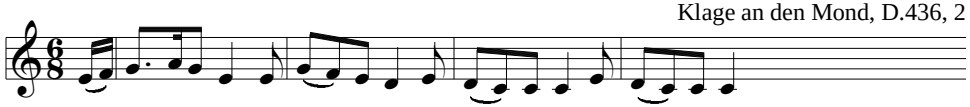
Sym H.47/i, 36



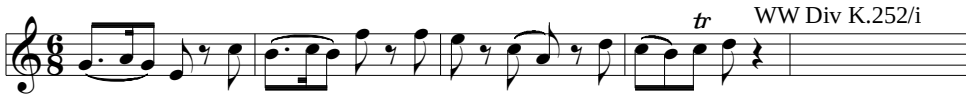
Deutsch WoO 13/#5, trio



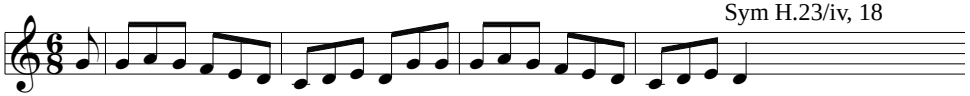
Klage an den Mond, D.436, 2



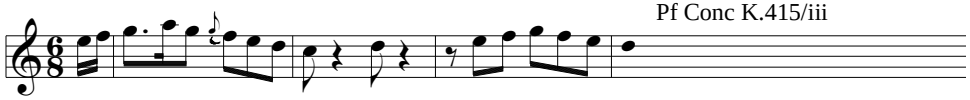
WW Div K.252/i



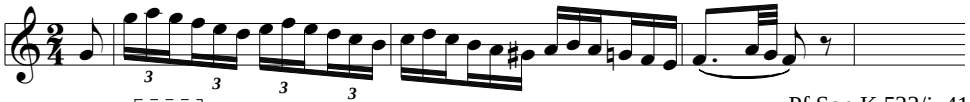
Sym H.23/iv, 18



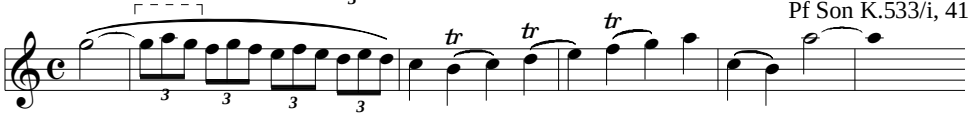
Pf Conc K.415/iii



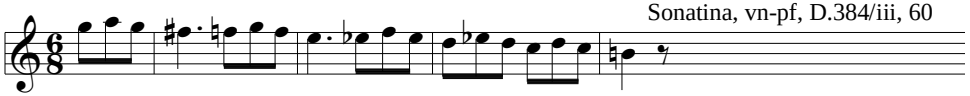
Pf Son K.309/iii, 39



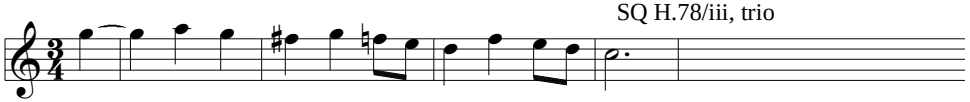
Pf Son K.533/i, 41



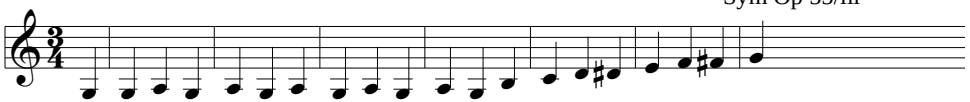
Sonatina, vn-pf, D.384/iii, 60



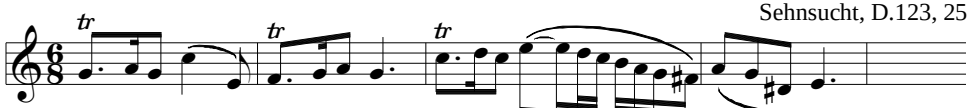
SQ H.78/iii, trio



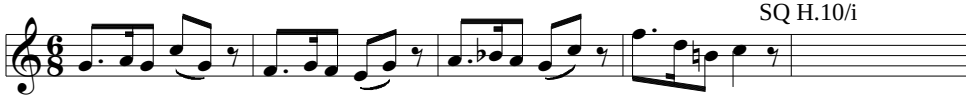
Sym Op 55/iii



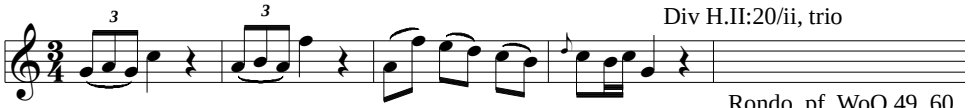
Sehnsucht, D.123, 25



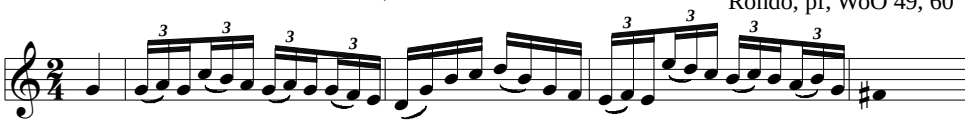
SQ H.10/i



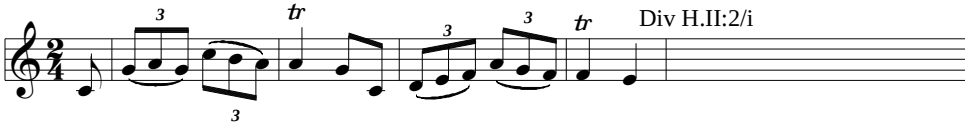
Div H.II:20/ii, trio



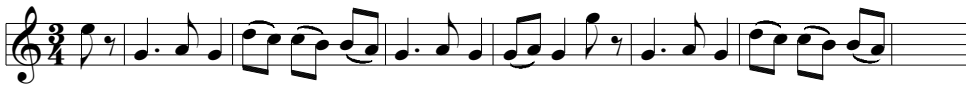
Rondo, pf, WoO 49, 60



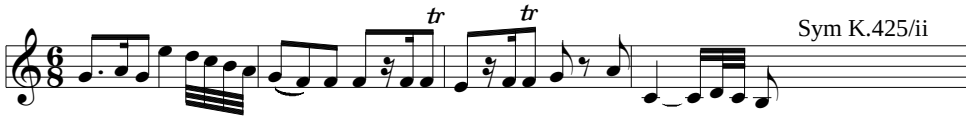
Div H.II:2/i



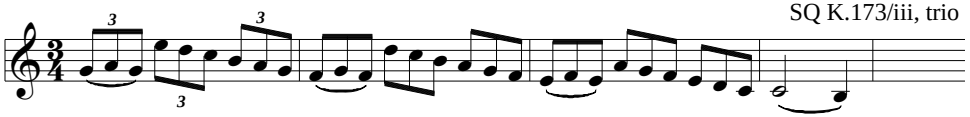
Deutsch D.783/#13



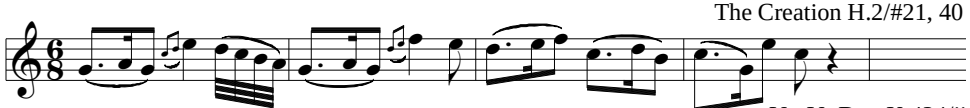
Sym K.425/ii



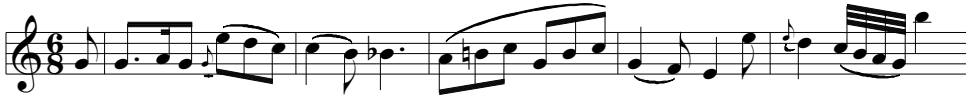
SQ K.173/iii, trio



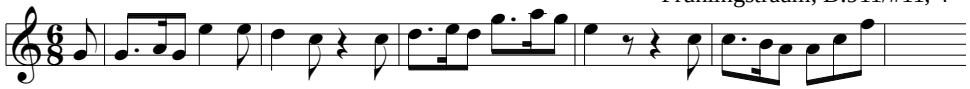
The Creation H.2/#21, 40



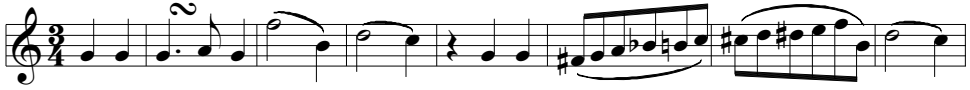
Vn-Va Duo K.424/ii



Frühlingstraum, D.911/#11, 4

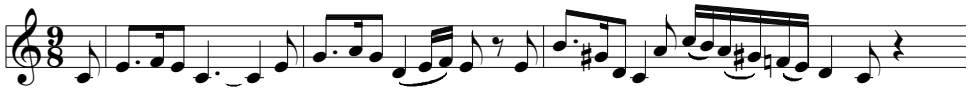


Pf Son K.457/iii, 46

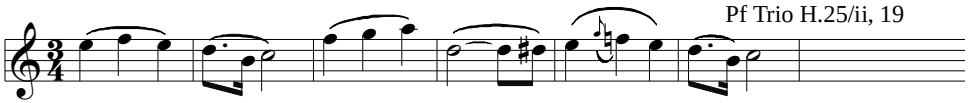


Δ2^B1, upper half-step NT

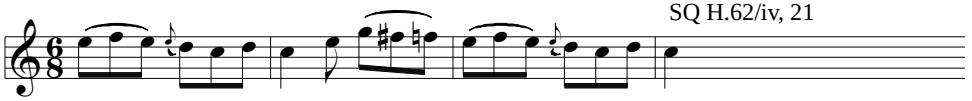
Die Sterne, D.684, 4



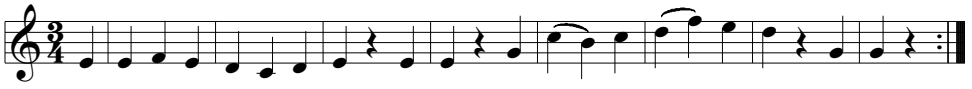
Pf Trio H.25/ii, 19



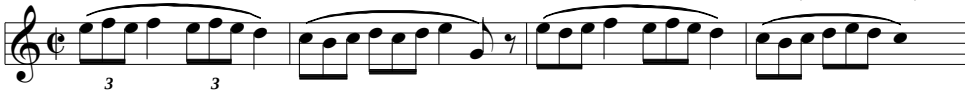
SQ H.62/iv, 21



Min H.8/#11

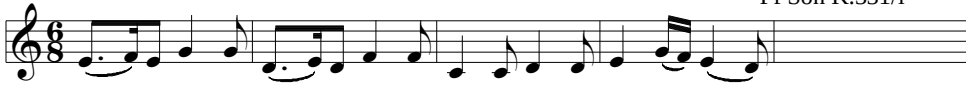


Die Verschworenen, D.787/#11, 120

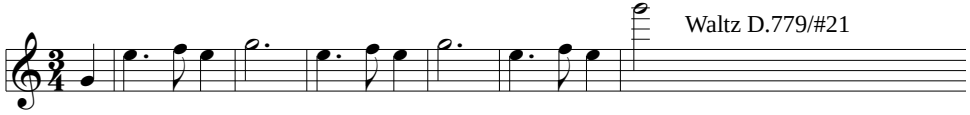


Die vierjährige Posten, D.190/Ov, 4

Pf Son K.331/i

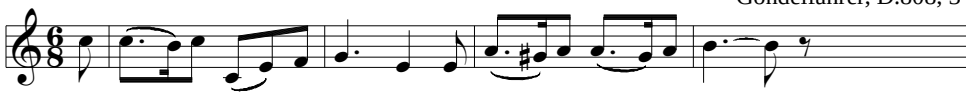


Waltz D.779/#21

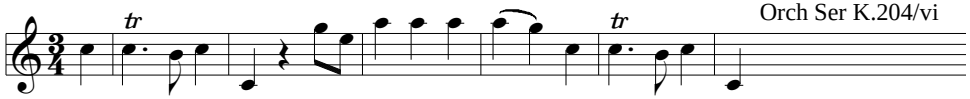


Δ2^B1, lower half-step NT

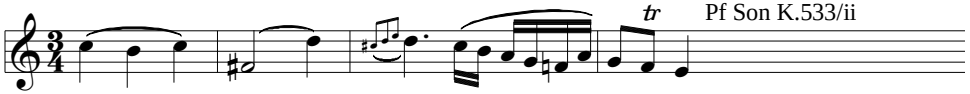
Gondelfahrer, D.808, 3



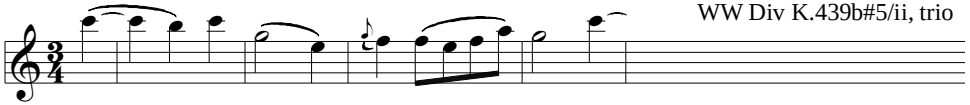
Orch Ser K.204/vi



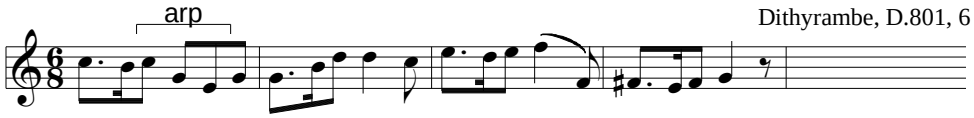
Pf Son K.533/ii



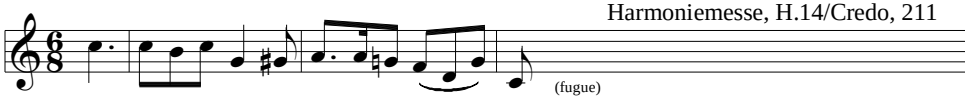
WW Div K.439b#5/ii, trio



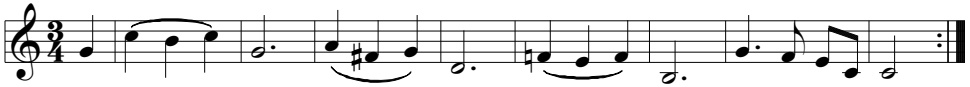
Dithyrambe, D.801, 6



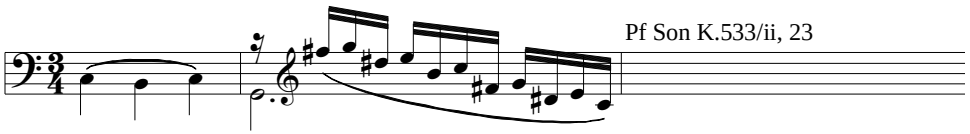
Harmoniemesse, H.14/Credo, 211



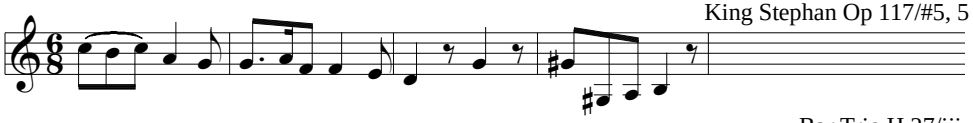
Min K.164/#3, trio



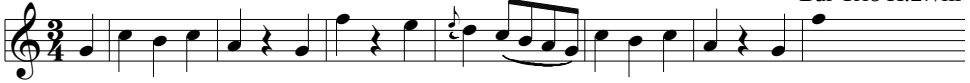
Pf Son K.533/ii, 23

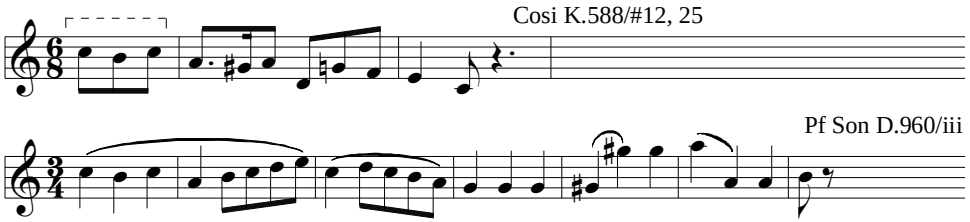


King Stephan Op 117/#5, 5

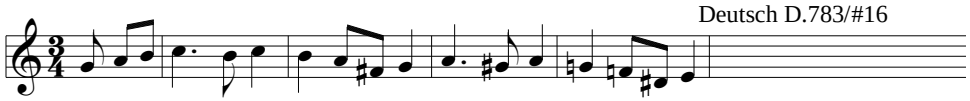


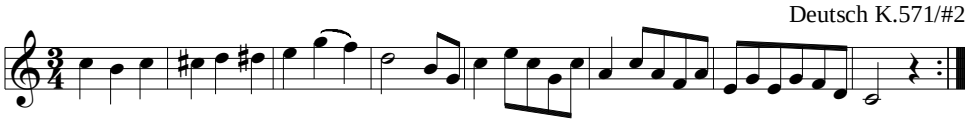
Bar Trio H.27/iii

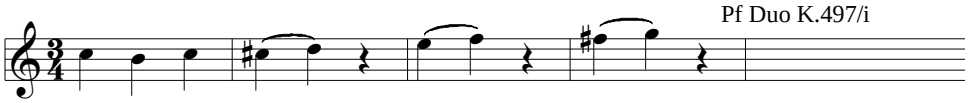


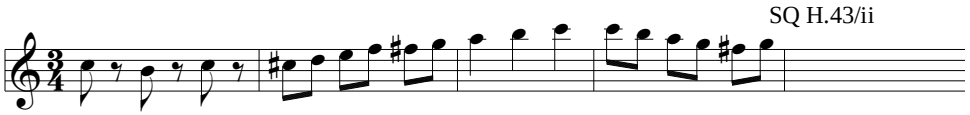

Cosi K.588/#12, 25

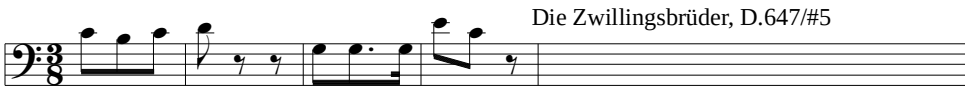
Pf Son D.960/iii

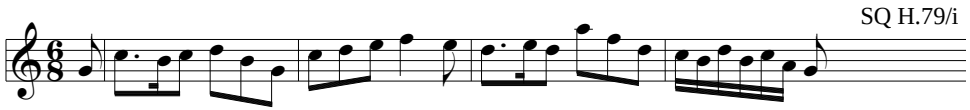

Deutsch D.783/#16

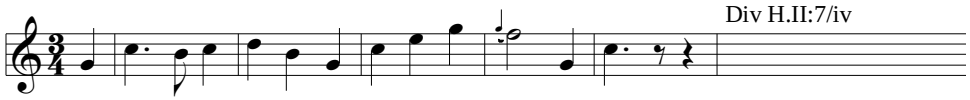

Deutsch K.571/#2

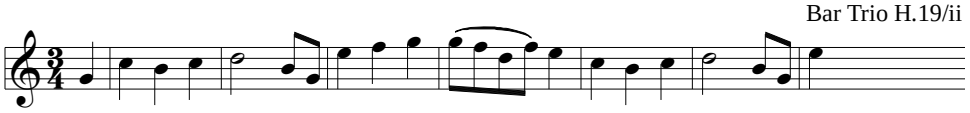

Pf Duo K.497/i

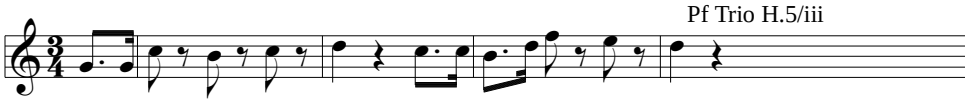

SQ H.43/ii

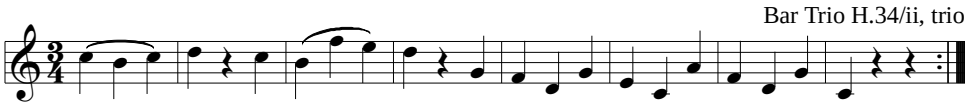

Die Zwillingsbrüder, D.647/#5


SQ H.79/i

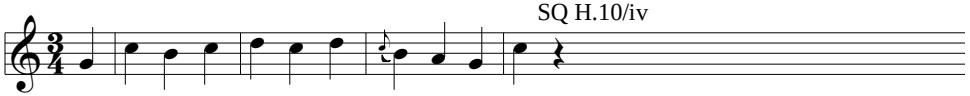

Div H.II:7/iv


Bar Trio H.19/ii

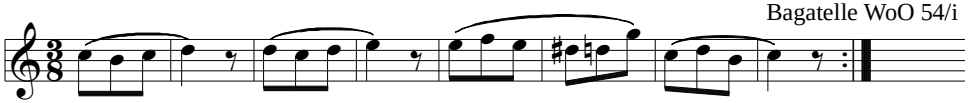

Pf Trio H.5/iii


Bar Trio H.34/ii, trio

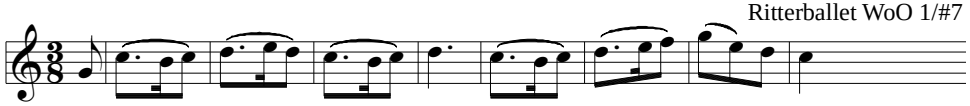
SQ H.10/iv



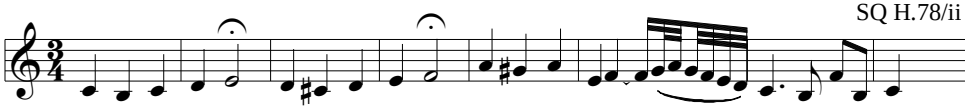
Bagatelle WoO 54/i



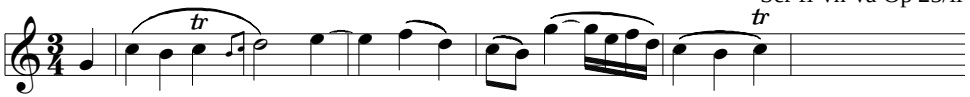
Ritterballet WoO 1/#7



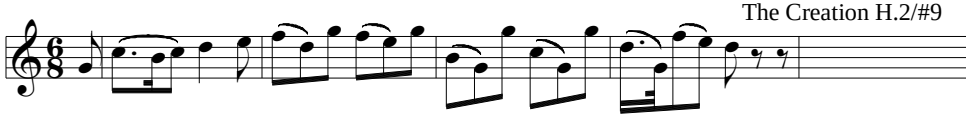
SQ H.78/ii



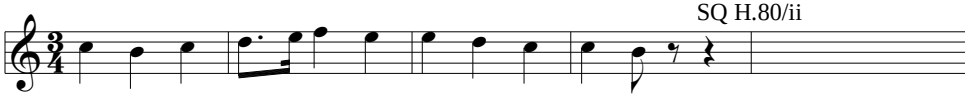
Ser fl-vn-va Op 25/ii



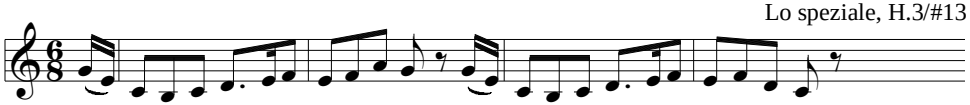
The Creation H.2/#9



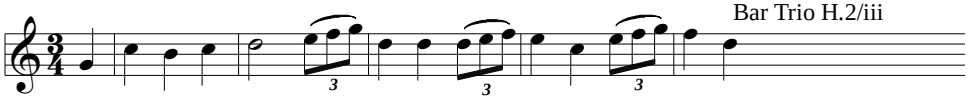
SQ H.80/ii



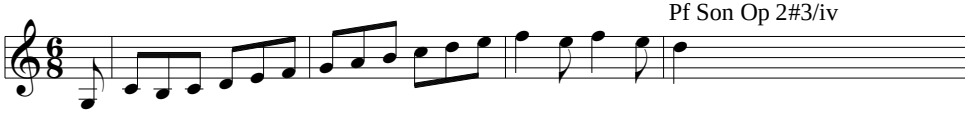
Lo speziale, H.3/#13



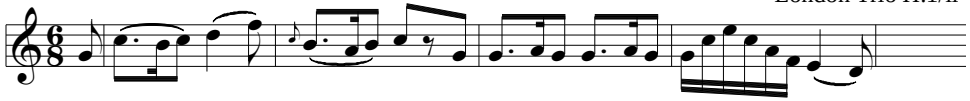
Bar Trio H.2/iii



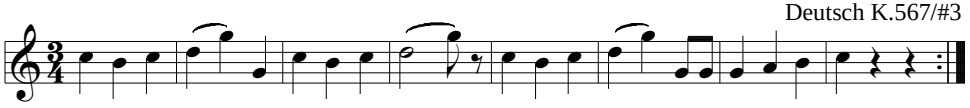
Pf Son Op 2#3/iv



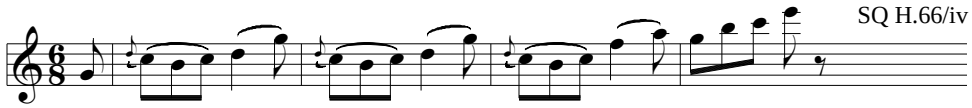
London Trio H.1/ii



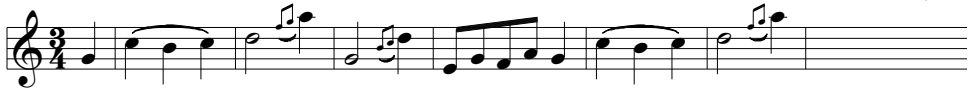
Deutsch K.567/#3



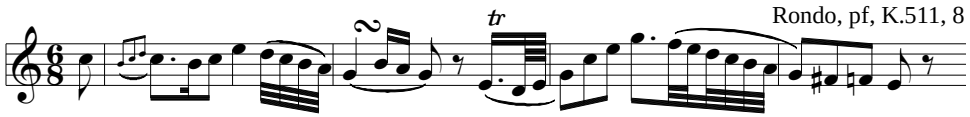
SQ H.66/iv



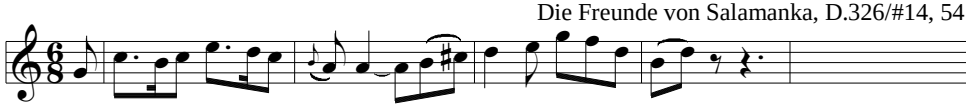
Deutsch H.12/#4, trio



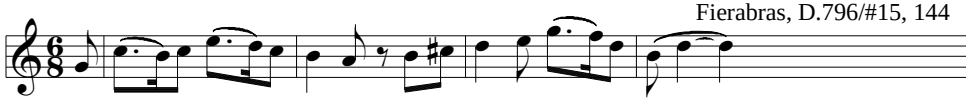
Rondo, pf, K.511, 8



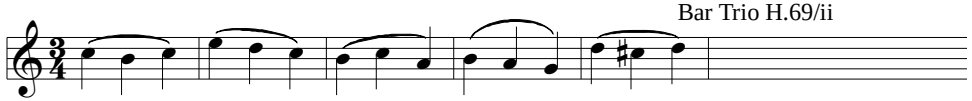
Die Freunde von Salamanka, D.326/#14, 54



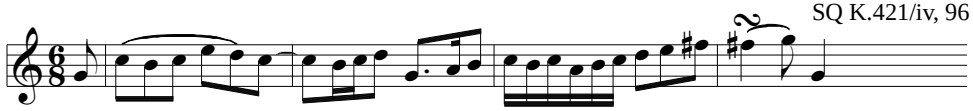
Fierabras, D.796/#15, 144



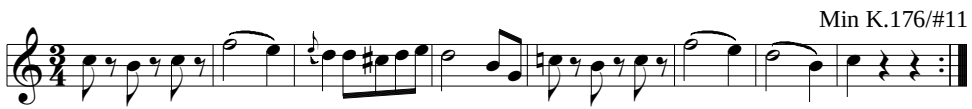
Bar Trio H.69/ii



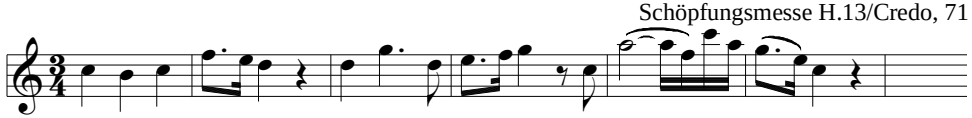
SQ K.421/iv, 96



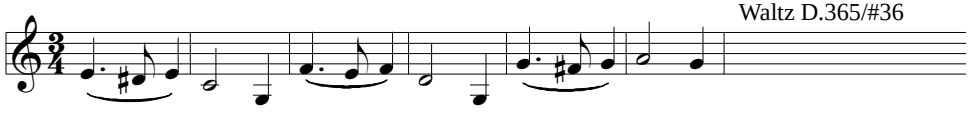
Min K.176/#11



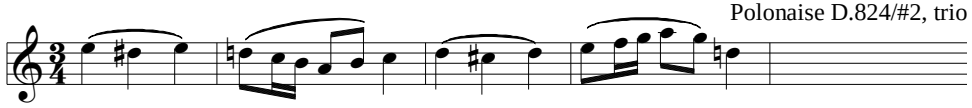
Schöpfungsmesse H.13/Credo, 71



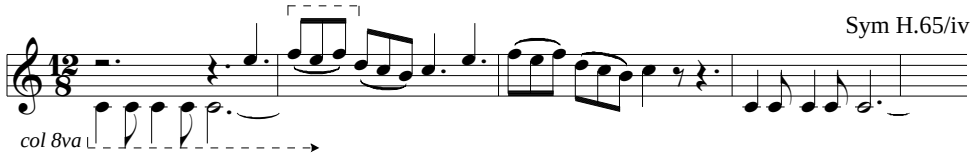
Waltz D.365/#36



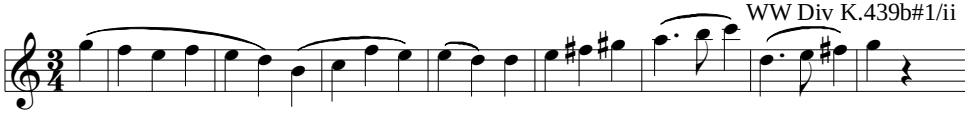
Polonaise D.824/#2, trio



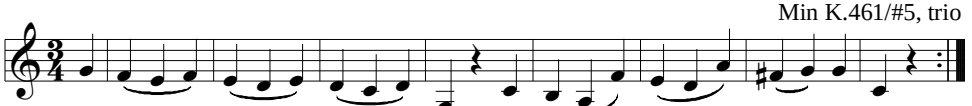
Sym H.65/iv



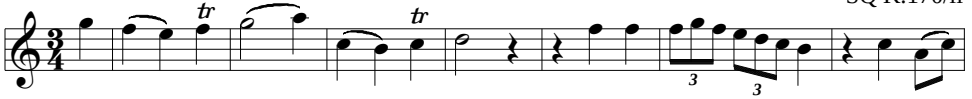
WW Div K.439b#1/ii



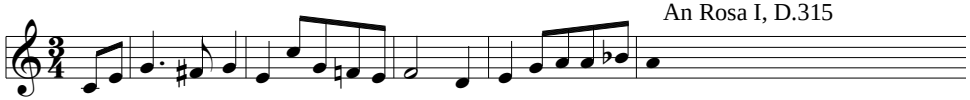
Min K.461/#5, trio



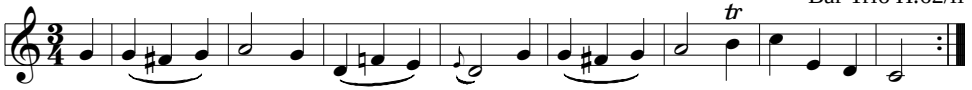
SQ K.170/ii



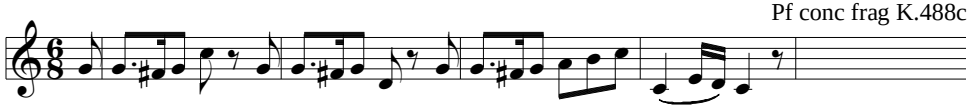
An Rosa I, D.315



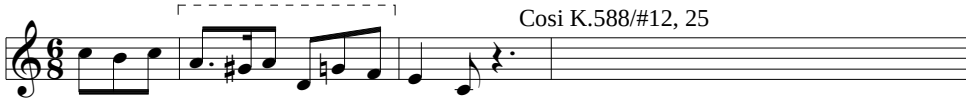
Bar Trio H.62/ii



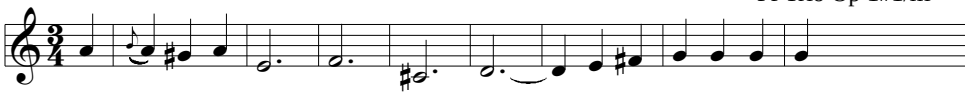
Pf conc frag K.488c



Cosi K.588/#12, 25

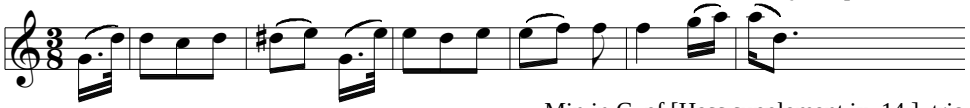


Pf Trio Op 1#1/iii

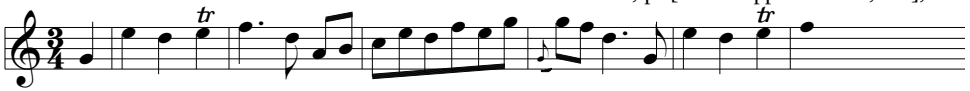


Δ2^B1, lower whole-step NT

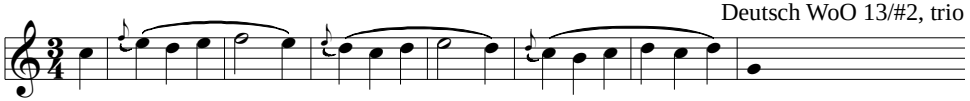
Sym Op 36/ii, 16



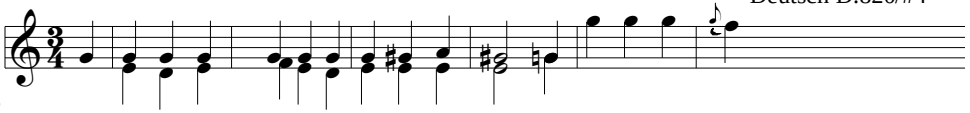
Min in C, pf [Hess supplement ix, 14], trio



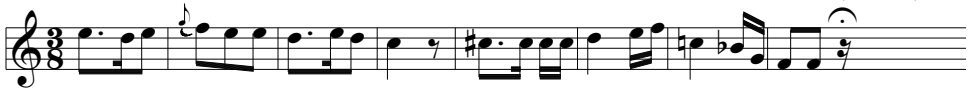
Deutsch WoO 13/#2, trio



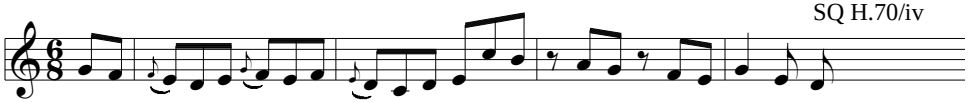
Deutsch D.820/#4



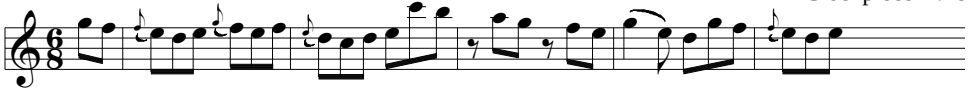
Der Tod Oscar's, D.375, 212



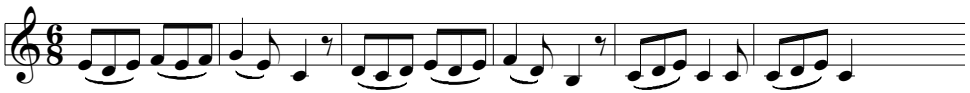
SQ H.70/iv



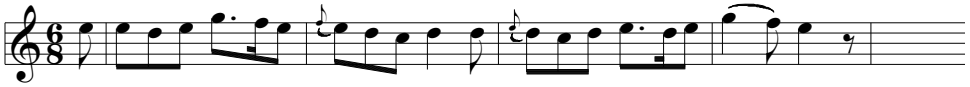
Clockpiece H.28



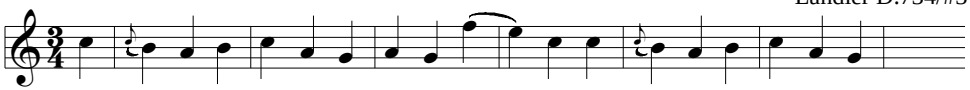
Vc Conc H.2/iii



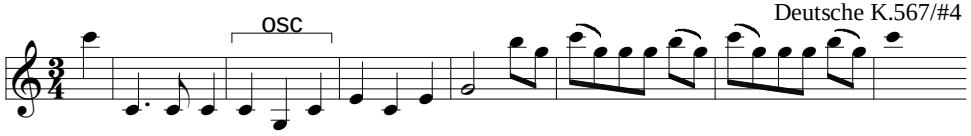
Lenore Prohaska, WoO 96/#2, 5

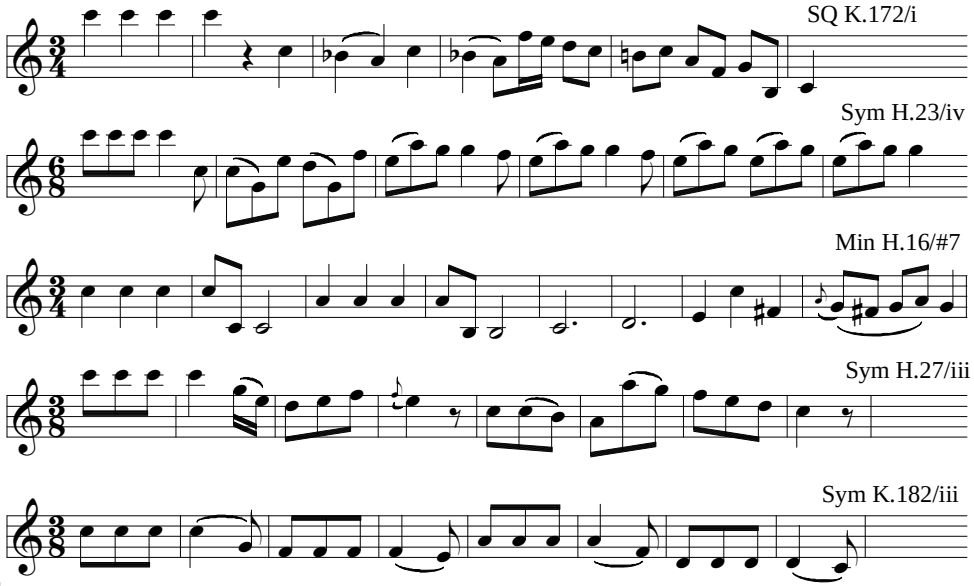


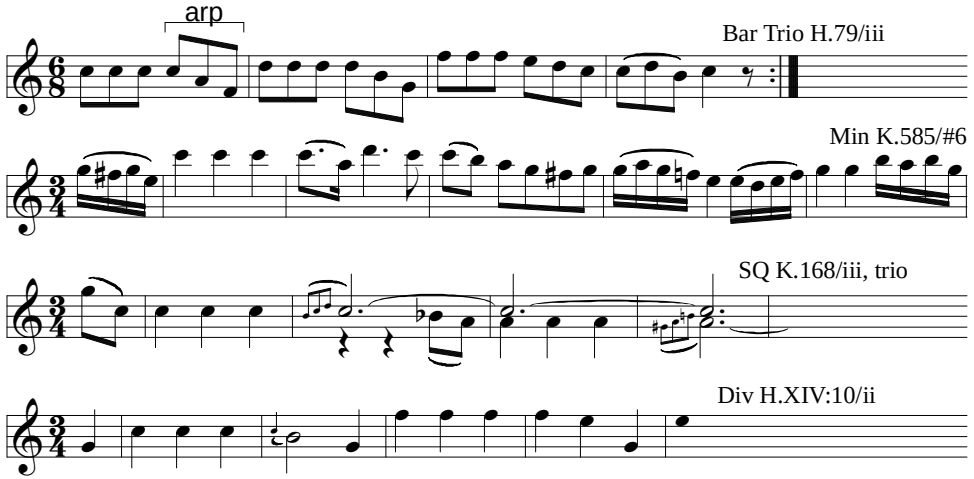
Ländler D.734/#3



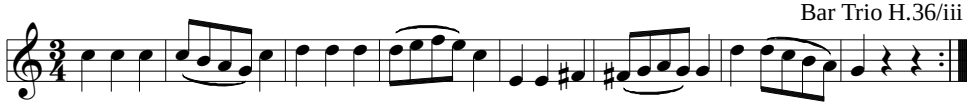
EX 32:
Δ2^B1, {RRR|R}



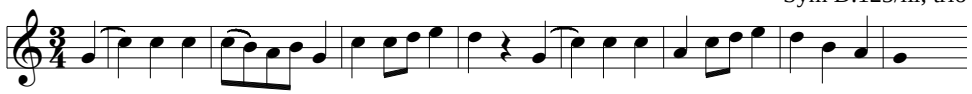




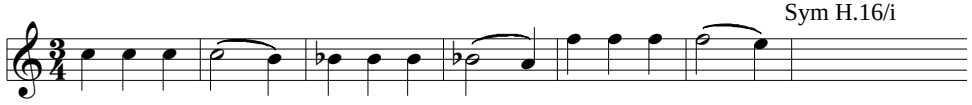
Bar Trio H.36/iii



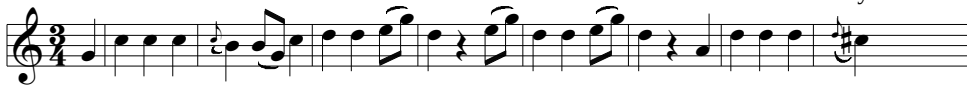
Sym D.125/iii, trio



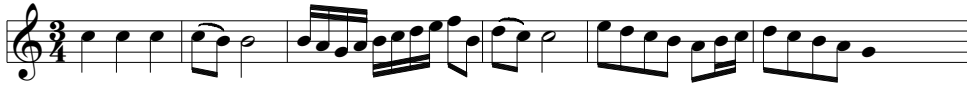
Sym H.16/i



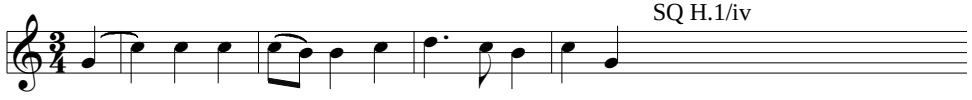
Sym H.70/iii



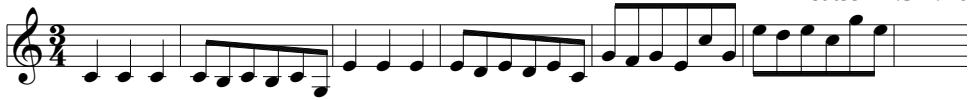
Hn Duo K.487/#6, trio



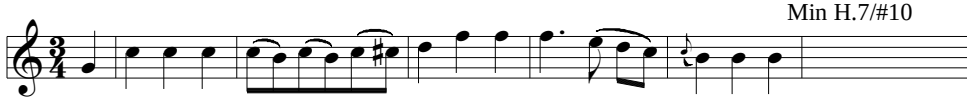
SQ H.1/iv



Deutsch K.571/#6



Min H.7/#10



Il Mondo della luna, H.7/#50, 181

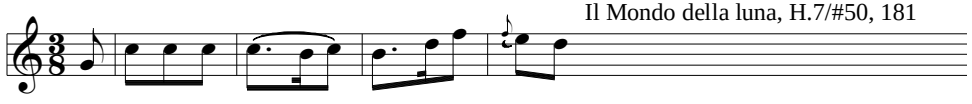
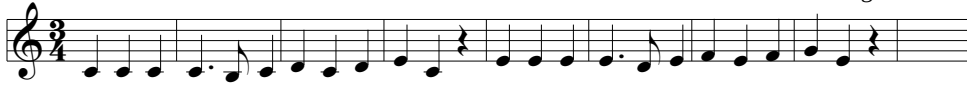
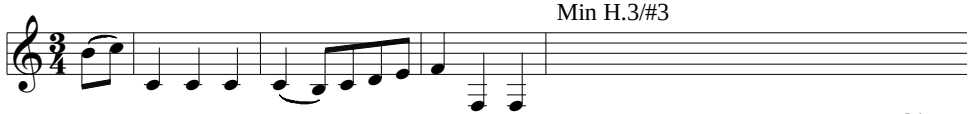


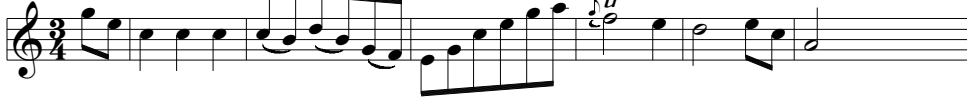
Fig K.492/#3



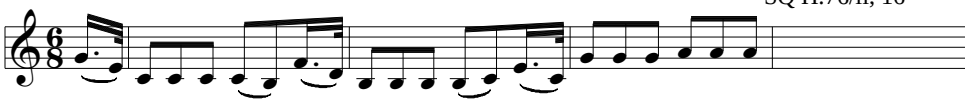
Min H.3/#3



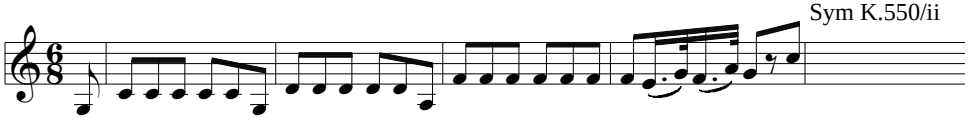
Min H.3/#1



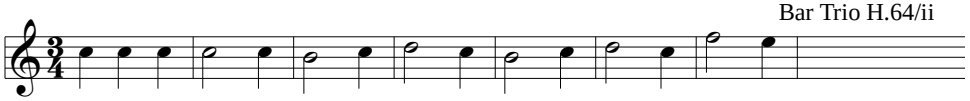
SQ H.76/ii, 16



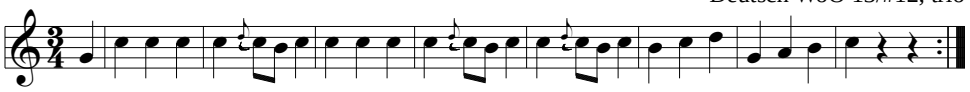
Sym K.550/ii



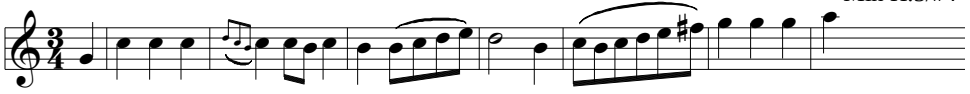
Bar Trio H.64/ii



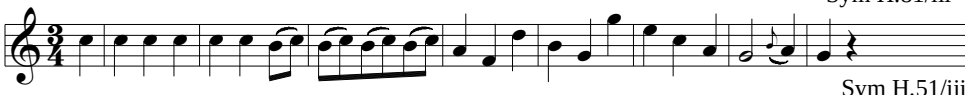
Deutsch WoO 13/#12, trio



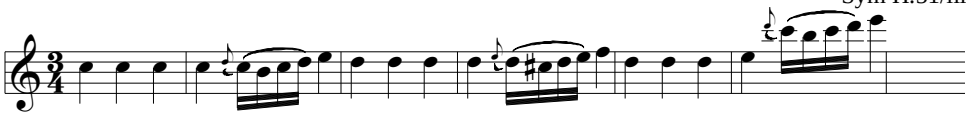
Min H.5/#4



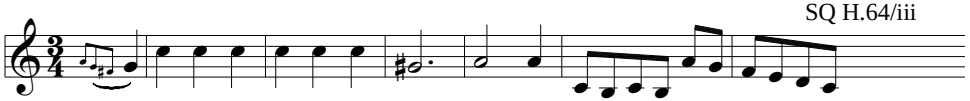
Sym H.81/iii



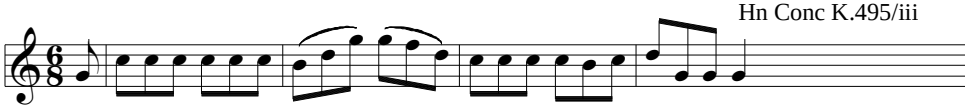
Sym H.51/iii



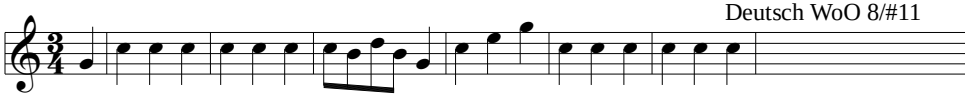
SQ H.64/iii



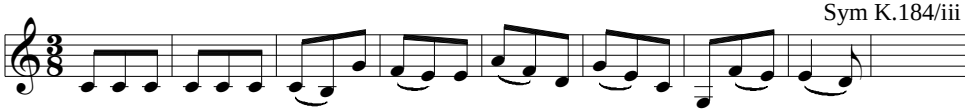
Hn Conc K.495/iii



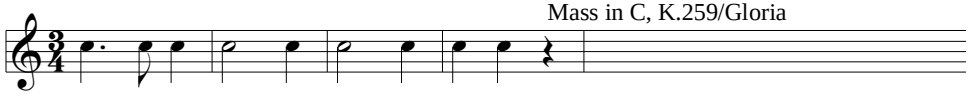
Deutsch WoO 8/#11



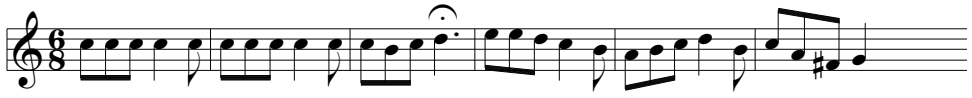
Sym K.184/iii



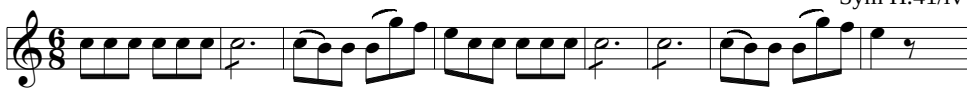
Mass in C, K.259/Gloria



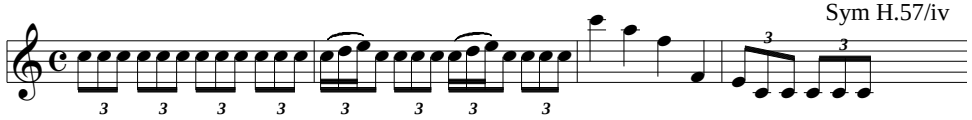
Lachen nicht, Mädchen, H.14, 3



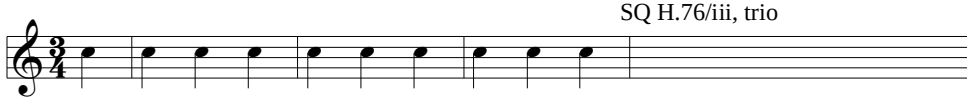
Sym H.41/iv



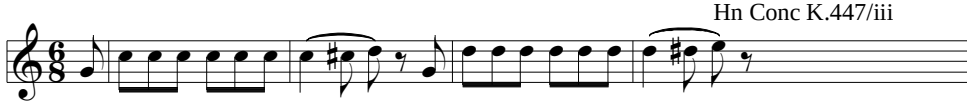
Sym H.57/iv



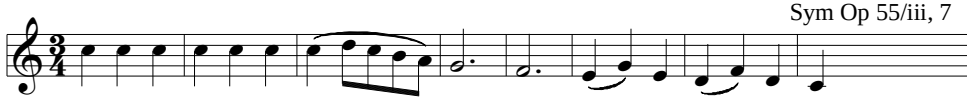
SQ H.76/iii, trio



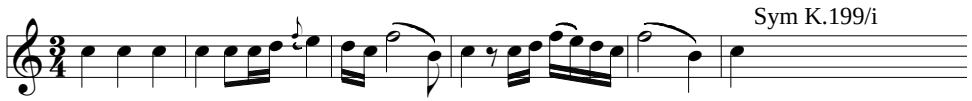
Hn Conc K.447/iii



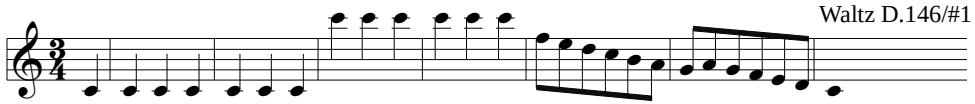
Sym Op 55/iii, 7



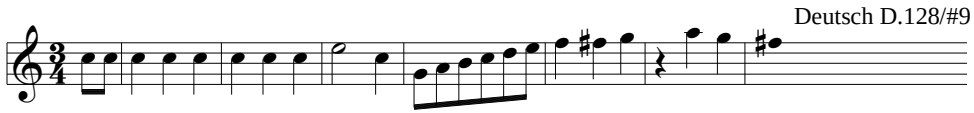
Sym K.199/i



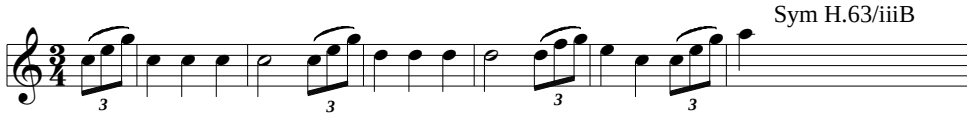
Waltz D.146/#1



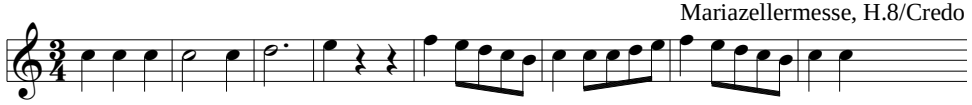
Deutsch D.128/#9



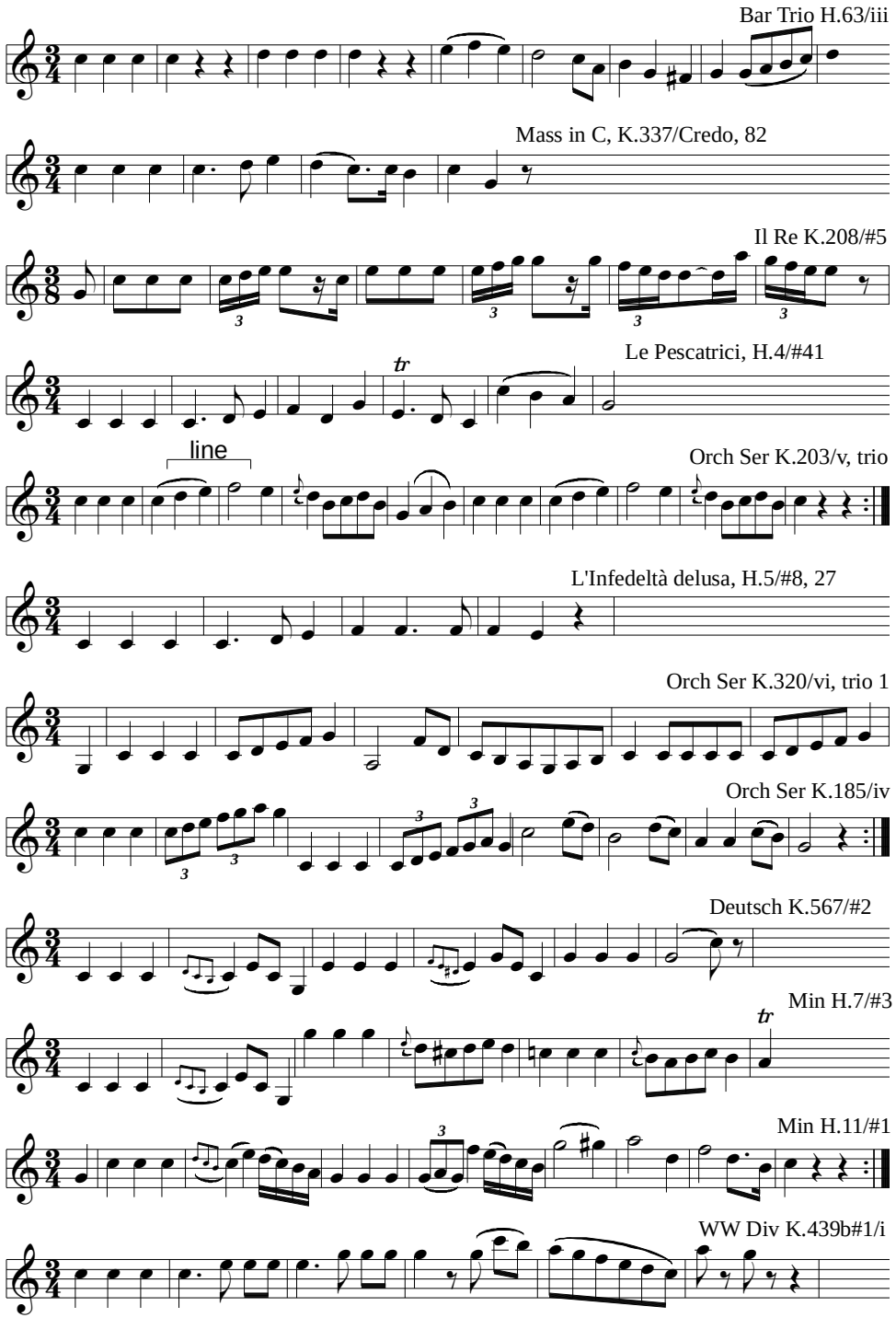
Sym H.63/iiiB



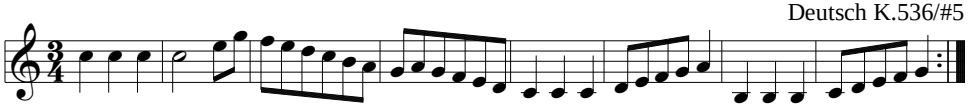
Mariazellermesse, H.8/Credo



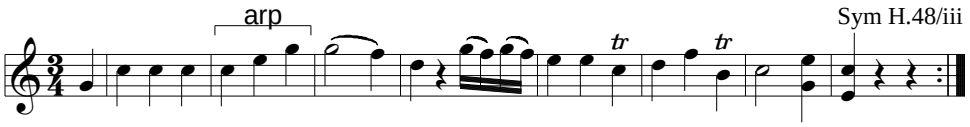
Pf Conc K.413/i


Bar Trio H.63/iii
Mass in C, K.337/Credo, 82
Il Re K.208/#5
Le Pescatrici, H.4/#41
line
Orch Ser K.203/v, trio
L'Infedeltà delusa, H.5/#8, 27
Orch Ser K.320/vi, trio 1
Orch Ser K.185/iv
Deutsch K.567/#2
Min H.7/#3
Min H.11/#1
WW Div K.439b#1/i

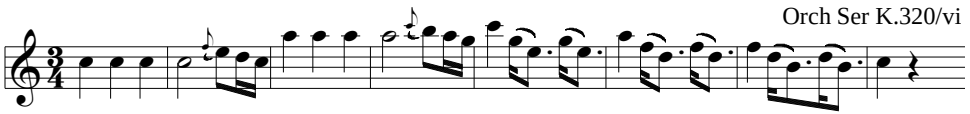
Deutsch K.536/#5



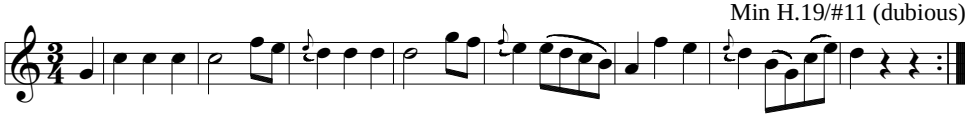
Sym H.48/iii



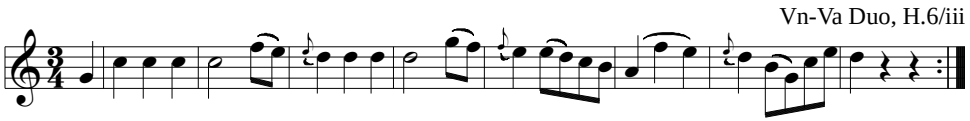
Orch Ser K.320/vi



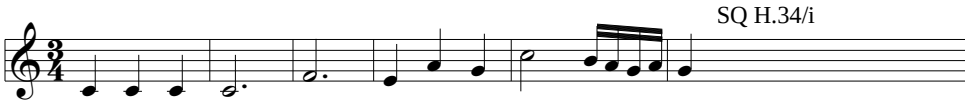
Min H.19/#11 (dubious)



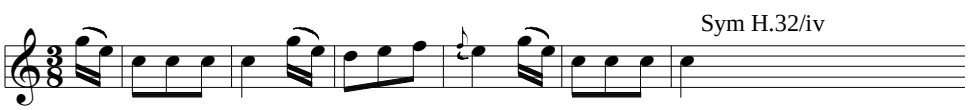
Vn-Va Duo, H.6/iii



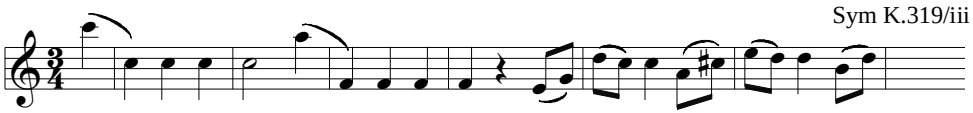
SQ H.34/i



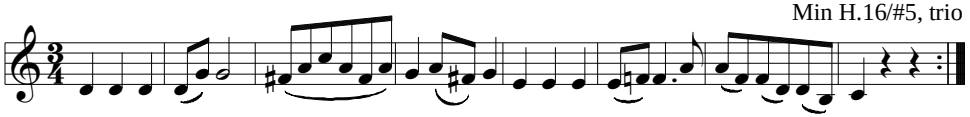
Sym H.32/iv



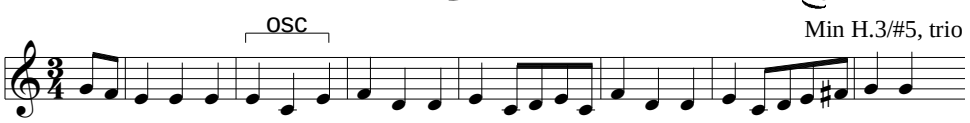
Sym K.319/iii



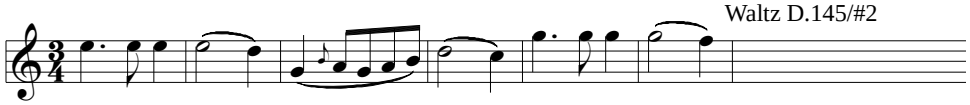
Min H.16/#5, trio



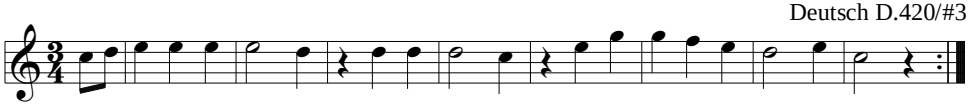
Min H.3/#5, trio



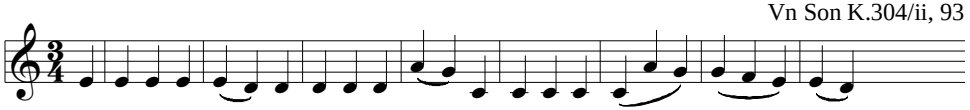
Waltz D.145/#2



Deutsch D.420/#3

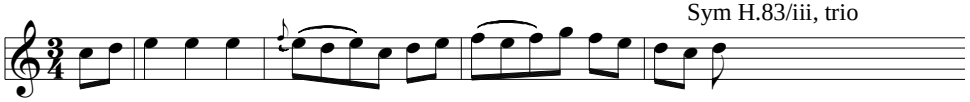


Vn Son K.304/ii, 93

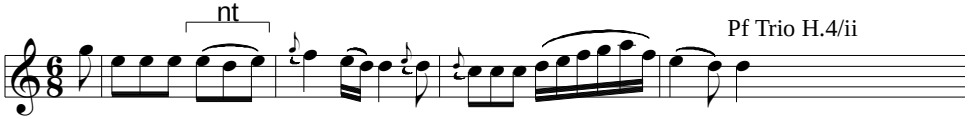


Waltz D.779/#2

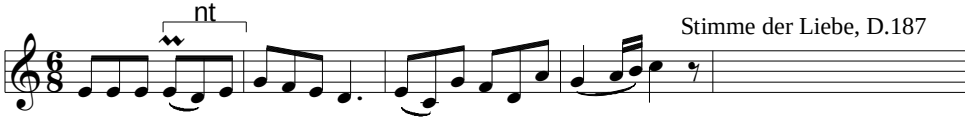
Sym H.83/iii, trio



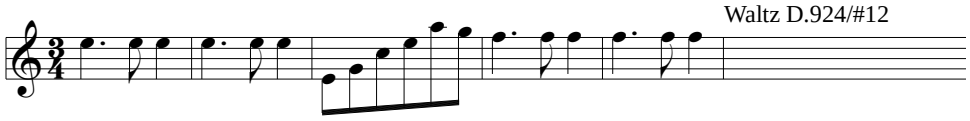
Pf Trio H.4/ii



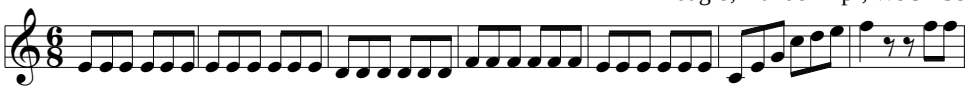
Stimme der Liebe, D.187



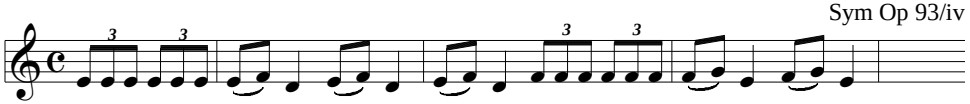
Waltz D.924/#12



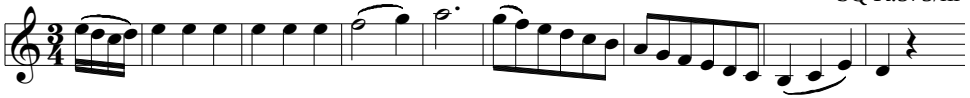
Adagio, mandolin-pf, WoO 43b



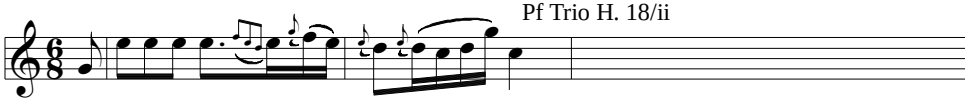
Sym Op 93/iv



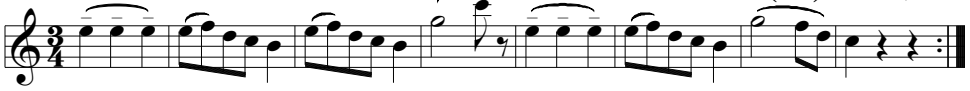
SQ K.575/iii



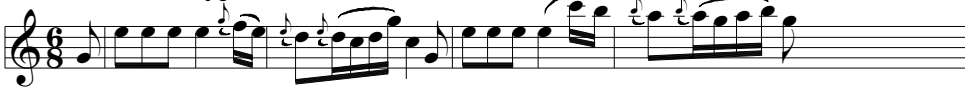
Pf Trio H. 18/ii

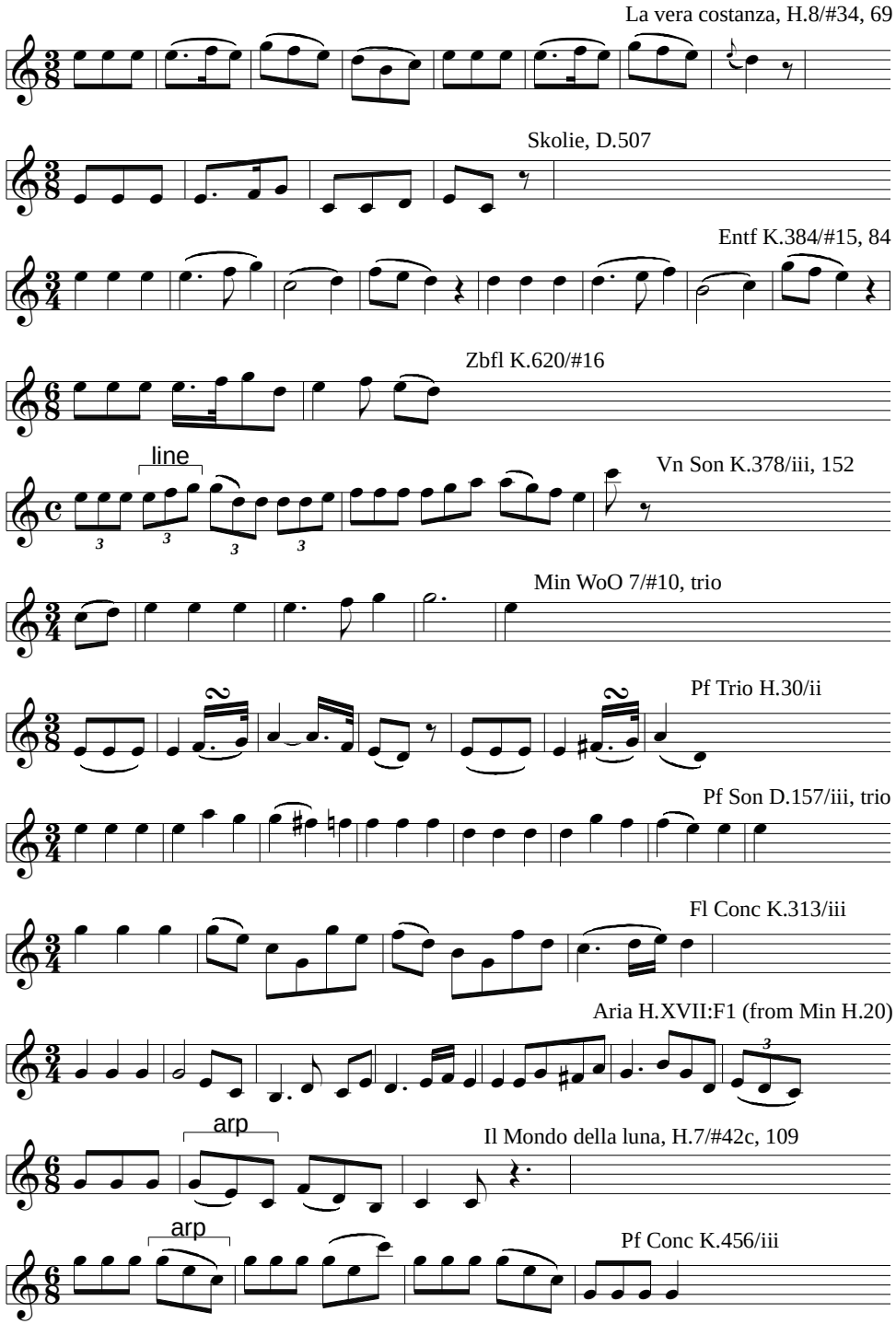


Str Trio (Div) K.563/v, trio 1

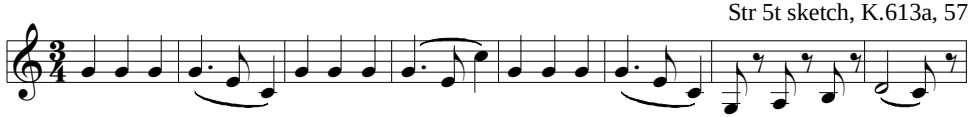


Pf Trio H.18/ii, 16

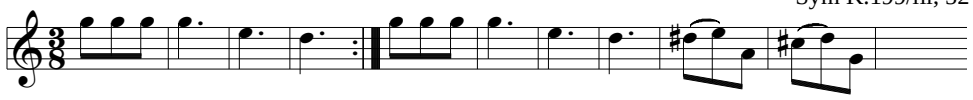



La vera costanza, H.8/#34, 69
Skolie, D.507
Entf K.384/#15, 84
Zbfl K.620/#16
line
Vn Son K.378/iii, 152
Min WoO 7/#10, trio
Pf Trio H.30/ii
Pf Son D.157/iii, trio
Fl Conc K.313/iii
Aria H.XVII:F1 (from Min H.20)
arp
Il Mondo della luna, H.7/#42c, 109
arp
Pf Conc K.456/iii

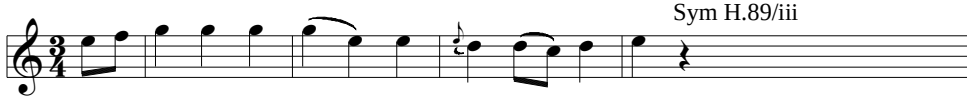
Str 5t sketch, K.613a, 57



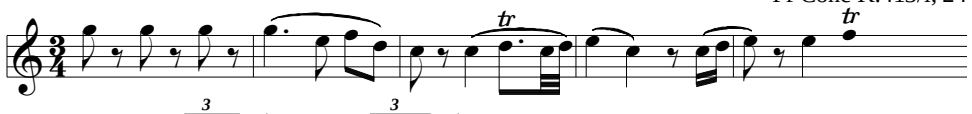
Sym K.199/iii, 52



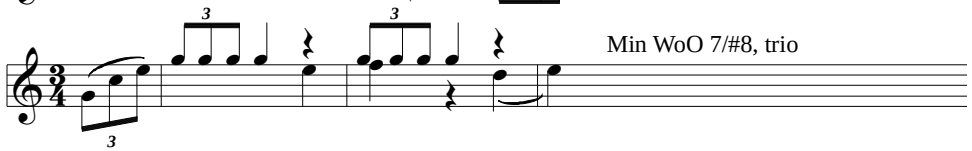
Sym H.89/iii



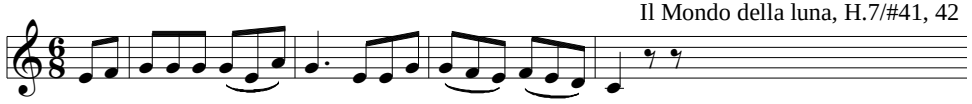
Pf Conc K.413/i, 24



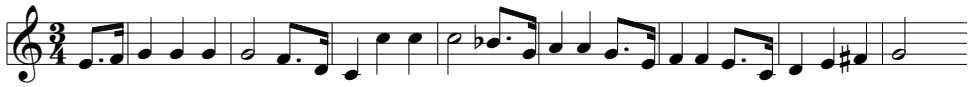
Min WoO 7/#8, trio



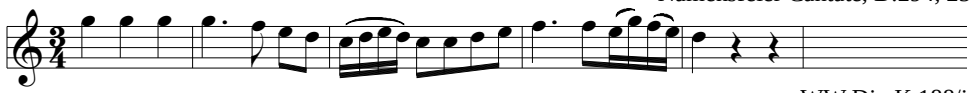
Il Mondo della luna, H.7/#41, 42



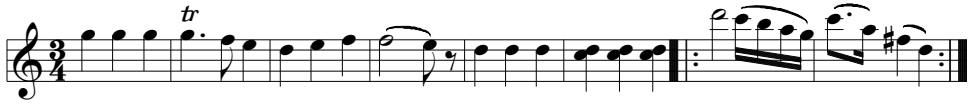
Bar Trio H.124/ii



Namensfeier Cantate, D.294, 25

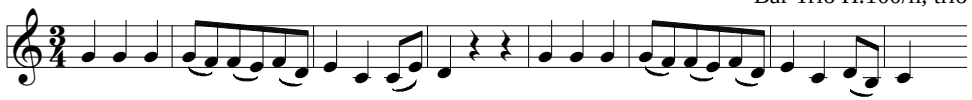


WW Div K.188/i

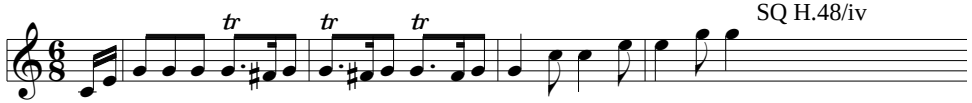


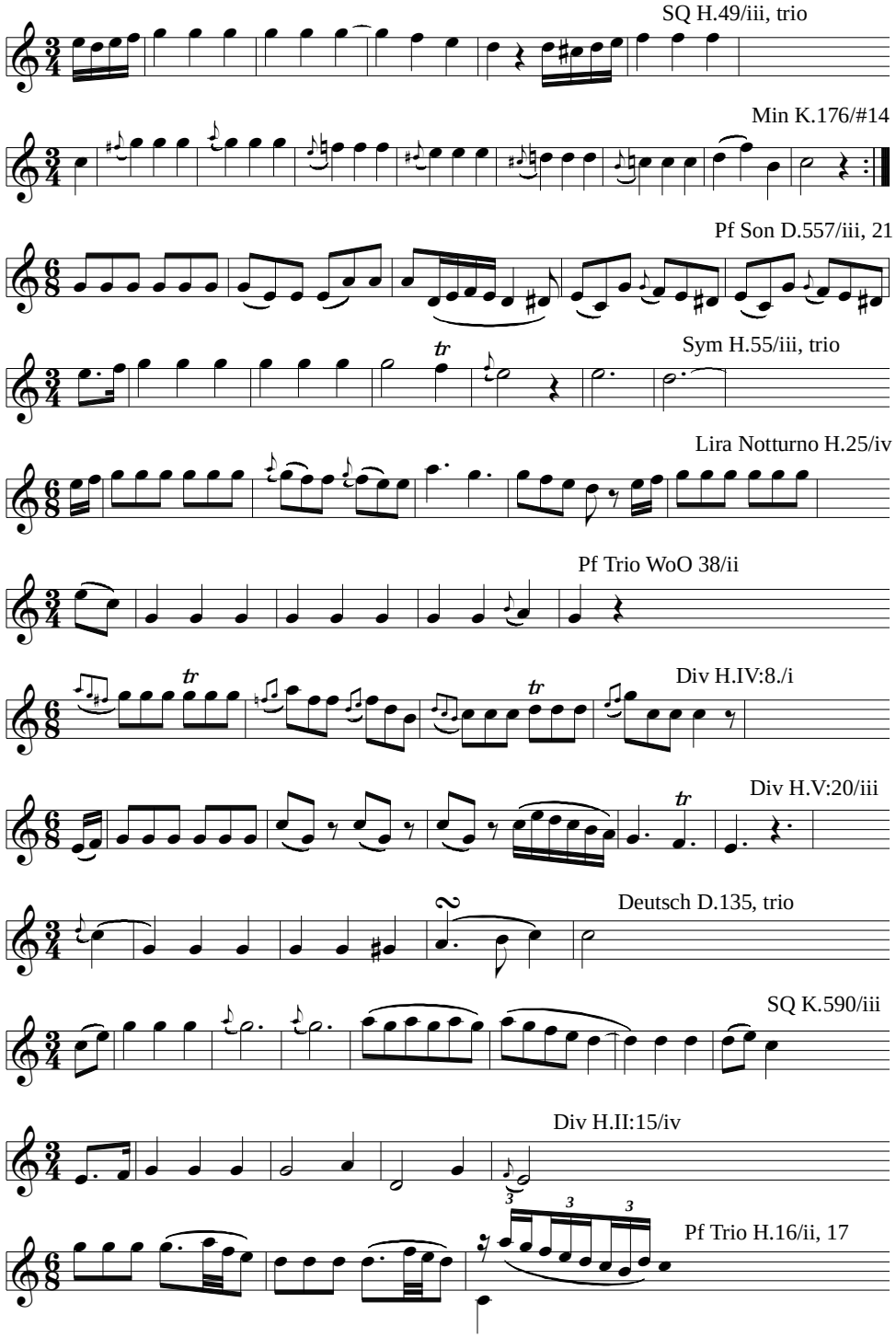
Concertone, 2 vn + orch, K.190/iii, 37

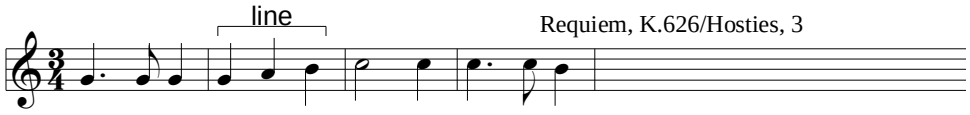
Bar Trio H.100/ii, trio



SQ H.48/iv

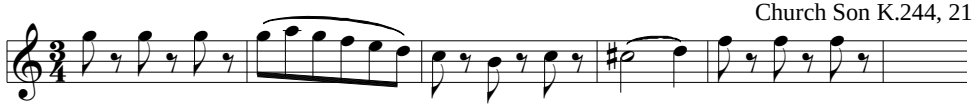



SQ H.49/iii, trio
Min K.176/#14
Pf Son D.557/iii, 21
Sym H.55/iii, trio
Lira Notturno H.25/iv
Pf Trio WoO 38/ii
Div H.IV:8./i
Div H.V:20/iii
Deutsch D.135, trio
SQ K.590/iii
Div H.II:15/iv
Pf Trio H.16/ii, 17

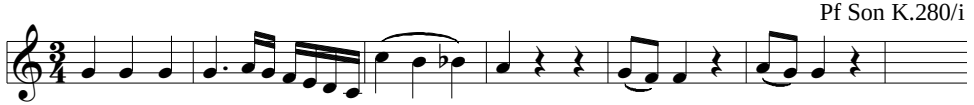


Requiem, K.626/Hosties, 3

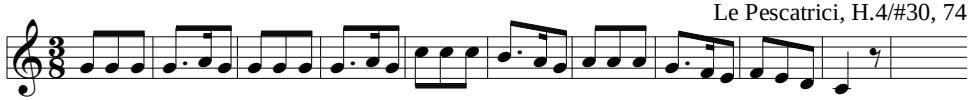
Church Son K.244, 21



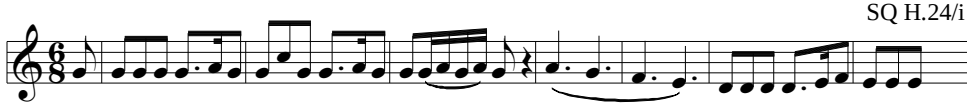
Pf Son K.280/i



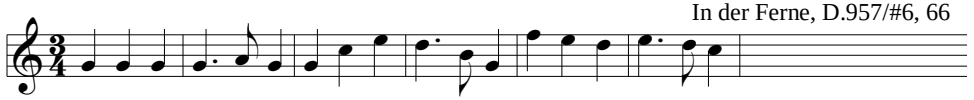
Le Pescatrici, H.4/#30, 74



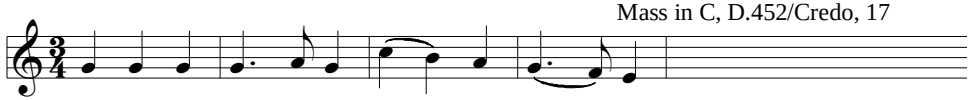
SQ H.24/i



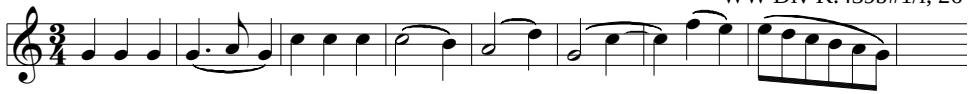
In der Ferne, D.957/#6, 66



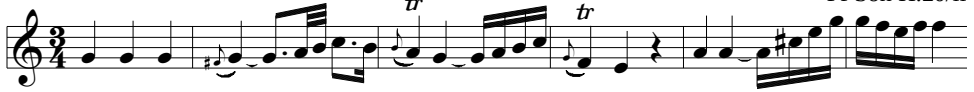
Mass in C, D.452/Credo, 17



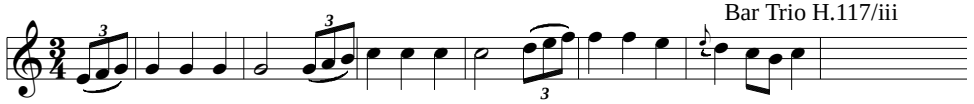
WW Div K.439b#1/i, 26



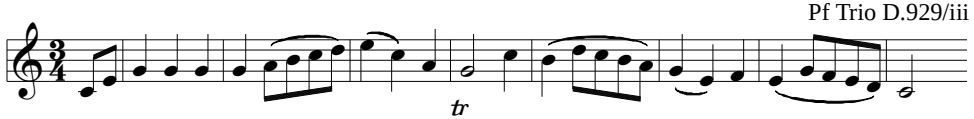
Pf Son H.20/ii



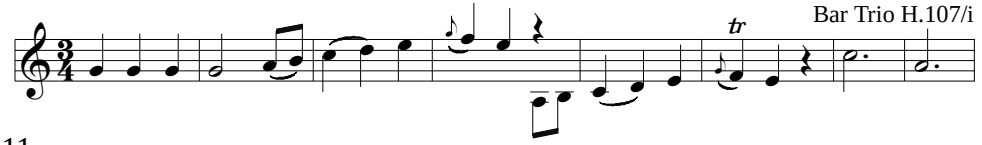
Bar Trio H.117/iii

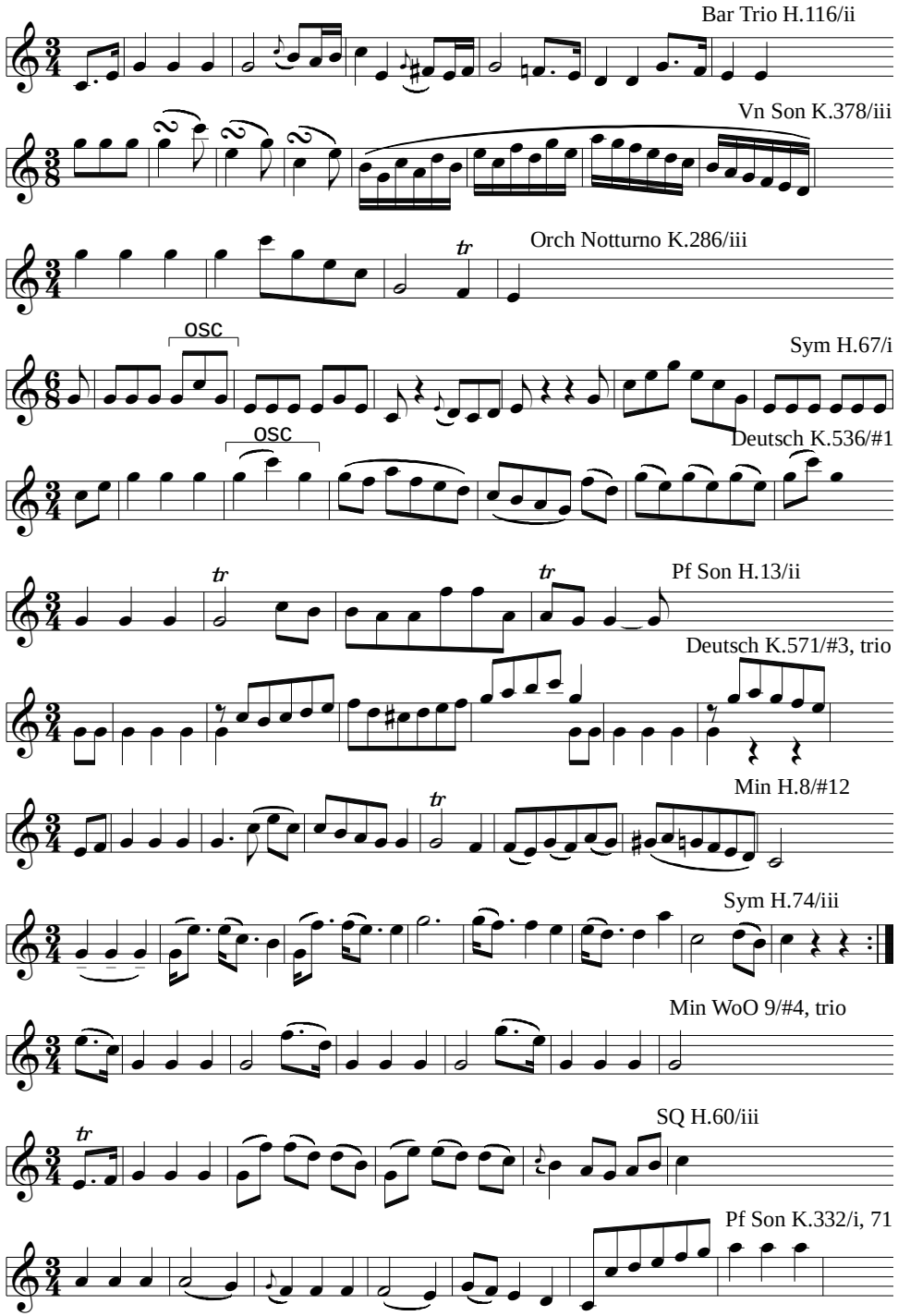


Pf Trio D.929/iii

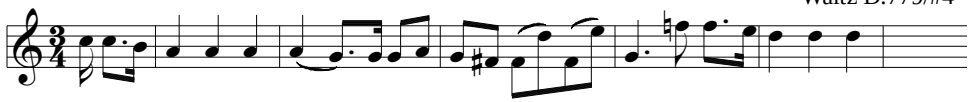


Bar Trio H.107/i

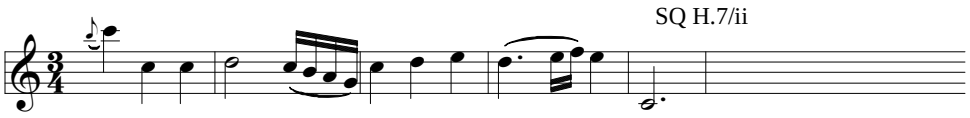


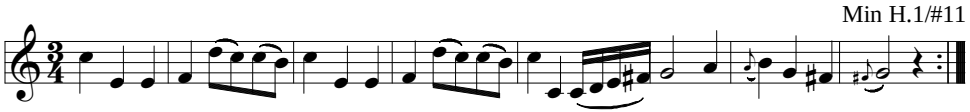

Bar Trio H.116/ii
Vn Son K.378/iii
Orch Notturno K.286/iii
OSC
Sym H.67/i
OSC
Deutsch K.536/#1
Pf Son H.13/ii
Deutsch K.571/#3, trio
Min H.8/#12
Sym H.74/iii
Min WoO 9/#4, trio
SQ H.60/iii
Pf Son K.332/i, 71

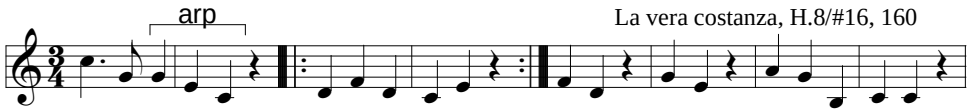
Waltz D.779/#4

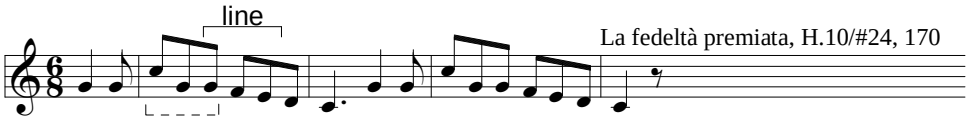


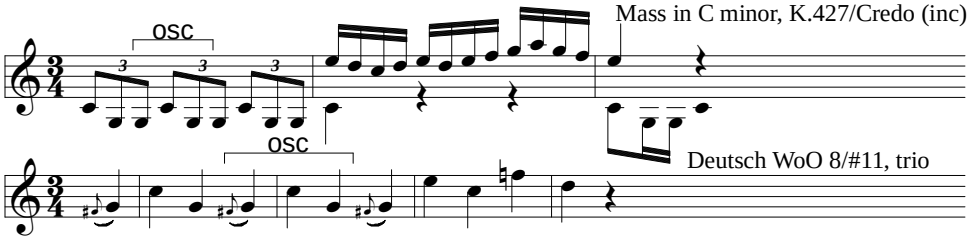
EX 33:
Δ2^B1, {-RR|-}

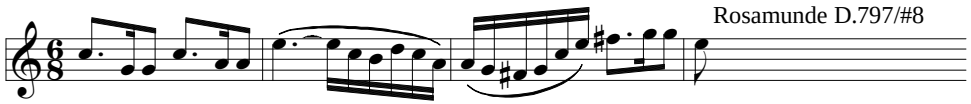

SQ H.7/ii

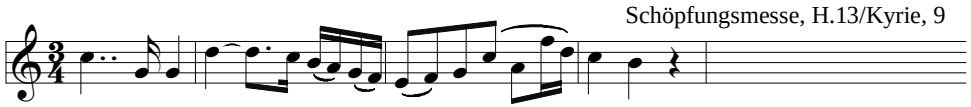

Min H.1/#11

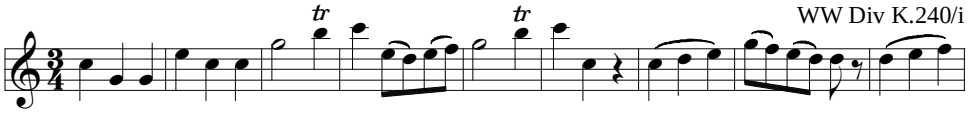

arp
La vera costanza, H.8/#16, 160

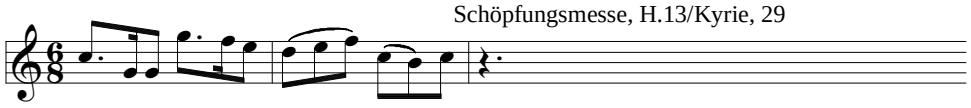

line
La fedeltà premiata, H.10/#24, 170


osc
Mass in C minor, K.427/Credo (inc)
osc
Deutsch WoO 8/#11, trio

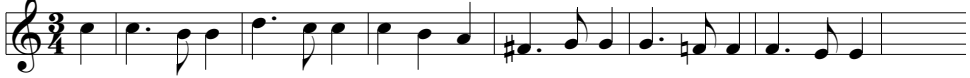

Rosamunde D.797/#8


Schöpfungsmesse, H.13/Kyrie, 9

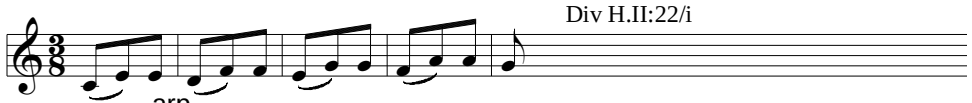

WW Div K.240/i


Schöpfungsmesse, H.13/Kyrie, 29

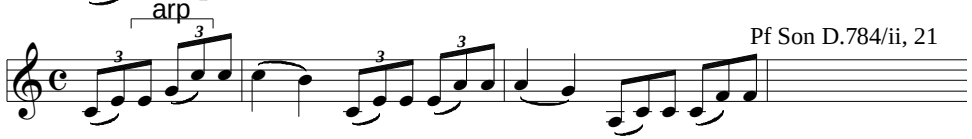
Waltz D.924/#5



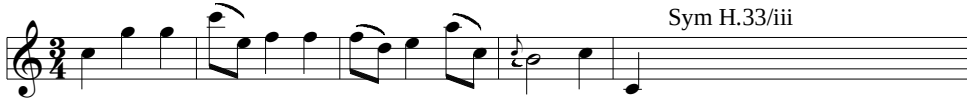
Div H.II:22/i



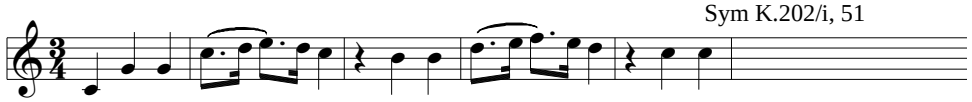
Pf Son D.784/ii, 21



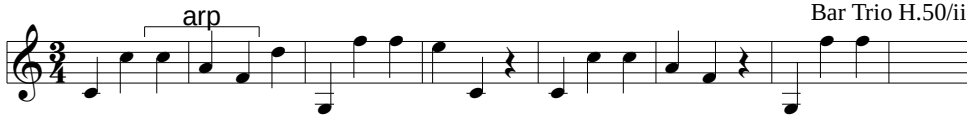
Sym H.33/iii



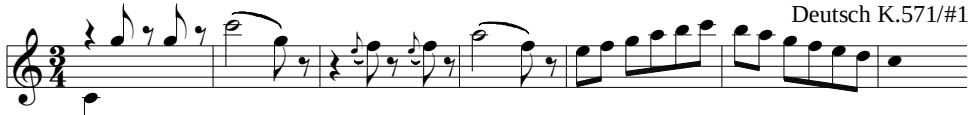
Sym K.202/i, 51



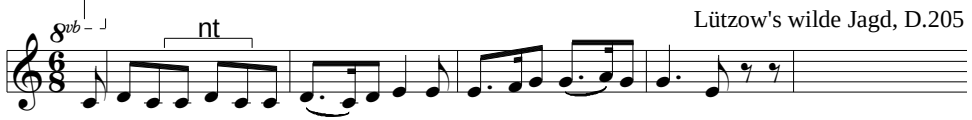
Bar Trio H.50/ii



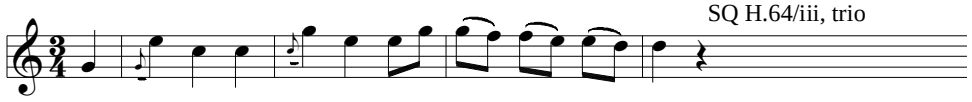
Deutsch K.571/#1



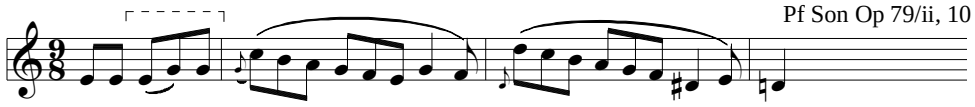
Lützow's wilde Jagd, D.205



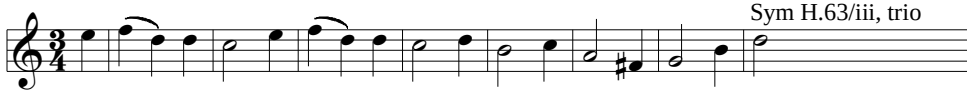
SQ H.64/iii, trio



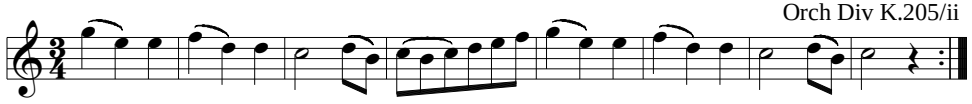
Pf Son Op 79/ii, 10



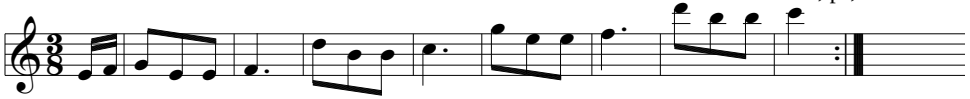
Sym H.63/iii, trio



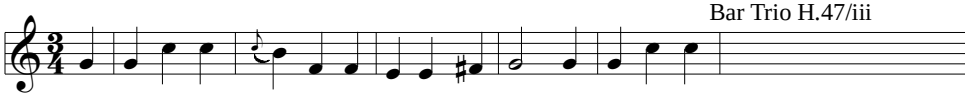
Orch Div K.205/ii



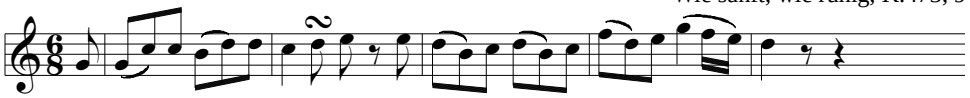
Deutsch, pf, Hess 67/#1



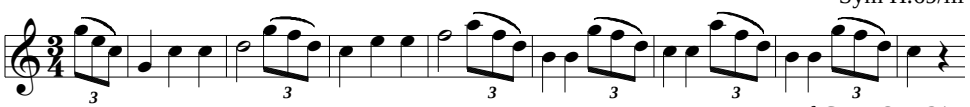
Bar Trio H.47/iii



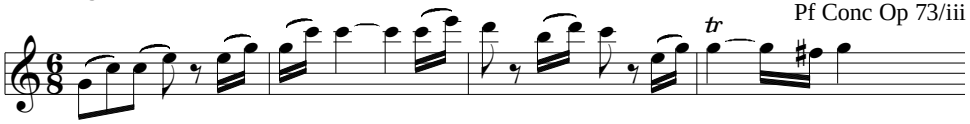
Wie sanft, wie ruhig, K.473, 9



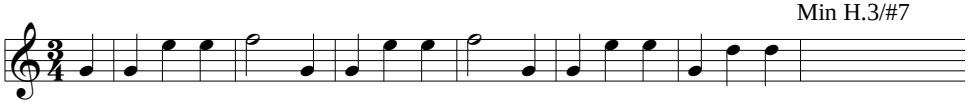
Sym H.69/iii



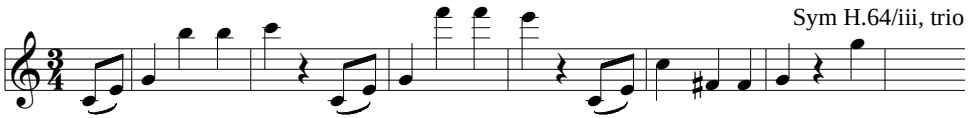
Pf Conc Op 73/iii



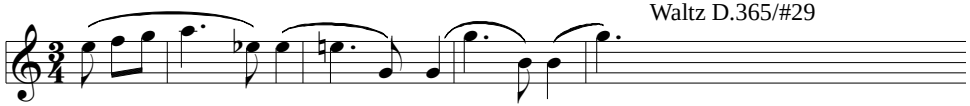
Min H.3/#7



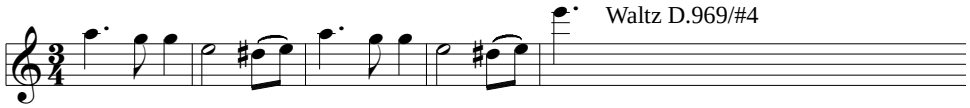
Sym H.64/iii, trio



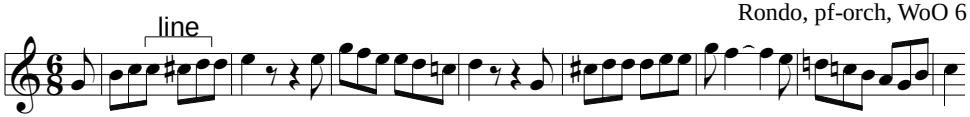
Waltz D.365/#29



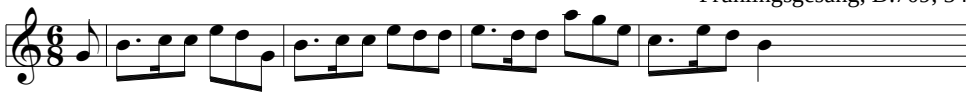
Waltz D.969/#4



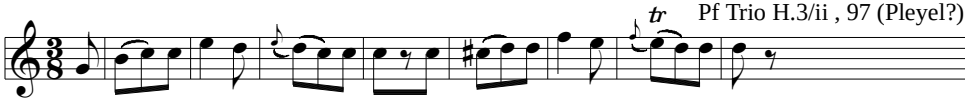
Rondo, pf-orch, WoO 6



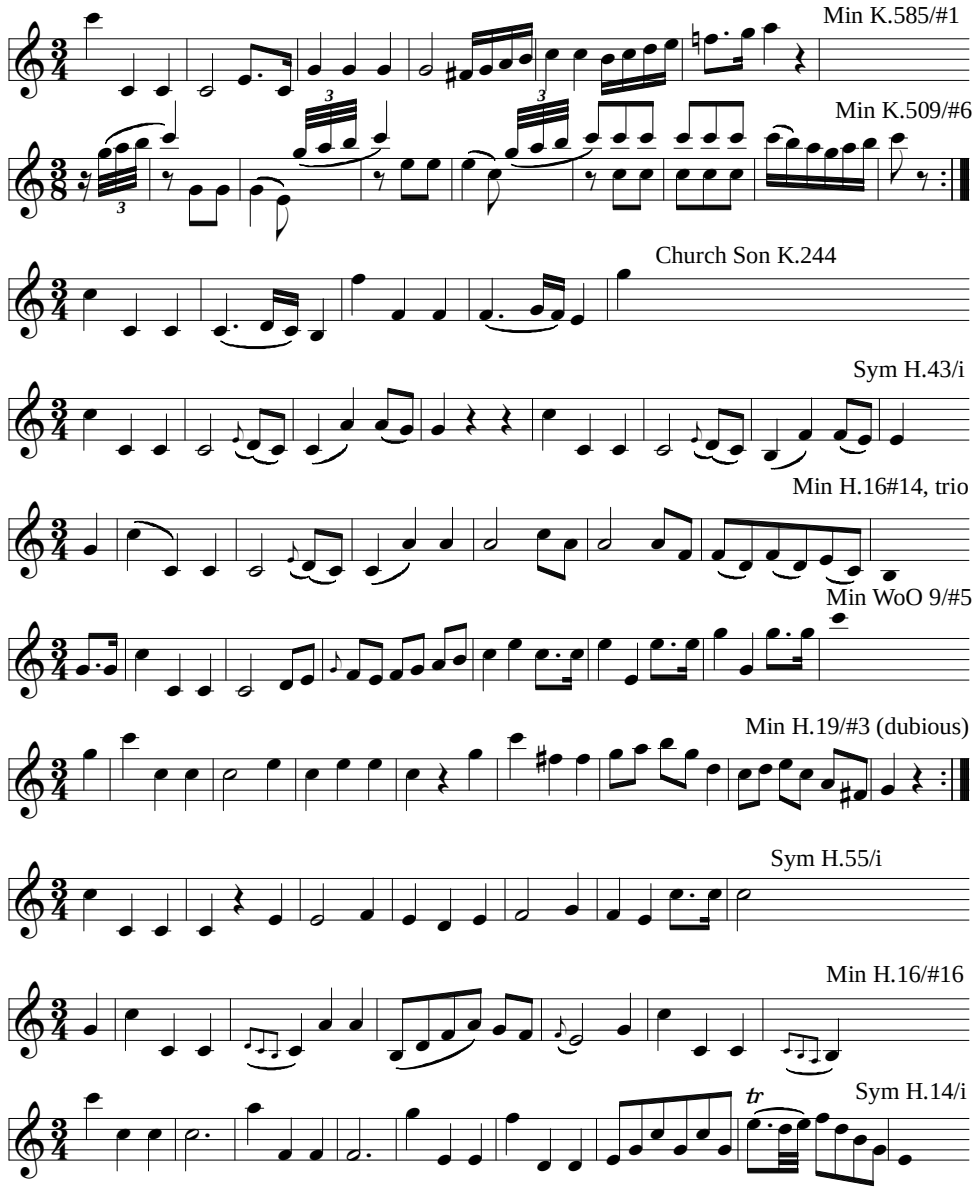
Frühlingsgesang, D.709, 54

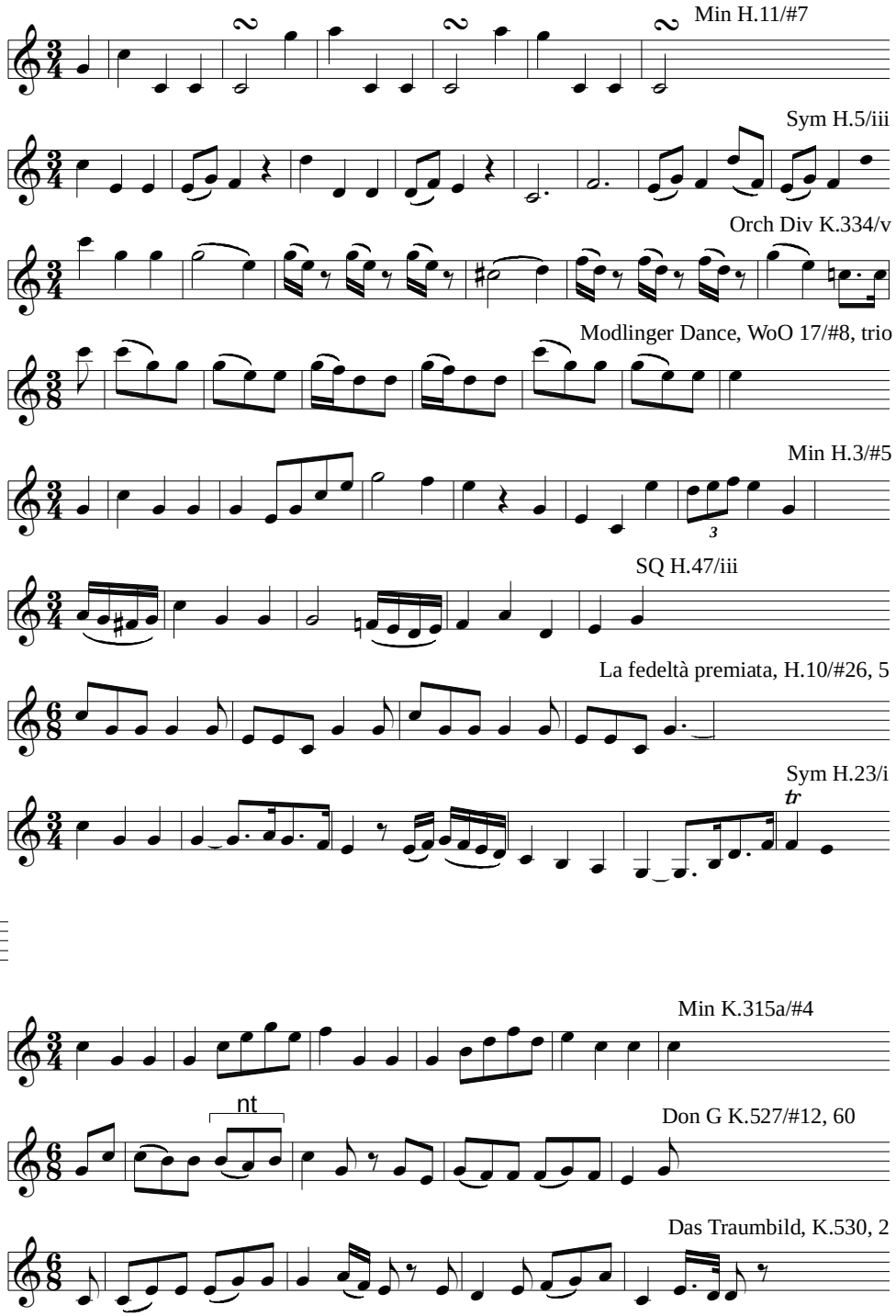


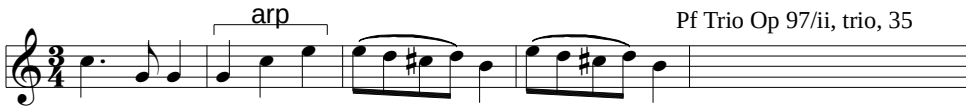
Pf Trio H.3/ii , 97 (Pleyel?)

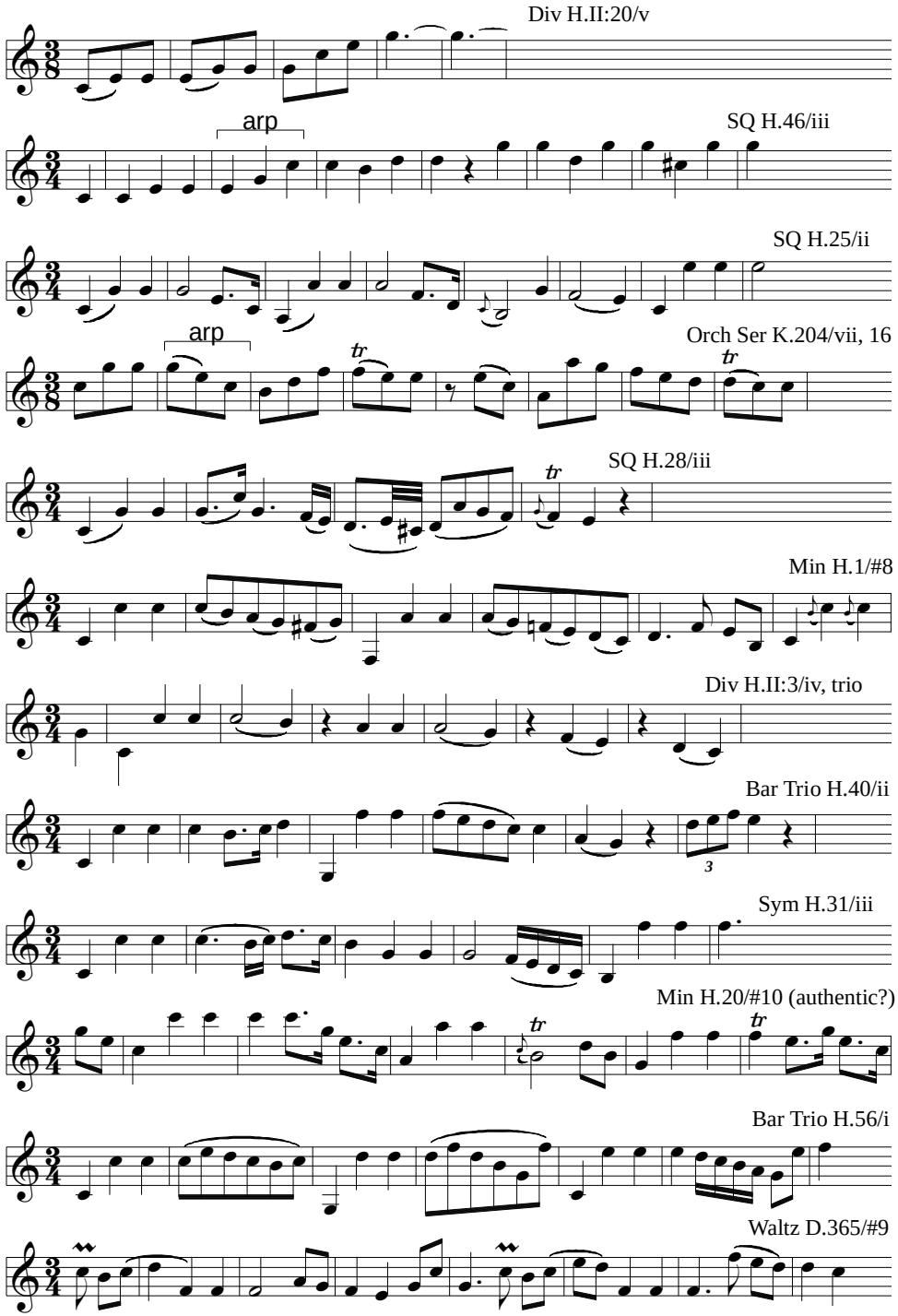


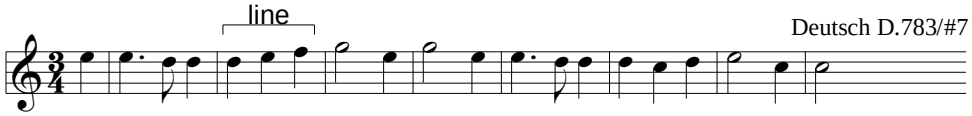
EX 34:
Δ2^B1, {-RR|R}



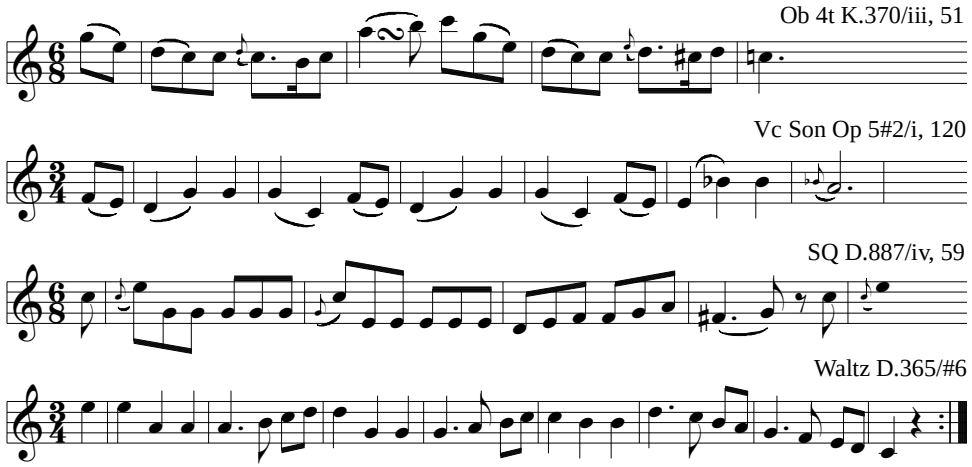

Min H.11/#7
Sym H.5/iii
Orch Div K.334/v
Modlinger Dance, WoO 17/#8, trio
Min H.3/#5
SQ H.47/iii
La fedeltà premiata, H.10/#26, 5
Sym H.23/i
tr
Min K.315a/#4
nt
Don G K.527/#12, 60
Das Traumbild, K.530, 2


arp
Pf Trio Op 97/ii, trio, 35


Div H.II:20/v
arp
SQ H.46/iii
SQ H.25/ii
arp
Orch Ser K.204/vii, 16
SQ H.28/iii
Min H.1/#8
Div H.II:3/iv, trio
Bar Trio H.40/ii
Sym H.31/iii
Min H.20/#10 (authentic?)
Bar Trio H.56/i
Waltz D.365/#9



Deutsch D.783/#7

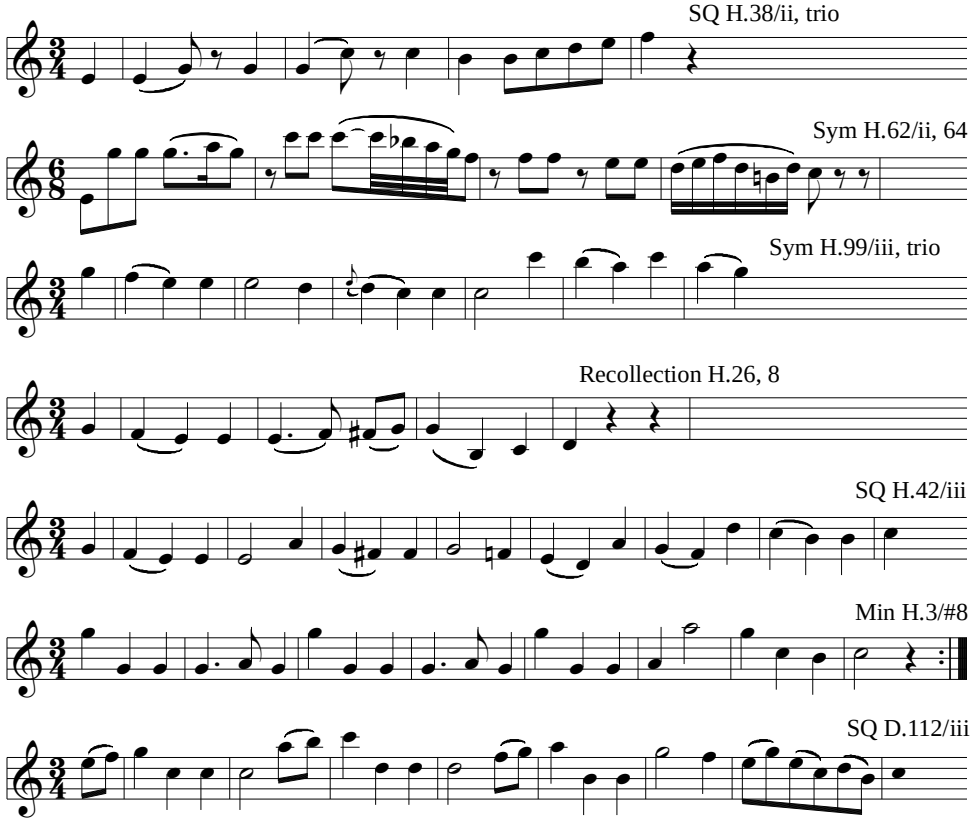


Ob 4t K.370/iii, 51

Vc Son Op 5#2/i, 120

SQ D.887/iv, 59

Waltz D.365/#6



SQ H.38/ii, trio

Sym H.62/ii, 64

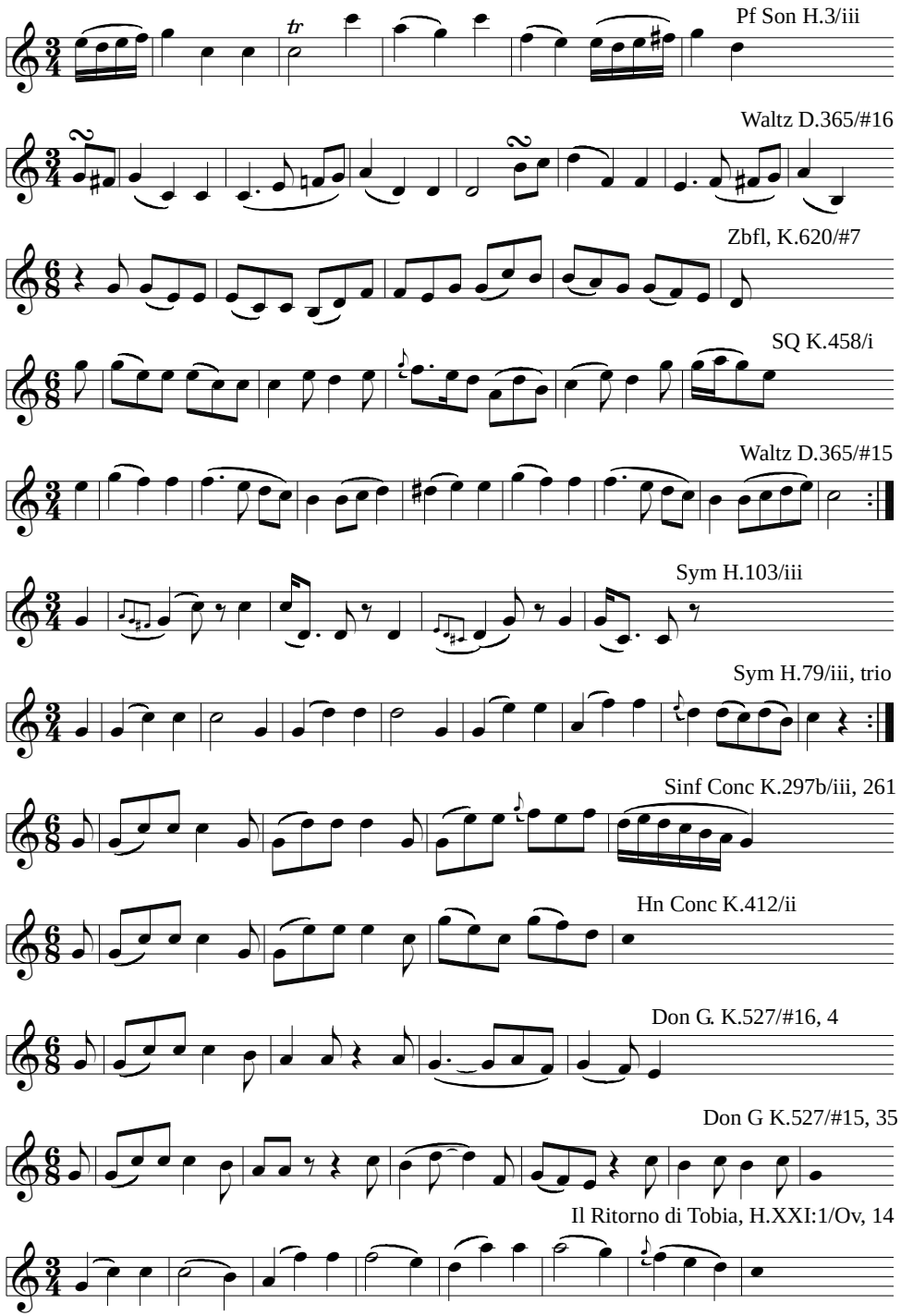
Sym H.99/iii, trio

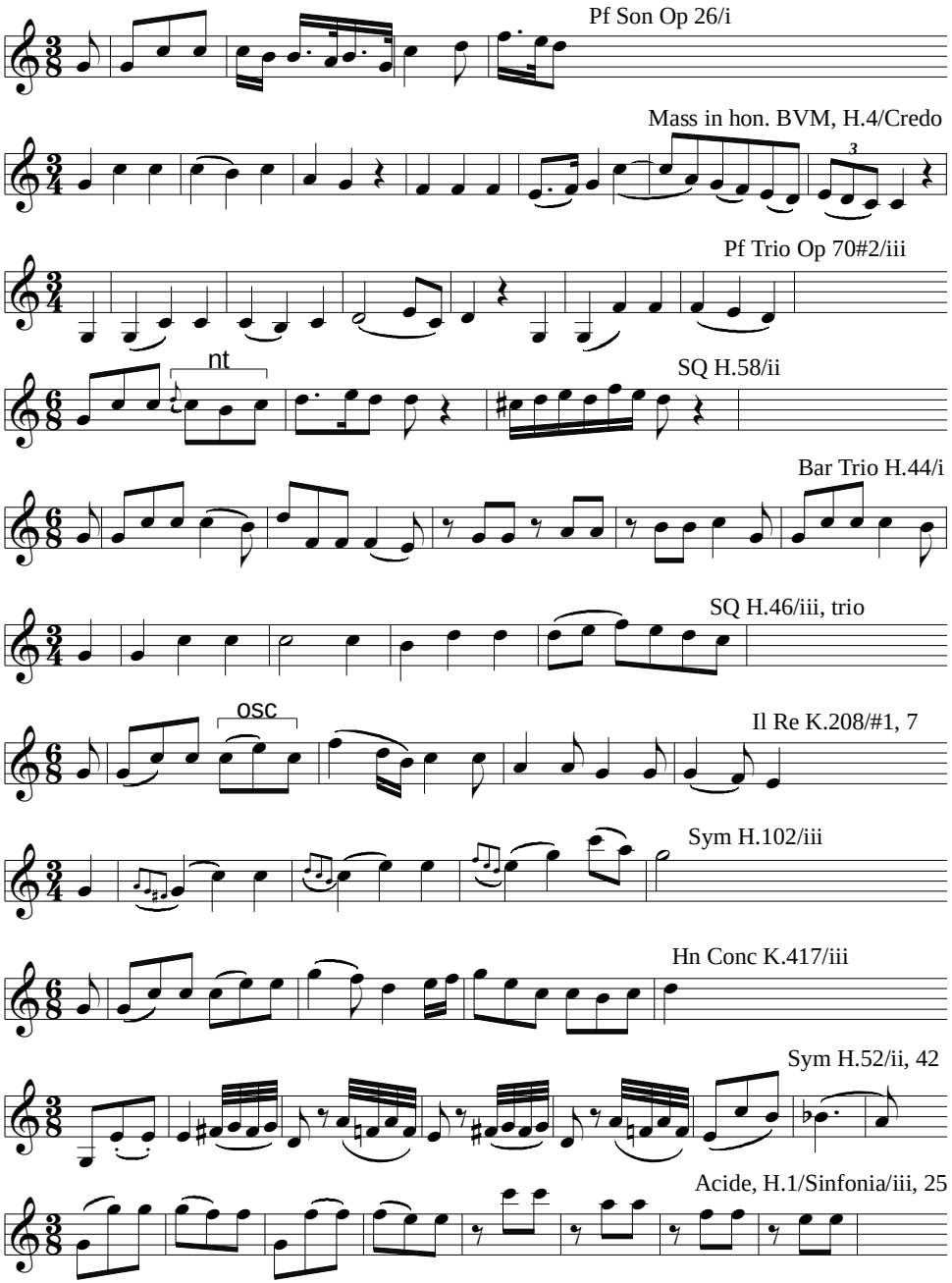
Recollection H.26, 8

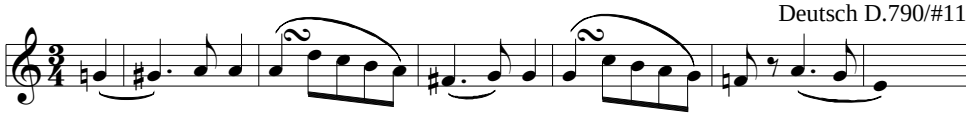
SQ H.42/iii

Min H.3/#8

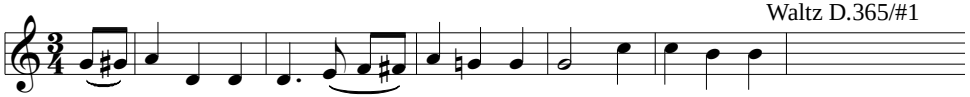
SQ D.112/iii


Pf Son H.3/iii
Waltz D.365/#16
Zbfl, K.620/#7
SQ K.458/i
Waltz D.365/#15
Sym H.103/iii
Sym H.79/iii, trio
Sinf Conc K.297b/iii, 261
Hn Conc K.412/ii
Don G. K.527/#16, 4
Don G K.527/#15, 35
Il Ritorno di Tobia, H.XXI:1/Ov, 14

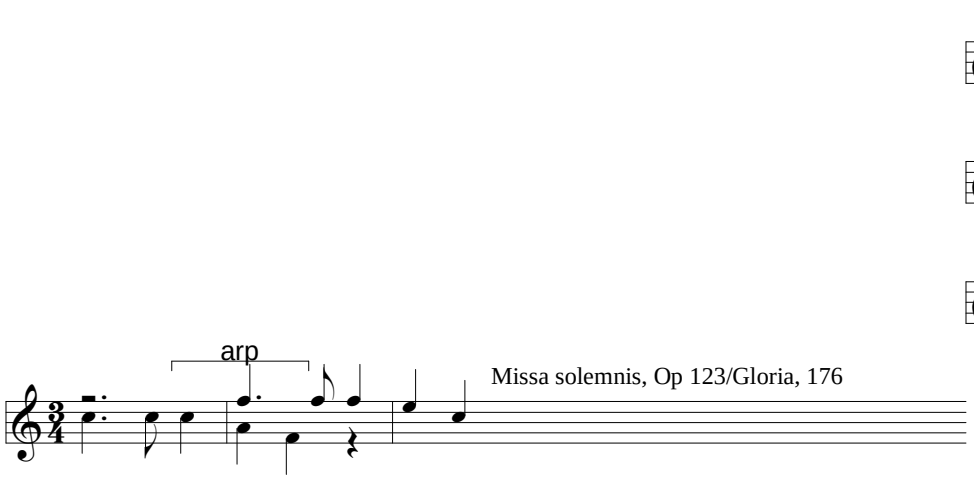

Pf Son Op 26/i
Mass in hon. BVM, H.4/Credo
Pf Trio Op 70#2/iii
nt
SQ H.58/ii
Bar Trio H.44/i
SQ H.46/iii, trio
osc
Il Re K.208/#1, 7
Sym H.102/iii
Hn Conc K.417/iii
Sym H.52/ii, 42
Acide, H.1/Sinfonia/iii, 25

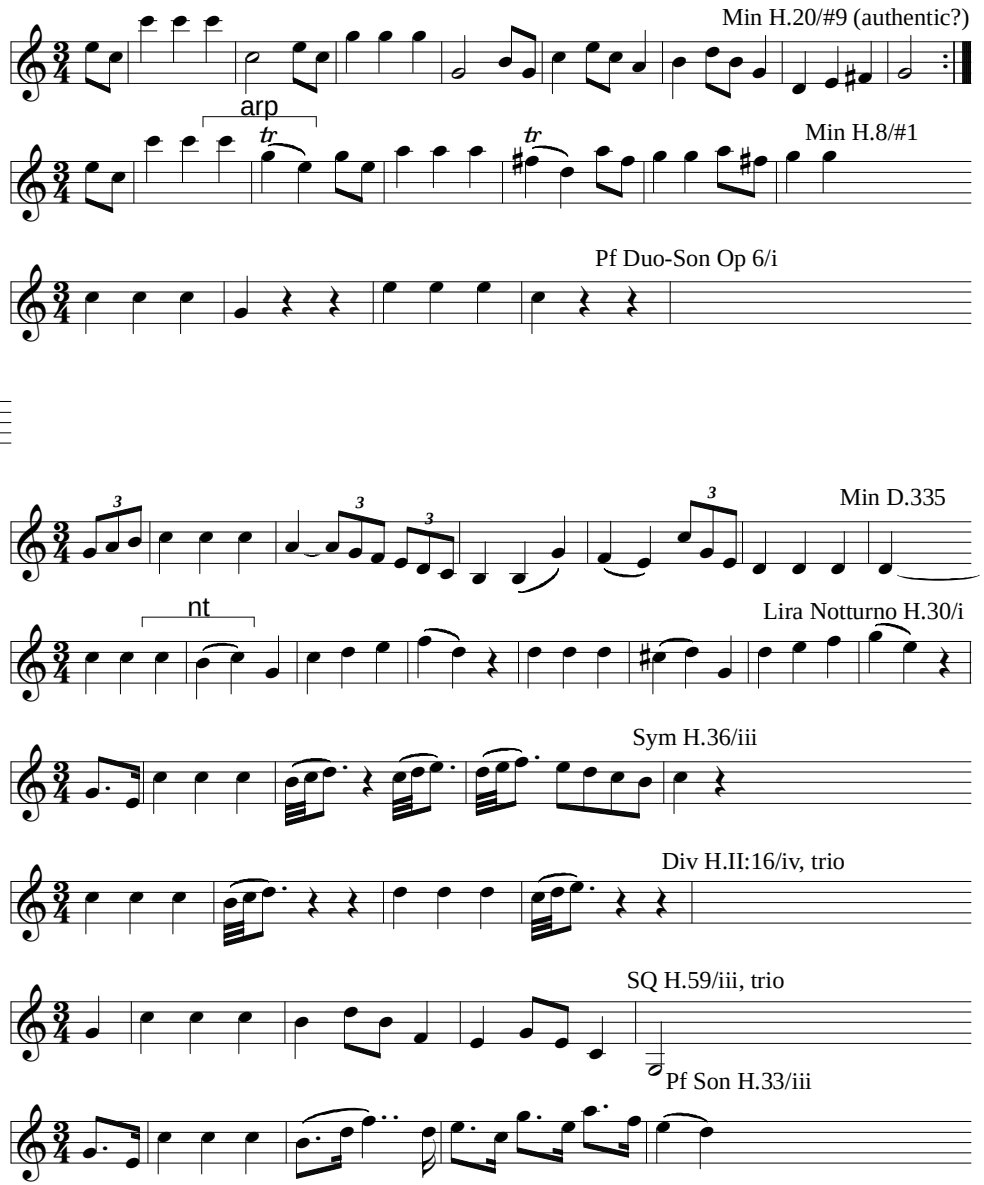

Deutsch D.790/#11

Waltz D.365/#1

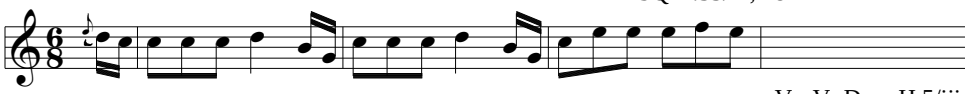


EX 35:
Δ2^B1, {RRR|-}

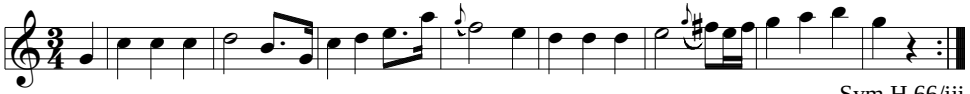




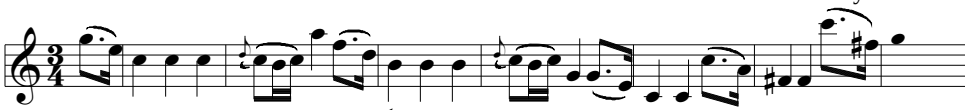
SQ H.35/iii, 28



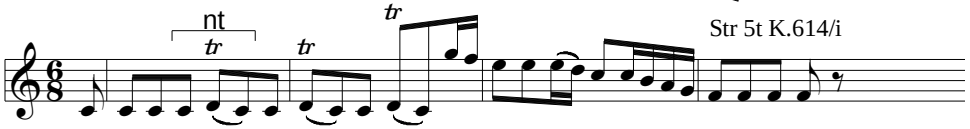
Vn-Va Duo, H.5/iii



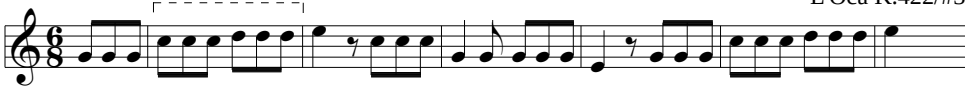
Sym H.66/iii



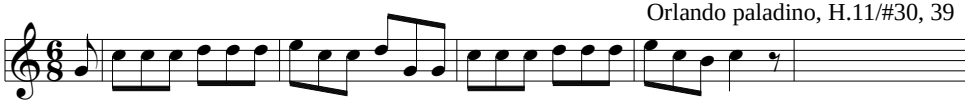
Str 5t K.614/i



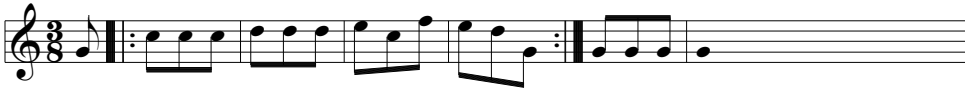
L'Oca K.422/#3



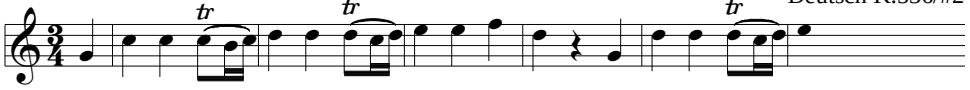
Orlando paladino, H.11/#30, 39



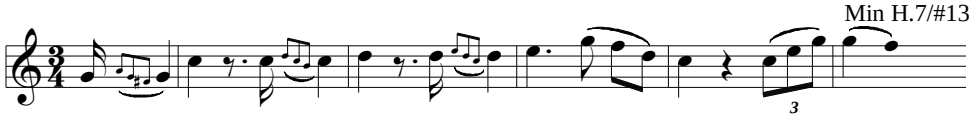
Il Mondo della luna, H.7/#55, 74



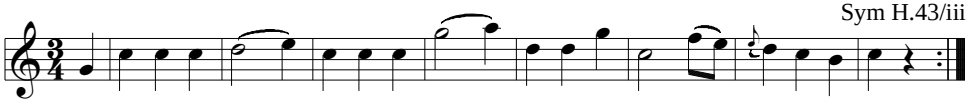
Deutsch K.536/#2



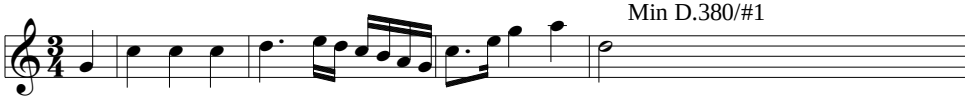
Min H.7/#13



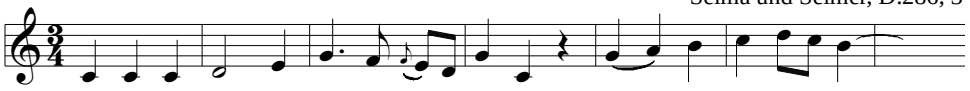
Sym H.43/iii



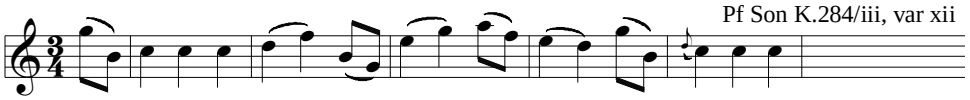
Min D.380/#1



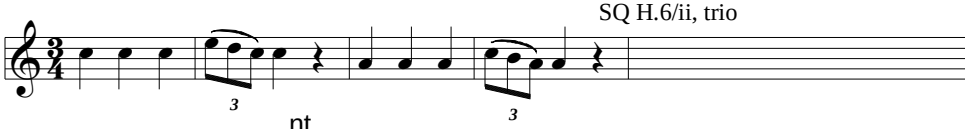
Selma und Selmer, D.286, 3



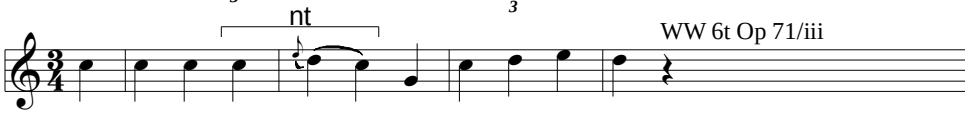
Pf Son K.284/iii, var xii



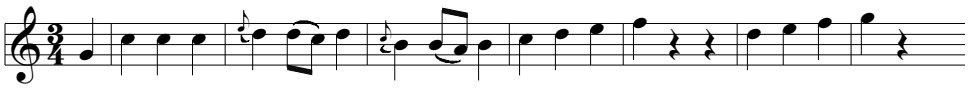
SQ H.6/ii, trio



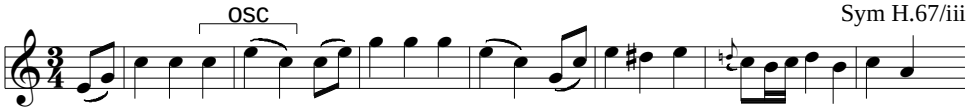
WW 6t Op 71/iii



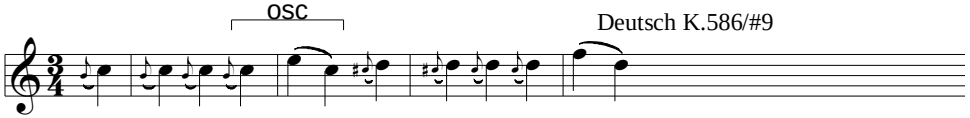
Pf Son H.50/iii



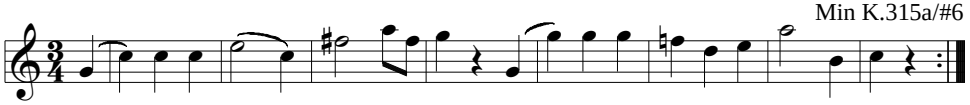
Sym H.67/iii



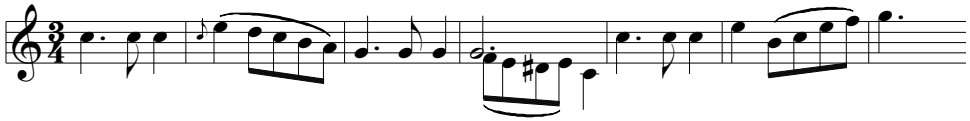
Deutsch K.586/#9



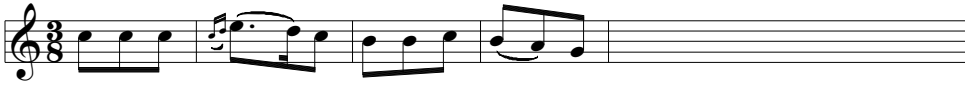
Min K.315a/#6



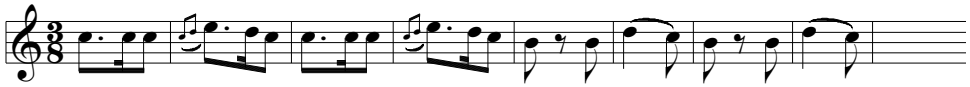
Waltz D.365/#32



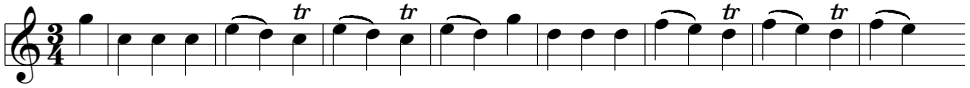
Don G K.527/#18



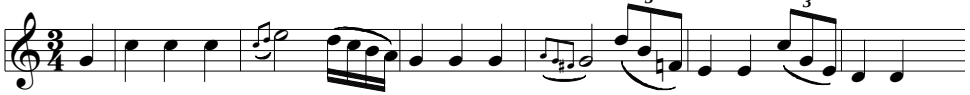
Pf Son K.280/iii, 38



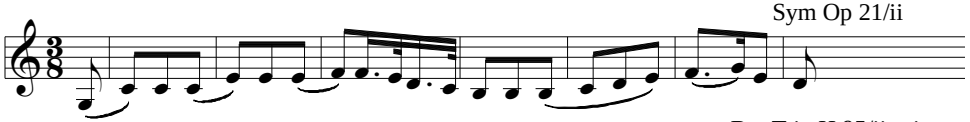
Orch Div K.287/v



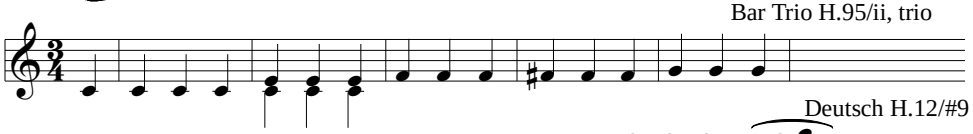
Min H.16/#10



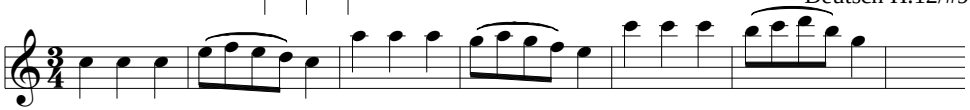
Sym Op 21/ii



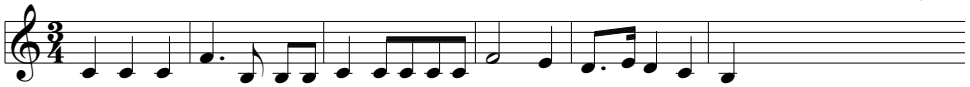
Bar Trio H.95/ii, trio



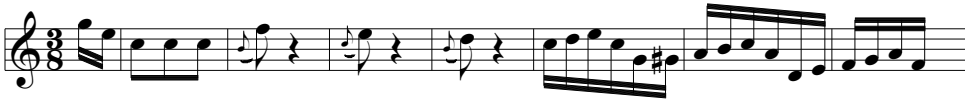
Deutsch H.12/#9



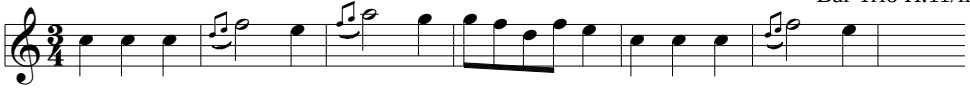
Missa brevis K.192/Gloria, 139



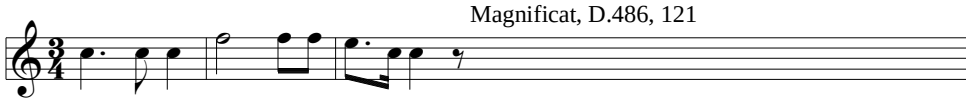
Pf Son K.280/iii



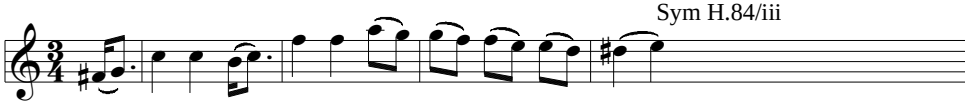
Bar Trio H.11/ii



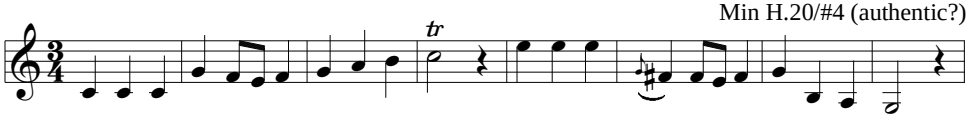
Magnificat, D.486, 121



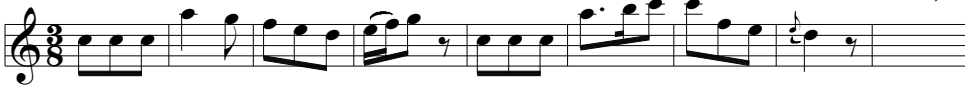
Sym H.84/iii



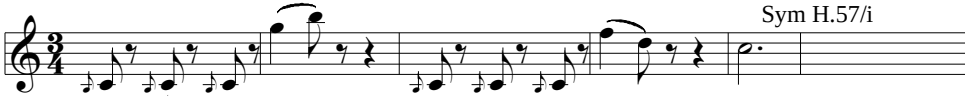
Min H.20/#4 (authentic?)



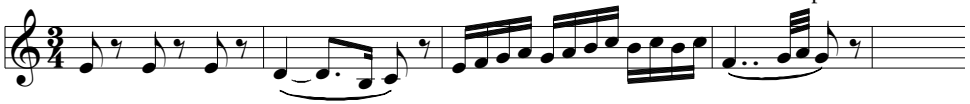
Cantata H.XXIVa:2/#1b, 27



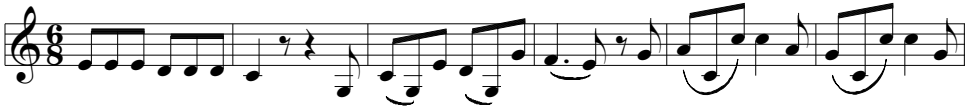
Sym H.57/i



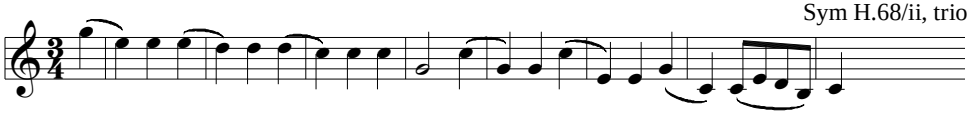
Fl-Hp Conc K.299/ii



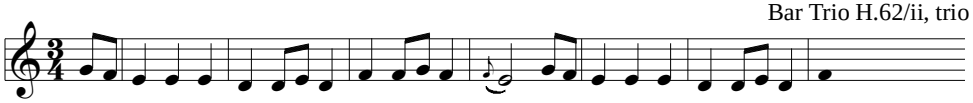
Pf Trio K.442/iii



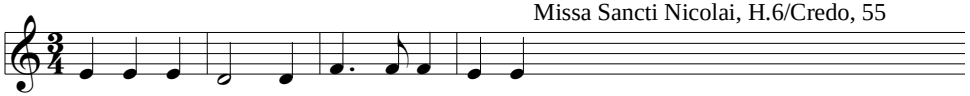
Sym H.68/ii, trio



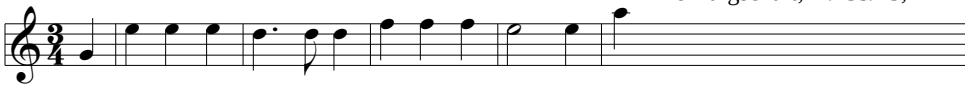
Bar Trio H.62/ii, trio



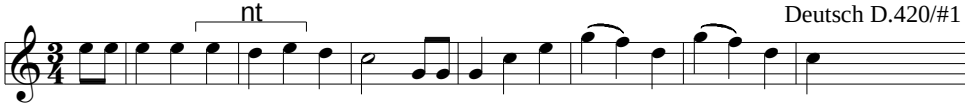
Missa Sancti Nicolai, H.6/Credo, 55



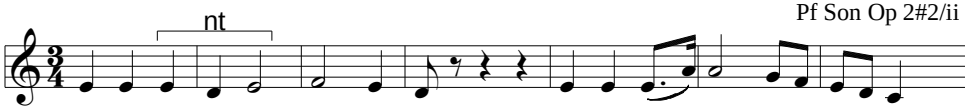
Die Bürgschaft, D.435/#3, 4



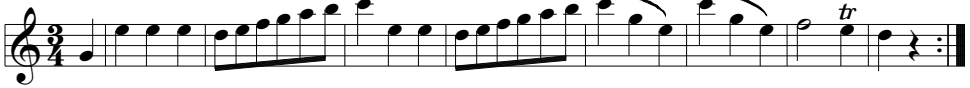
Deutsch D.420/#1



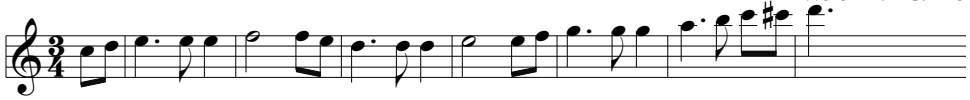
Pf Son Op 2#2/ii



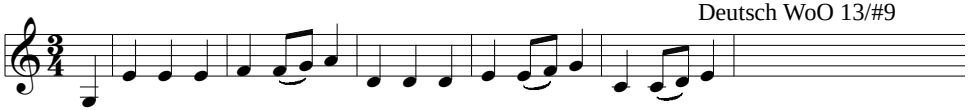
Orch Ser K.250/vii, trio 2



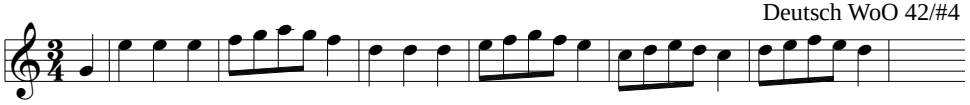
Waltz D.779/#20



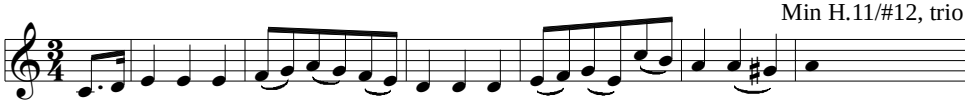
Deutsch WoO 13/#9



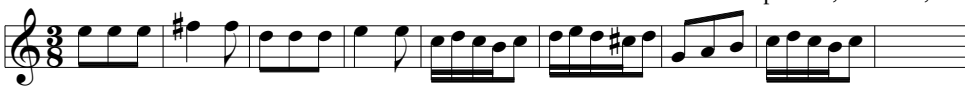
Deutsch WoO 42/#4

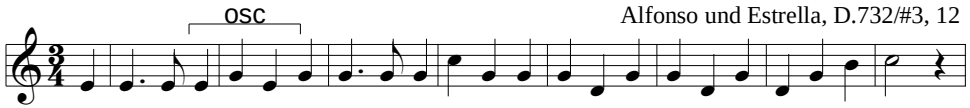


Min H.11/#12, trio



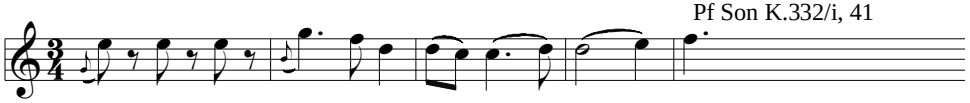
Lo speziale, H.3/#20, 68

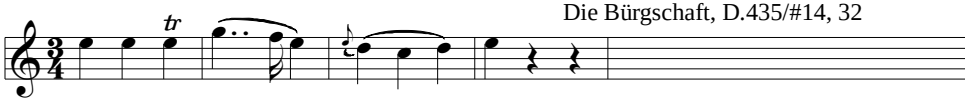




Alfonso und Estrella, D.732/#3, 12

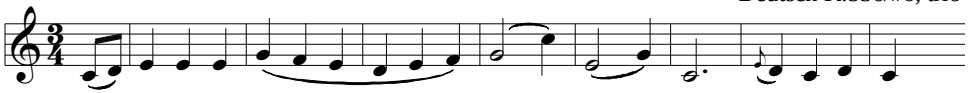
Pf Son K.332/i, 41



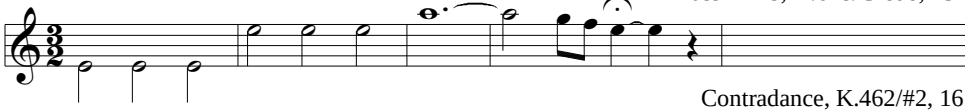


Die Bürgschaft, D.435/#14, 32

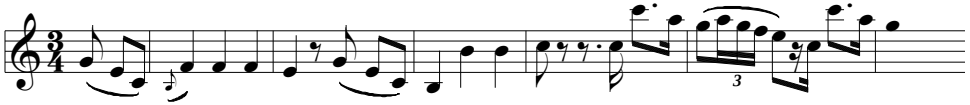
Deutsch K.536/#6, trio



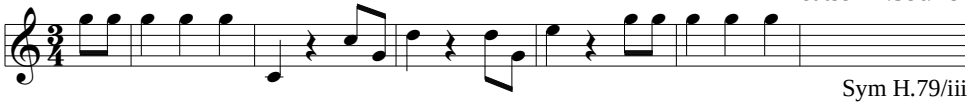
Mass in Ab, D.678/Credo, 131



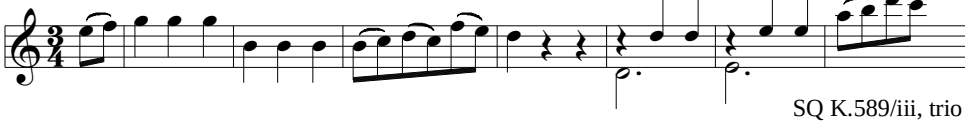
Contradance, K.462/#2, 16



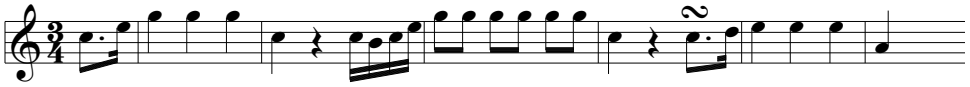
Deutsch K.586/#8



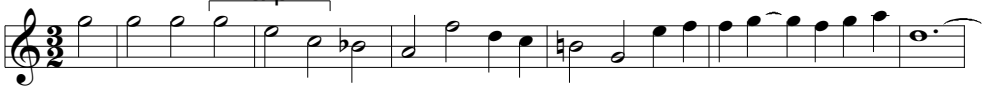
Sym H.79/iii



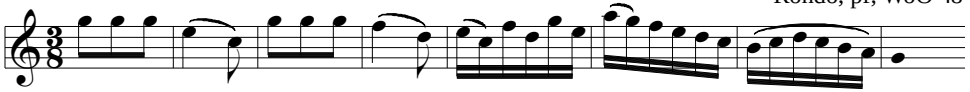
SQ K.589/iii, trio

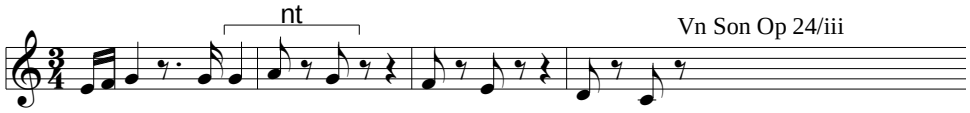


Missa solemnis, Op 123/Credo, 309

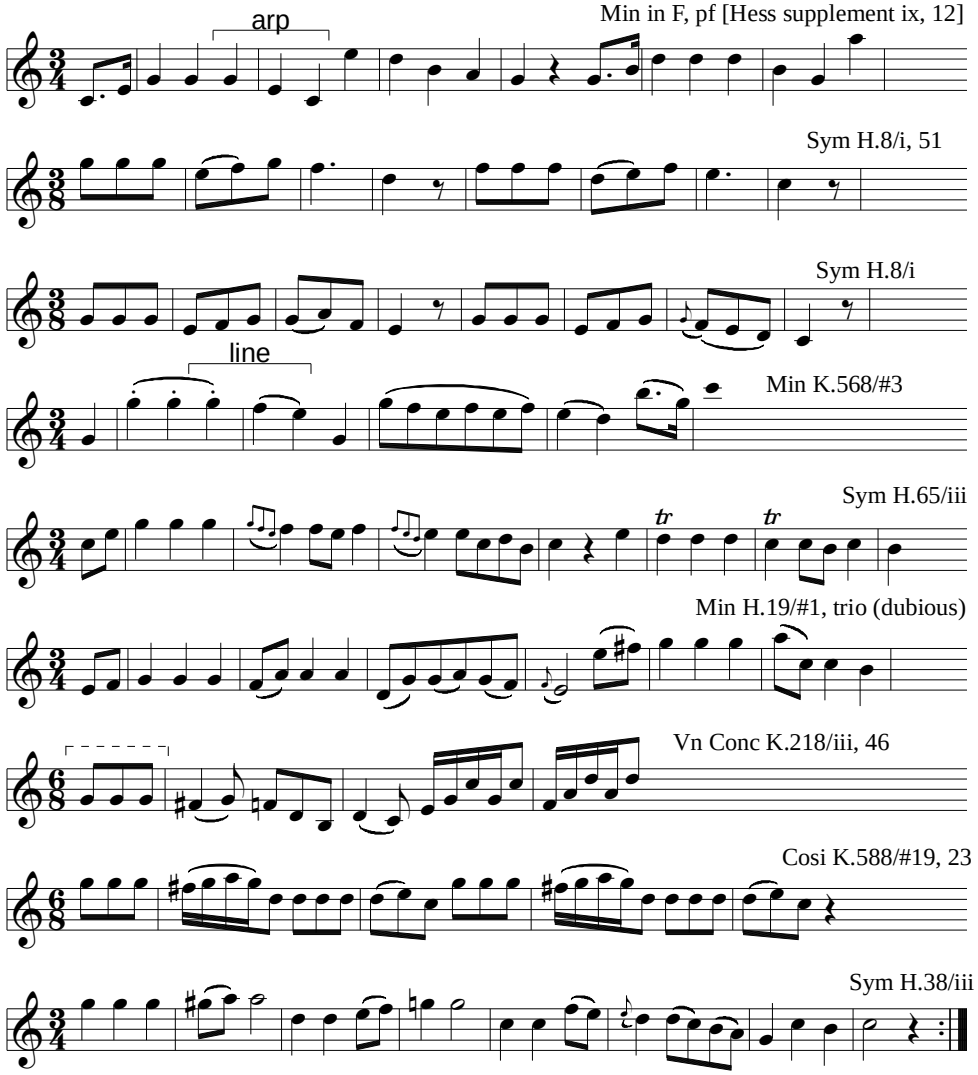


Rondo, pf, WoO 48





Vn Son Op 24/iii



Min in F, pf [Hess supplement ix, 12]

Sym H.8/i, 51

Sym H.8/i

Min K.568/#3

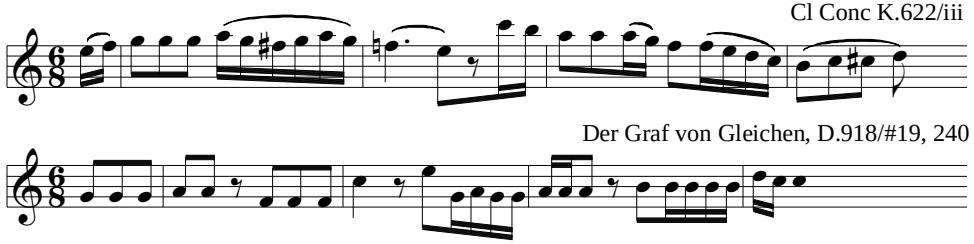
Sym H.65/iii

Min H.19/#1, trio (dubious)

Vn Conc K.218/iii, 46

Cosi K.588/#19, 23

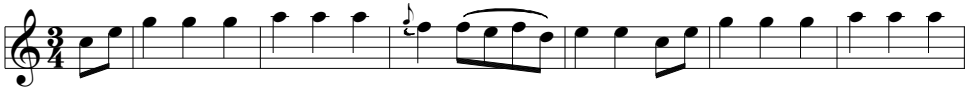
Sym H.38/iii



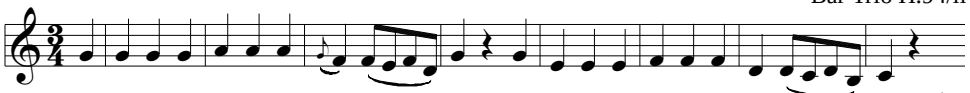
Cl Conc K.622/iii

Der Graf von Gleichen, D.918/#19, 240

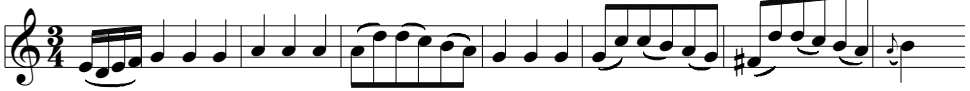
Bar Trio H.61/iii, trio



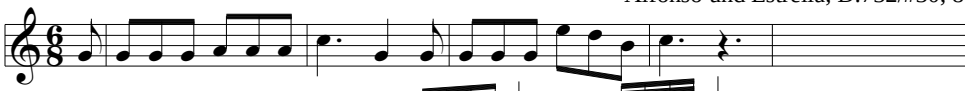
Bar Trio H.94/ii



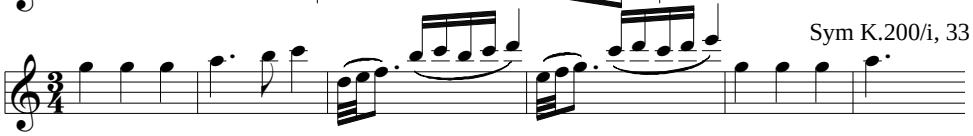
Min H.7/#5



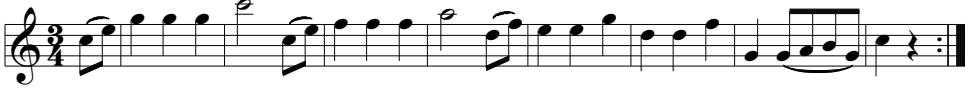
Alfonso und Estrella, D.732/#30, 8



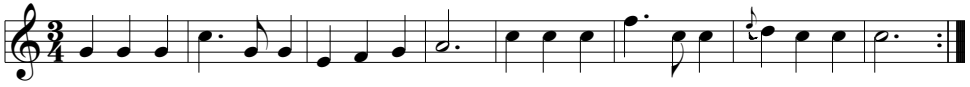
Sym K.200/i, 33



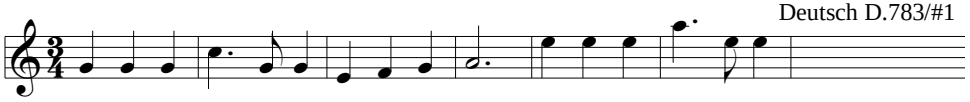
Sym H.53/iii



Deutsch D.790/#2

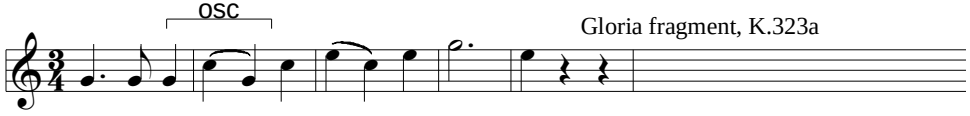


Deutsch D.783/#1

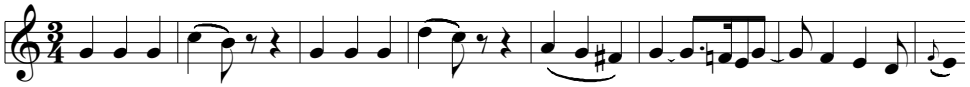


OSC

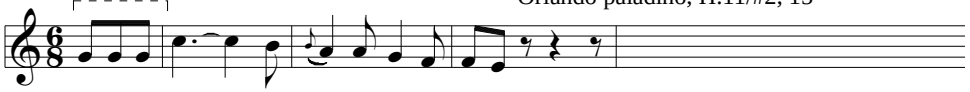
Gloria fragment, K.323a



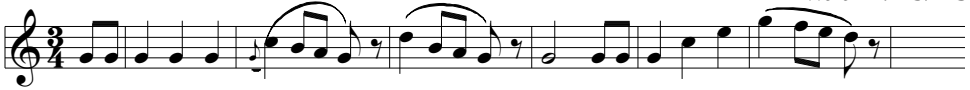
Bar Octet H.5/i



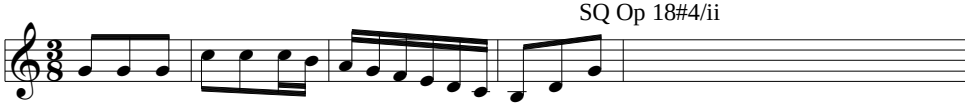
Orlando paladino, H.11/#2, 15



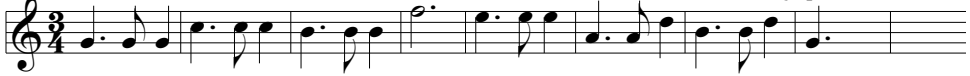
Waltz D.779/#25



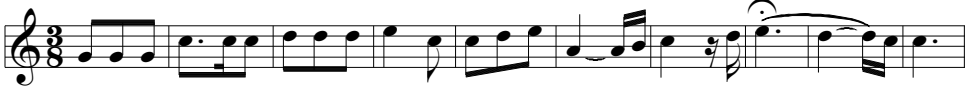
SQ Op 18#4/ii



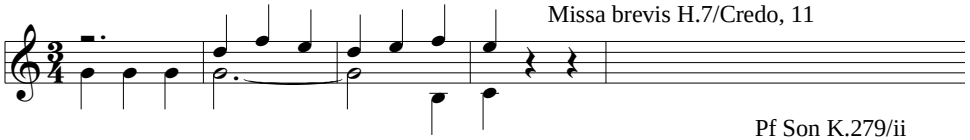
Fantasy, pf, D.760/iii, 79



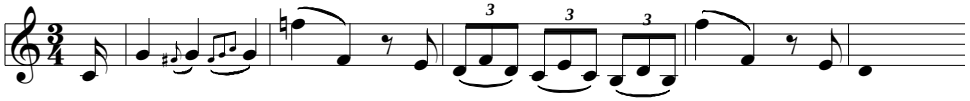
Cosi K.588/#31, 509



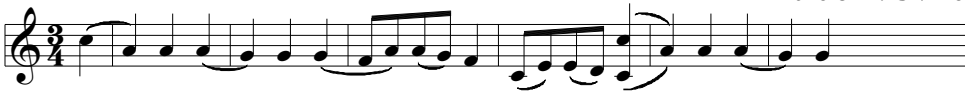
Missa brevis H.7/Credo, 11



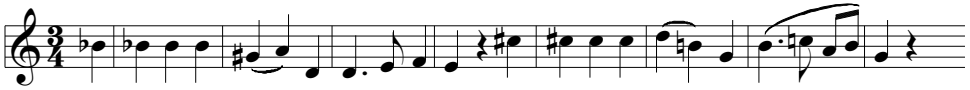
Pf Son K.279/ii



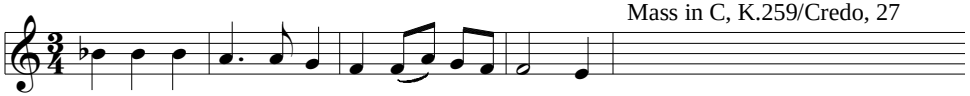
Ländler D.734/#16



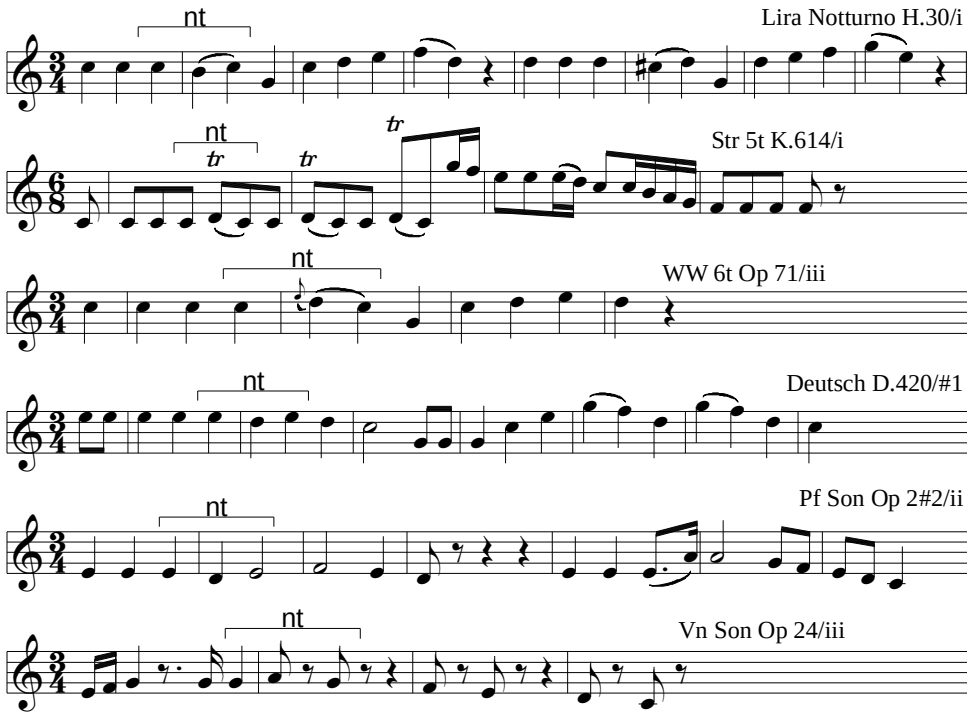
Deutsch K.586/#4, trio



Mass in C, K.259/Credo, 27

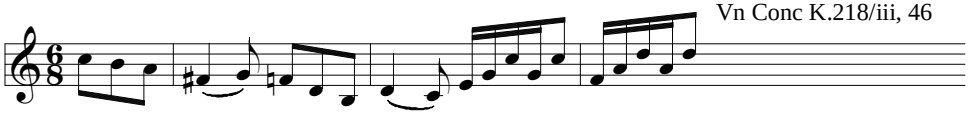


Δ2^B1, 3P+NT

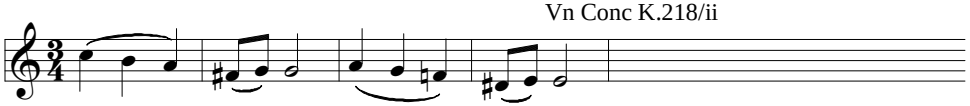

nt
Lira Notturno H.30/i
nt
tr
tr
tr
Str 5t K.614/i
nt
WW 6t Op 71/iii
nt
Deutsch D.420/#1
nt
Pf Son Op 2#2/ii
nt
Vn Son Op 24/iii

EX 36:
Δ2^B1, 3-linear

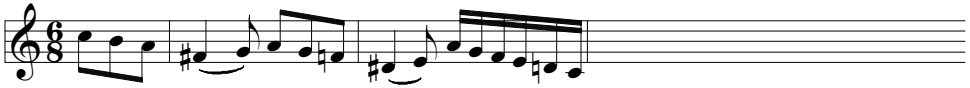
Vn Conc K.218/iii, 46



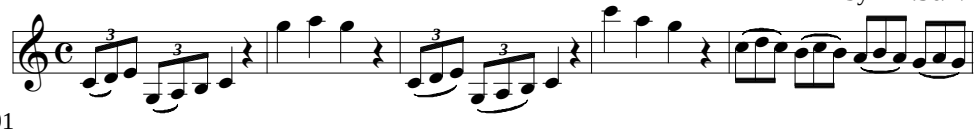
Vn Conc K.218/ii

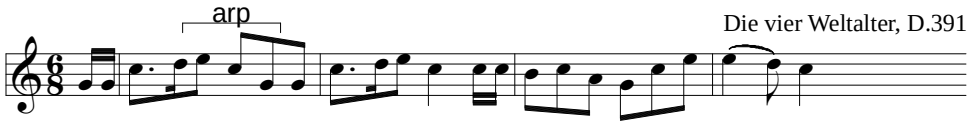


Vn Conc K.218/iii, 23



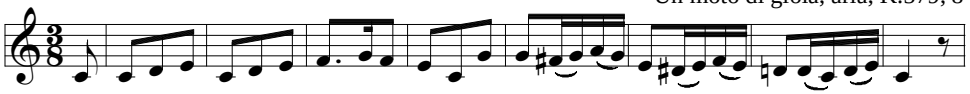
Sym H.56/iv



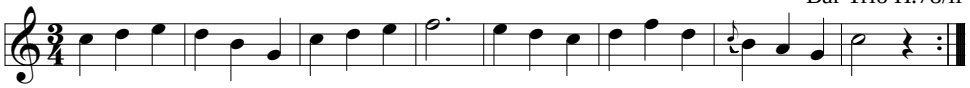


Die vier Weltalter, D.391

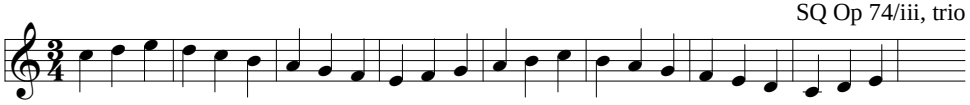
Un moto di gioia, aria, K.579, 8

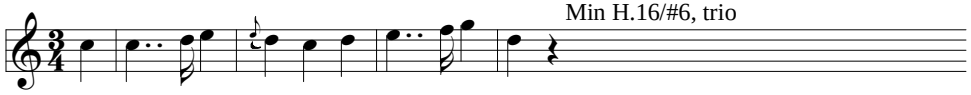


Bar Trio H.78/ii

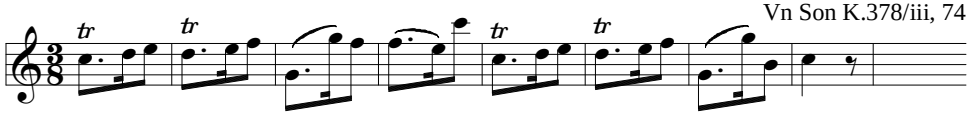


SQ Op 74/iii, trio



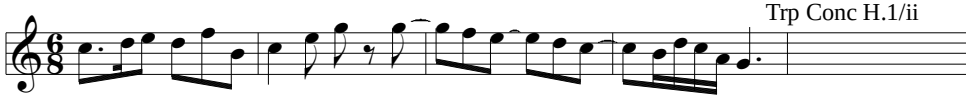


Min H.16/#6, trio

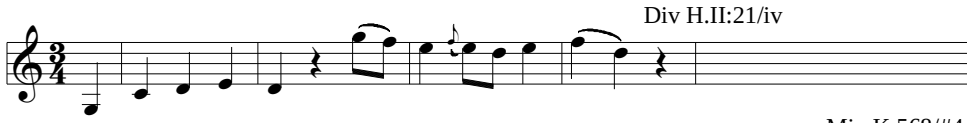


Vn Son K.378/iii, 74

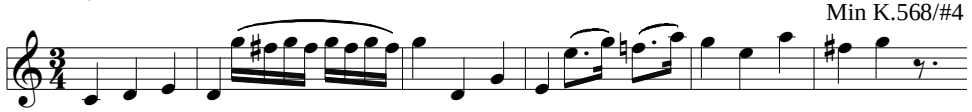
Trp Conc H.1/ii



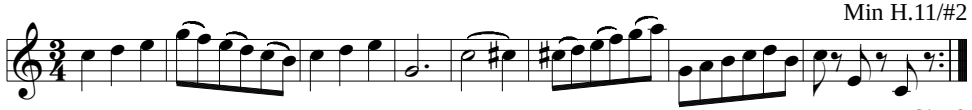
Div H.II:21/iv



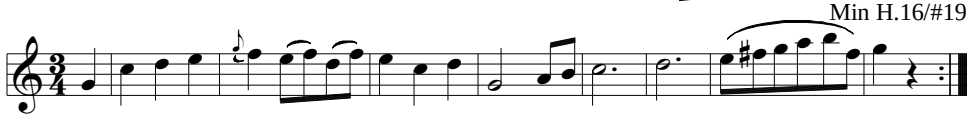
Min K.568/#4



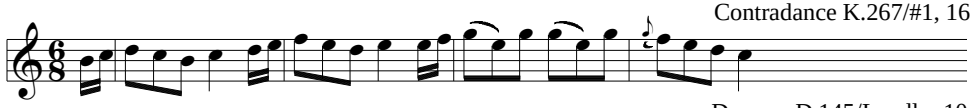
Min H.11/#2



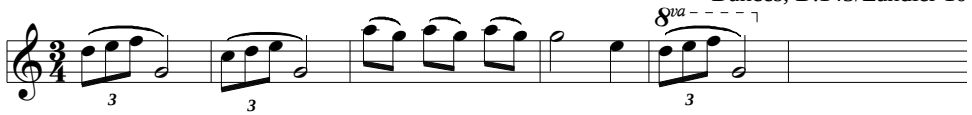
Min H.16/#19



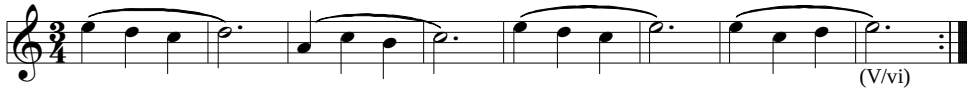
Contradance K.267/#1, 16



Dances, D.145/Landler 10



Waltz D.146/#18



Deutsch D.420/coda

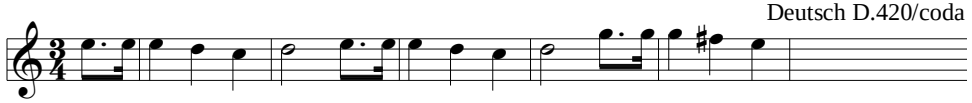
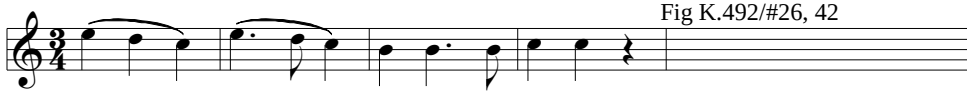
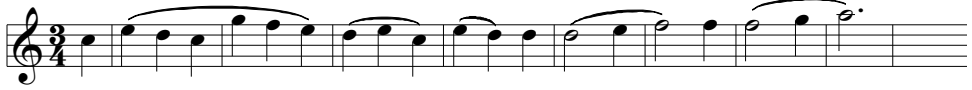


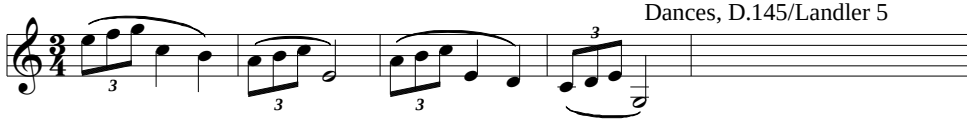
Fig K.492/#26, 42



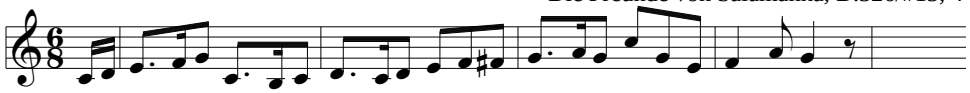
Ruins of Athens Op 113/#7



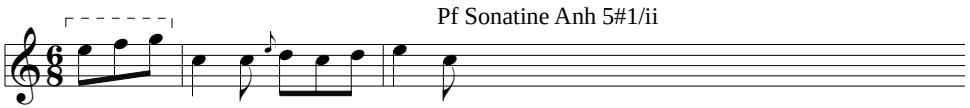
Dances, D.145/Landler 5



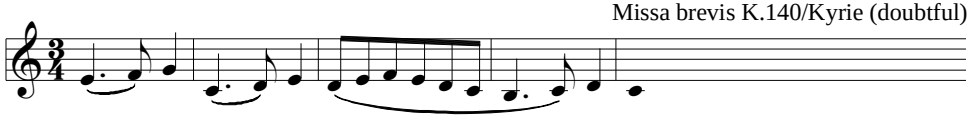
Die Freunde von Salamanka, D.326/#15, 4



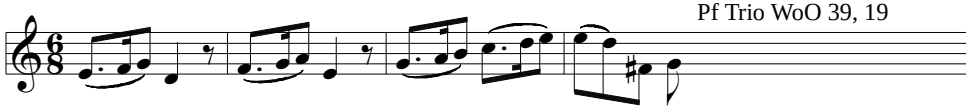
Pf Sonatine Anh 5#1/ii



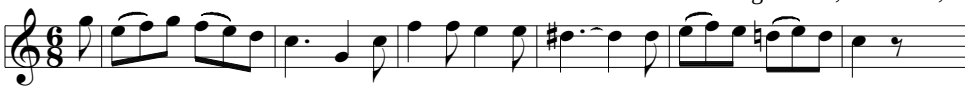
Missa brevis K.140/Kyrie (doubtful)



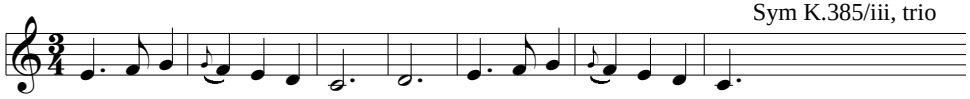
Pf Trio WoO 39, 19



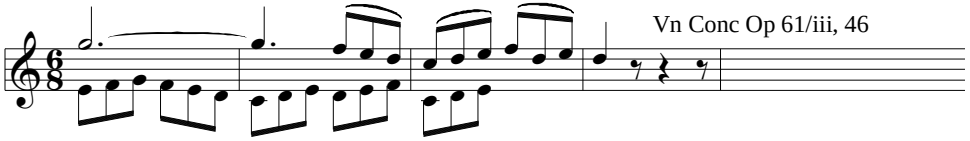
Die Zwillingsbrüder, D.647/#7, 2



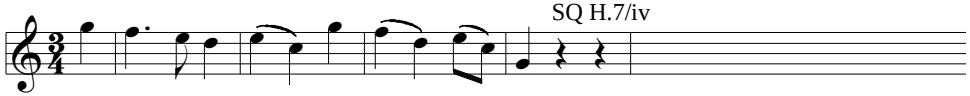
Sym K.385/iii, trio



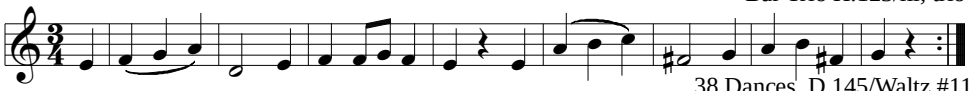
Vn Conc Op 61/iii, 46



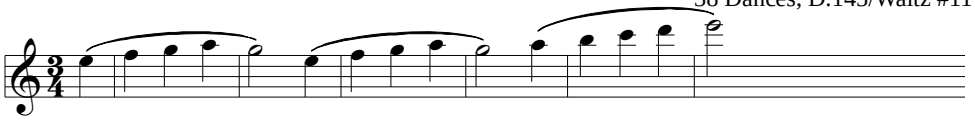
SQ H.7/iv



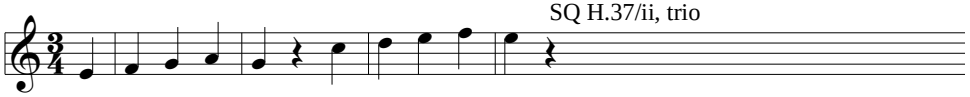
Bar Trio H.123/iii, trio



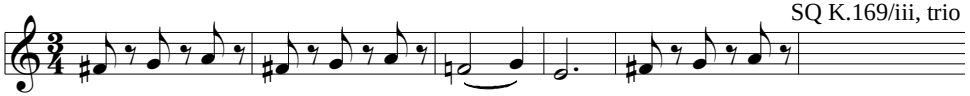
38 Dances, D.145/Waltz #11



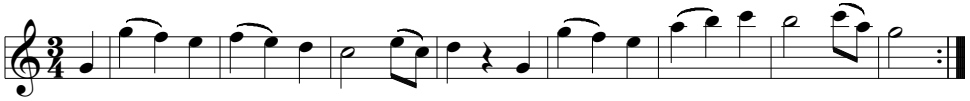
SQ H.37/ii, trio



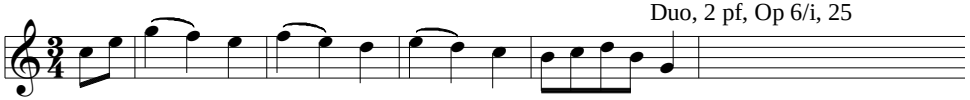
SQ K.169/iii, trio



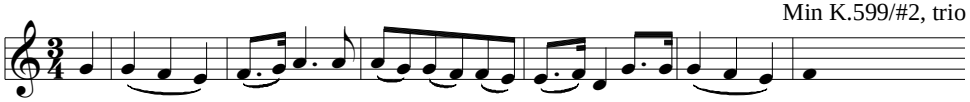
Min K.315a/#3, trio



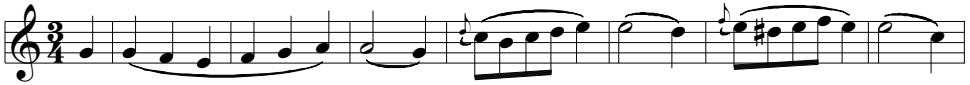
Duo, 2 pf, Op 6/i, 25



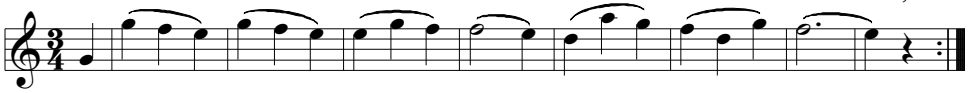
Min K.599/#2, trio



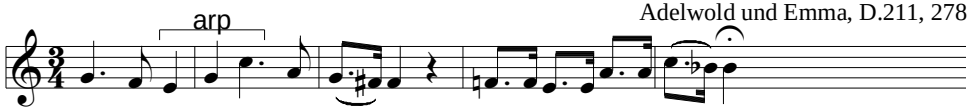
Deutsch D.420/#6



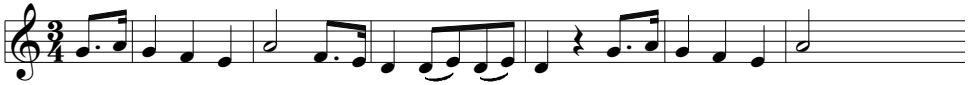
Orch Ser K.250/vii, trio 1



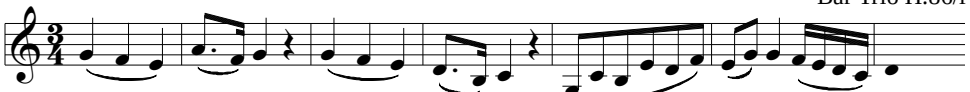
Adelwold und Emma, D.211, 278



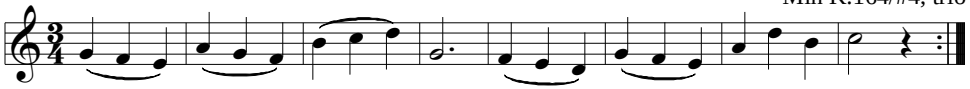
Min H.23



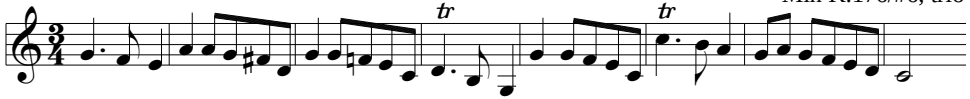
Bar Trio H.86/i



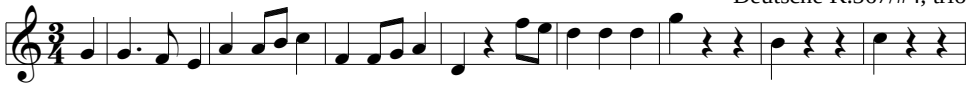
Min K.164/#4, trio



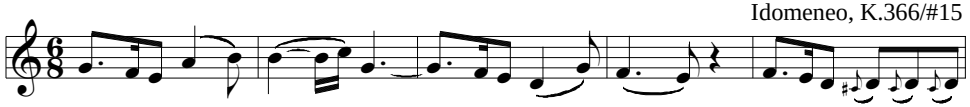
Min K.176/#6, trio



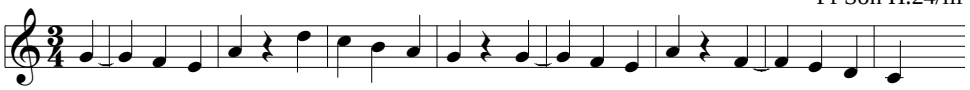
Deutsche K.567/#4, trio



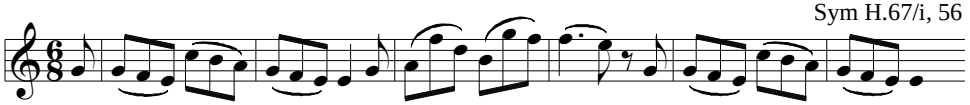
Idomeneo, K.366/#15



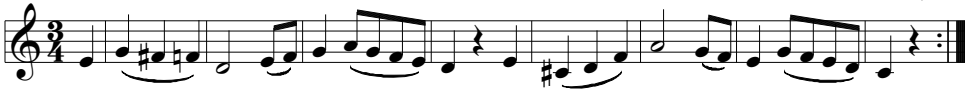
Pf Son H.24/iii



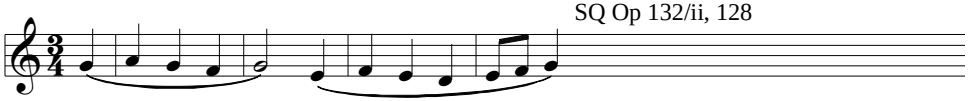
Sym H.67/i, 56



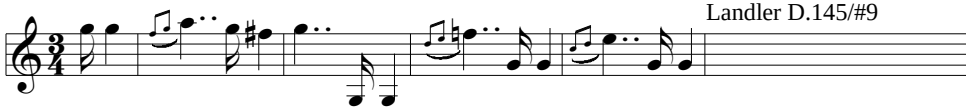
Deutsch K.600/#3, trio



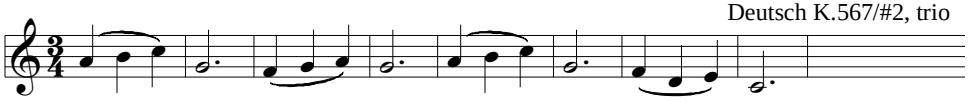
SQ Op 132/ii, 128



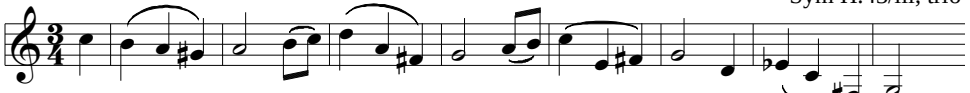
Landler D.145/#9



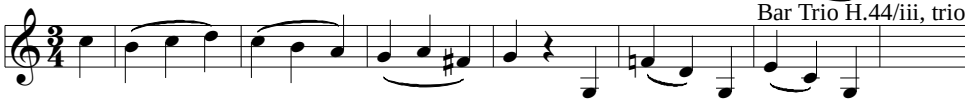
Deutsch K.567/#2, trio



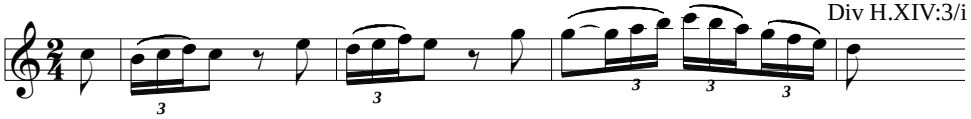
Sym H.43/iii, trio



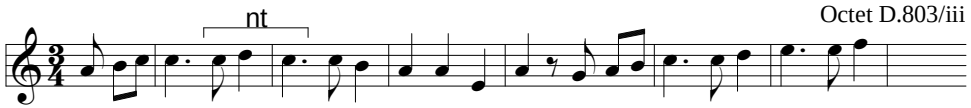
Bar Trio H.44/iii, trio



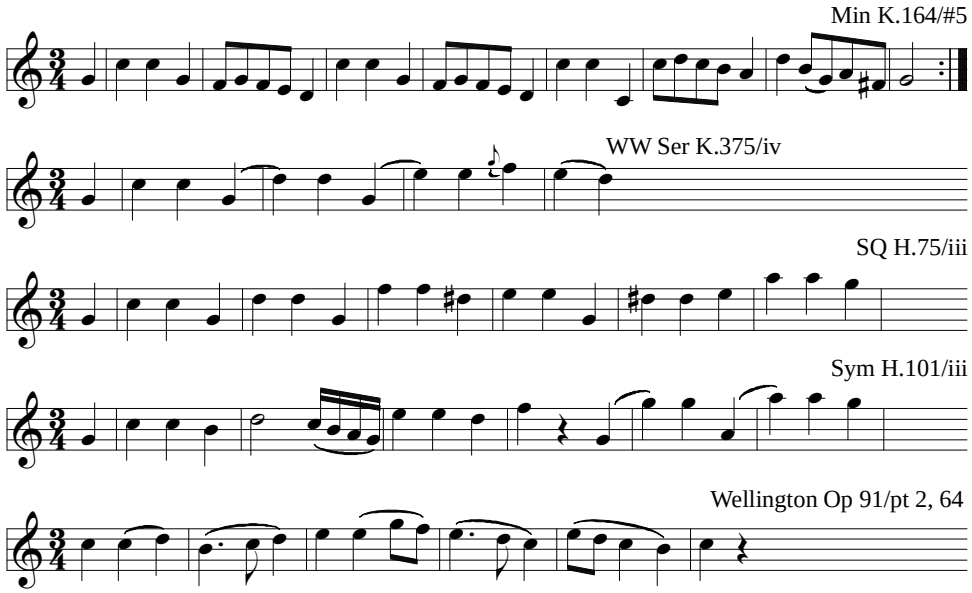
Div H.XIV:3/i

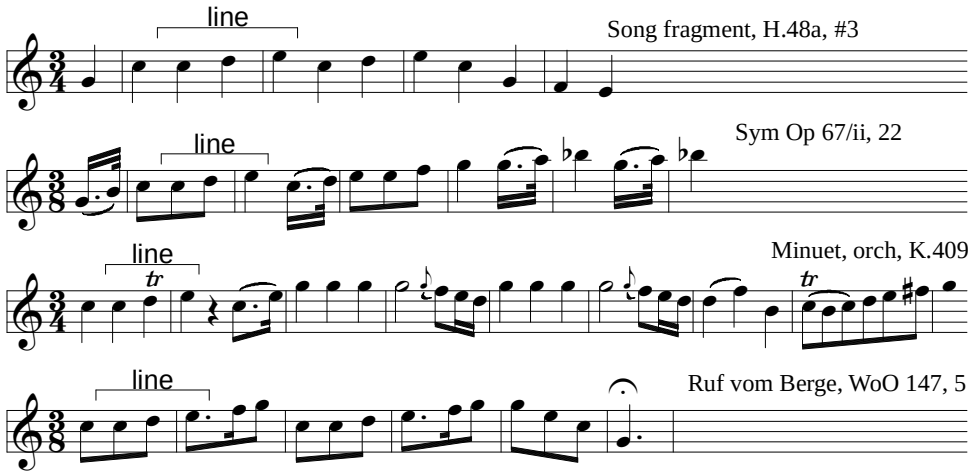


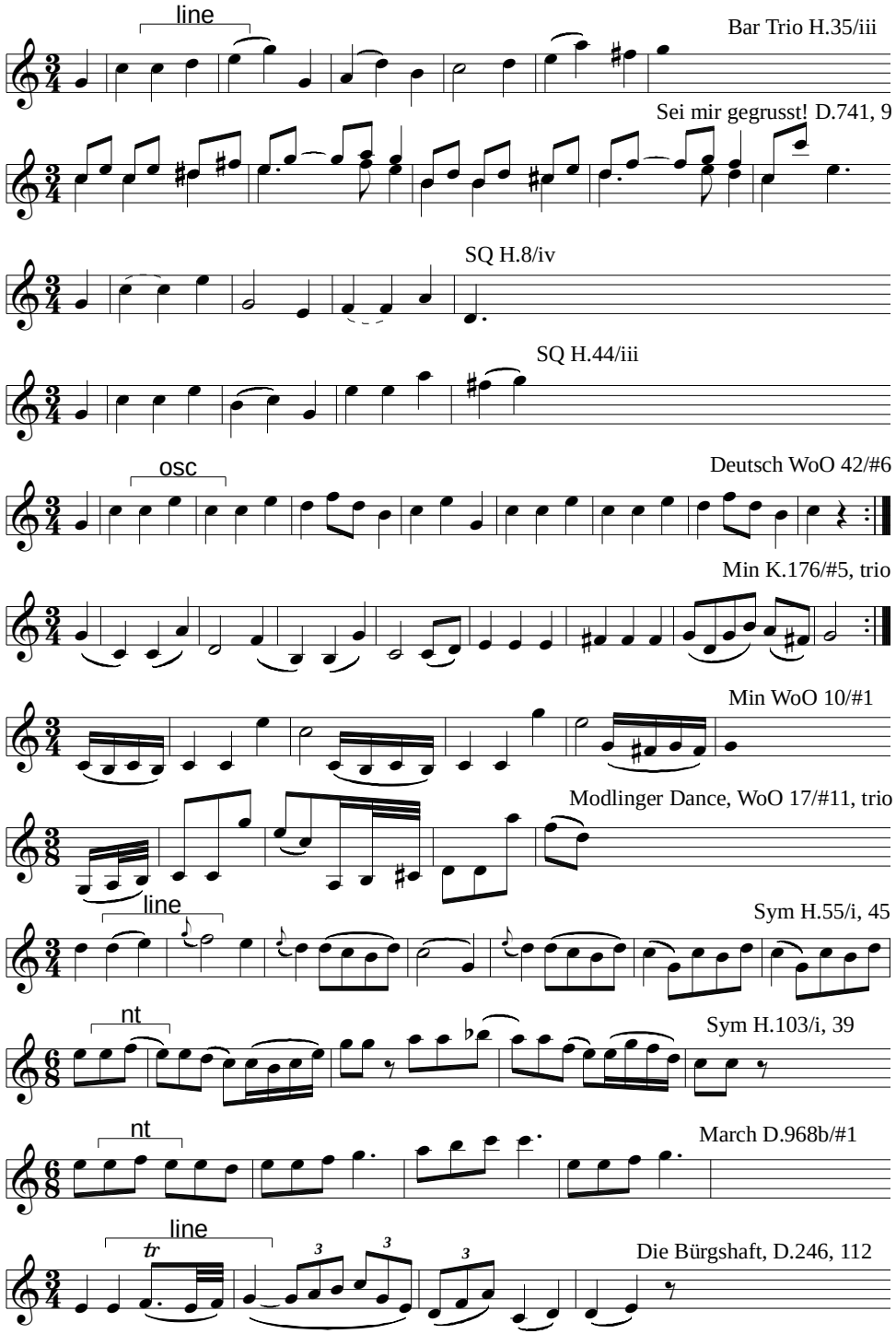
EX 37:
Δ2^B1, {RR-|-}

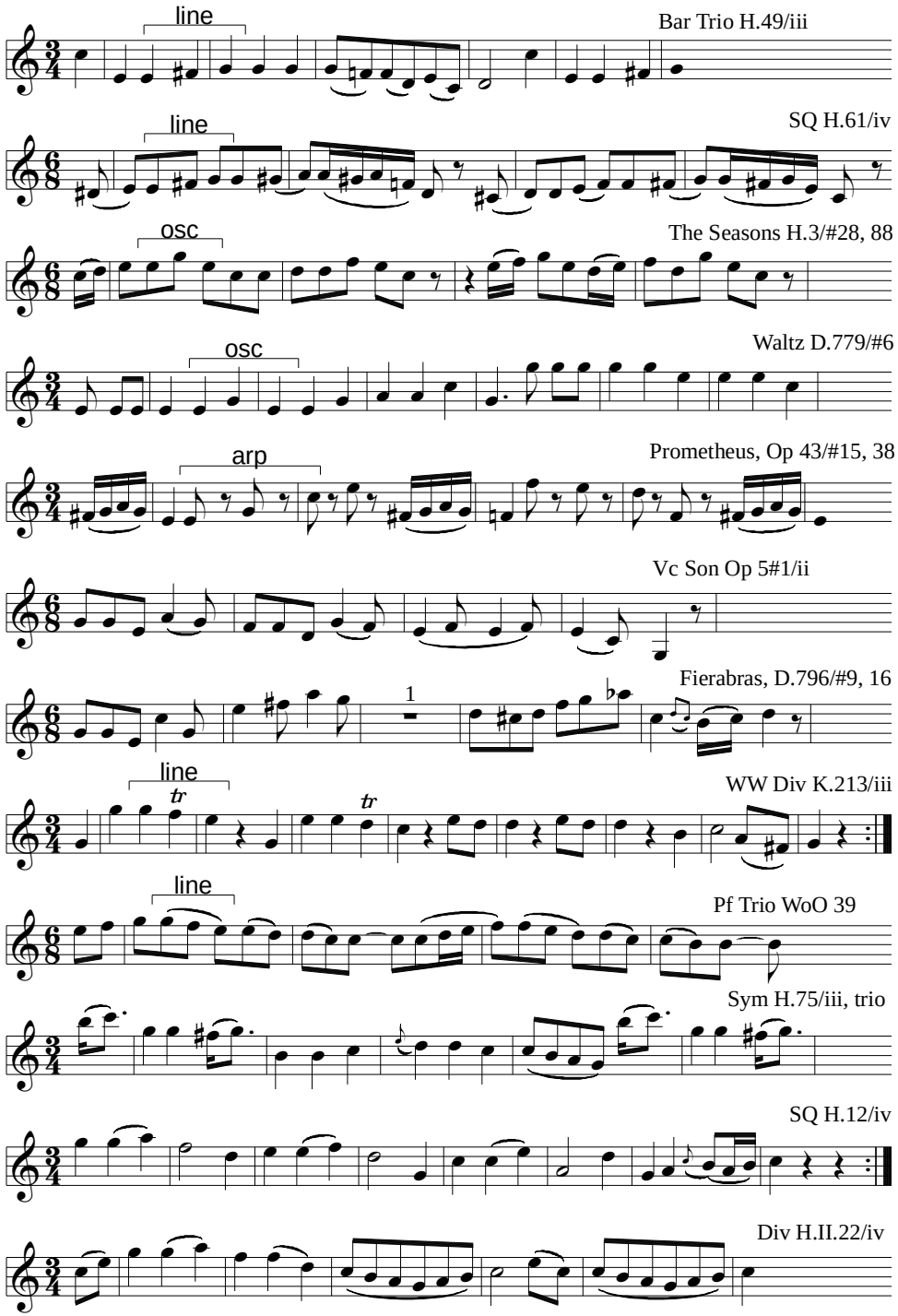


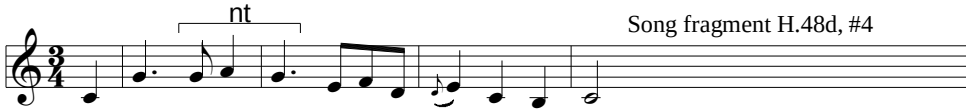
Octet D.803/iii



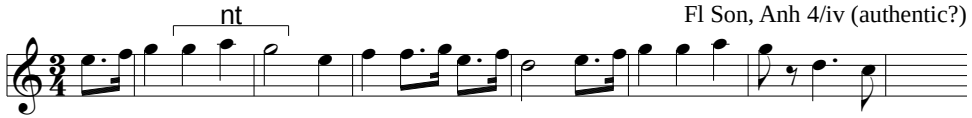



line
Bar Trio H.35/iii
Sei mir gegrusst! D.741, 9
SQ H.8/iv
SQ H.44/iii
osc
Deutsch WoO 42/#6
Min K.176/#5, trio
Min WoO 10/#1
Modlinger Dance, WoO 17/#11, trio
line
Sym H.55/i, 45
nt
Sym H.103/i, 39
nt
March D.968b/#1
line
Die Bürgshaft, D.246, 112

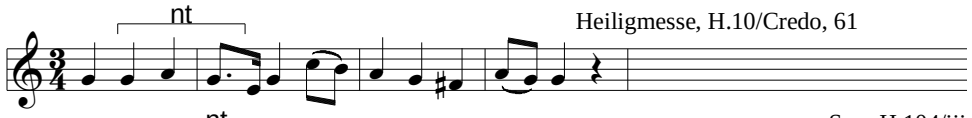

line
Bar Trio H.49/iii
line
SQ H.61/iv
osc
The Seasons H.3/#28, 88
osc
Waltz D.779/#6
arp
Prometheus, Op 43/#15, 38
Vc Son Op 5#1/ii
Fierabras, D.796/#9, 16
1
line
WW Div K.213/iii
line
Pf Trio WoO 39
Sym H.75/iii, trio
SQ H.12/iv
Div H.II.22/iv



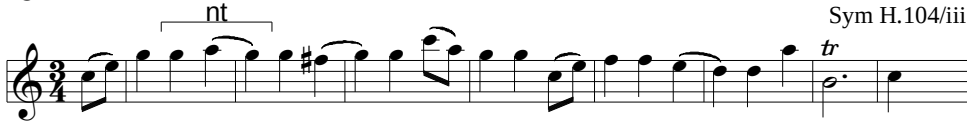
Song fragment H.48d, #4



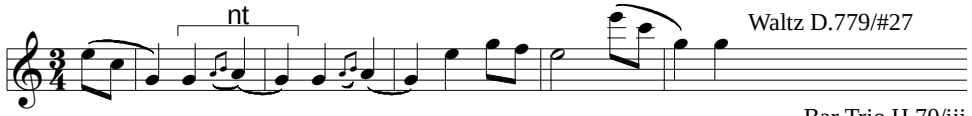
Fl Son, Anh 4/iv (authentic?)



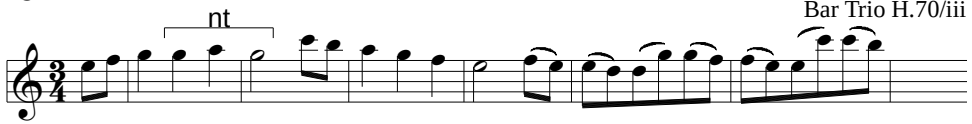
Heiligmesse, H.10/Credo, 61



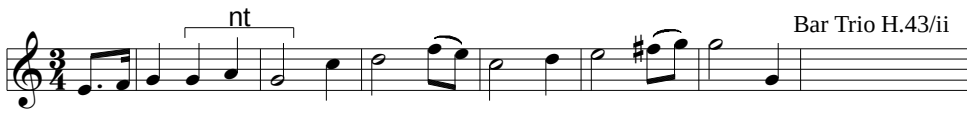
Sym H.104/iii



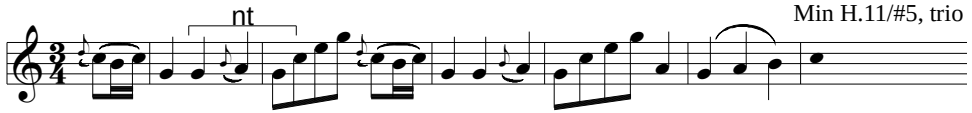
Waltz D.779/#27



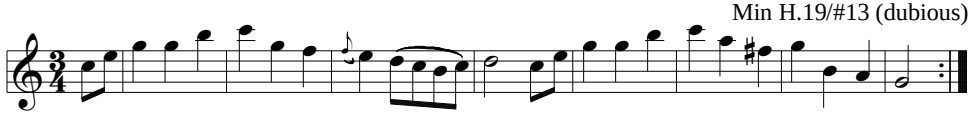
Bar Trio H.70/iii



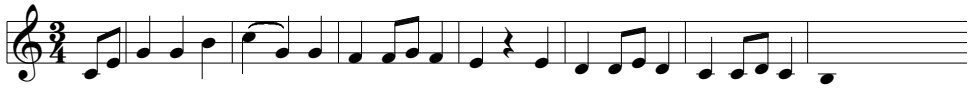
Bar Trio H.43/ii



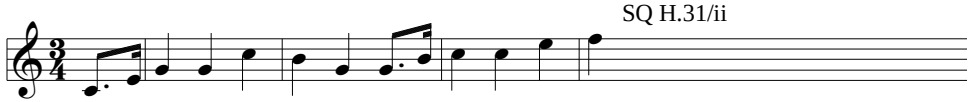
Min H.11/#5, trio



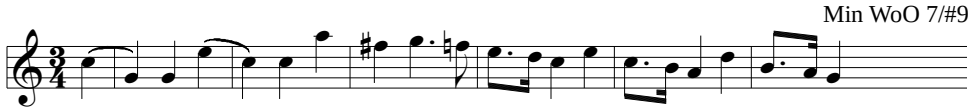
Min H.19/#13 (dubious)



Bar Trio H.119/ii

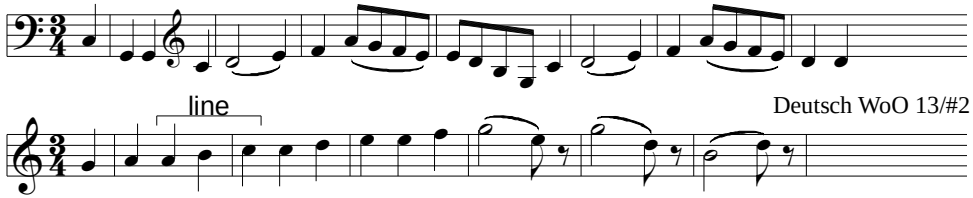


SQ H.31/ii



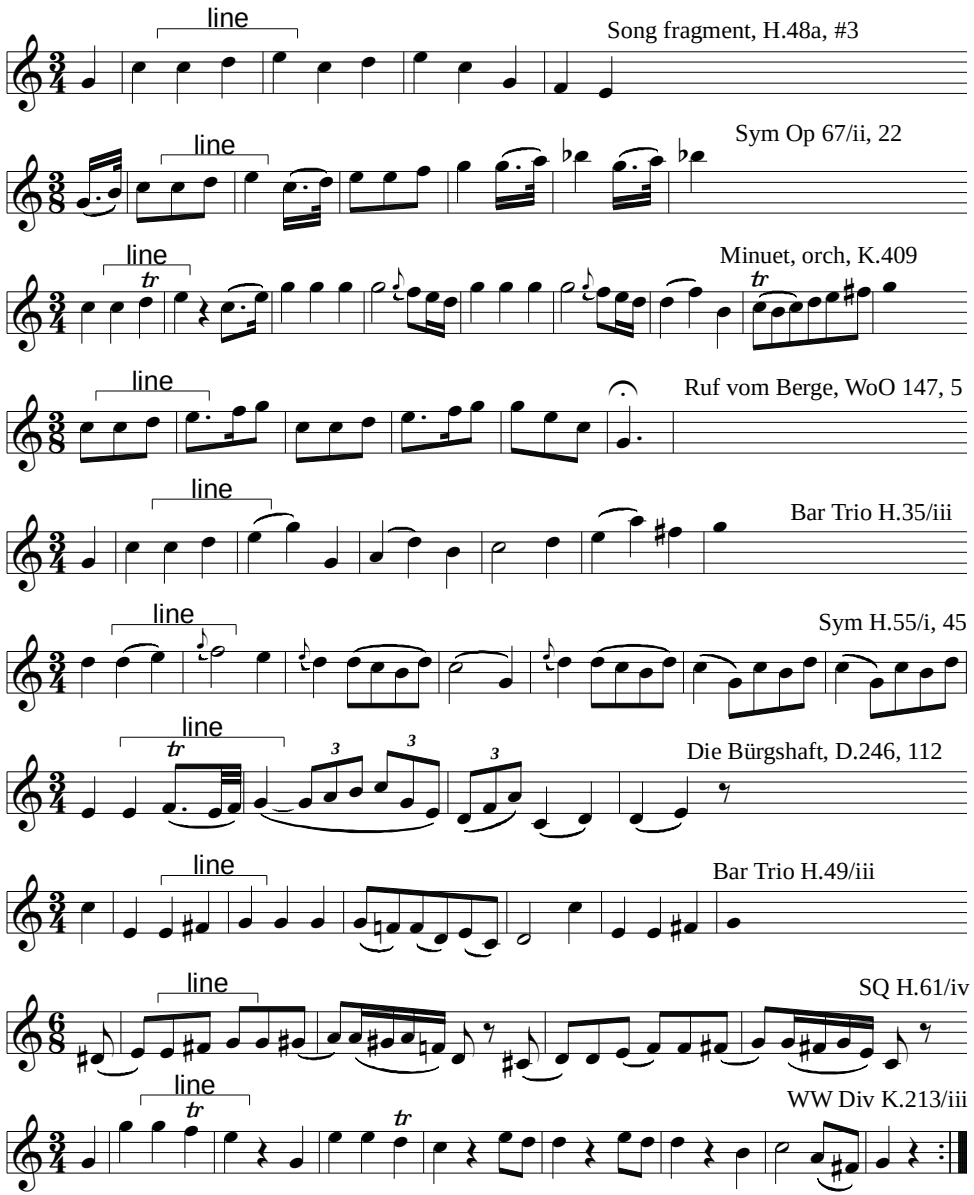
Min WoO 7/#9

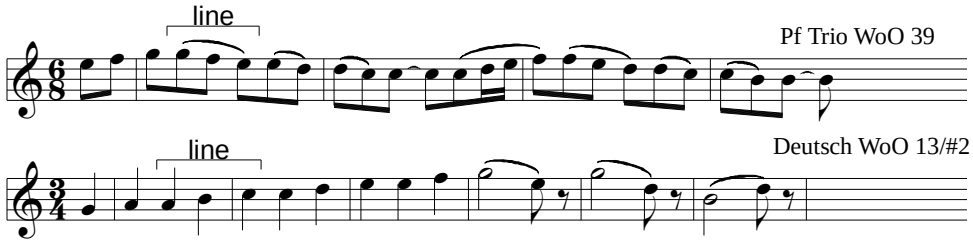
Min K.599/#6, trio



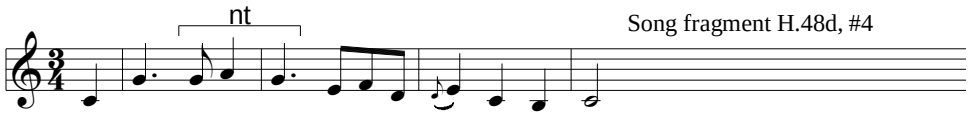
Deutsch WoO 13/#2

Δ2^B1, {RR-|-}+line

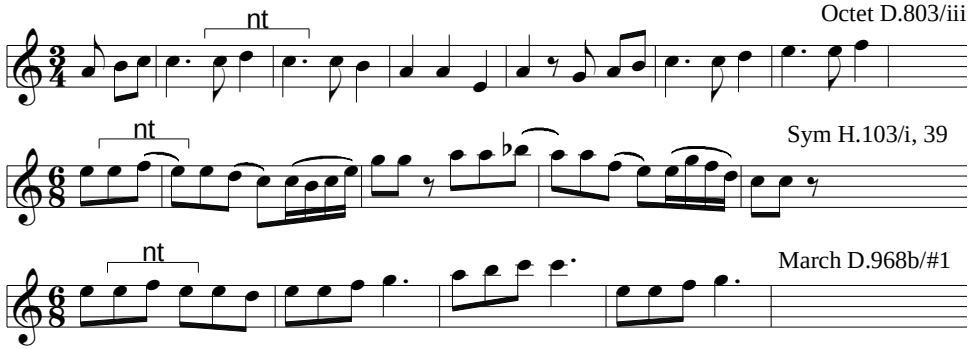

line
Song fragment, H.48a, #3
line
Sym Op 67/ii, 22
line
Minuet, orch, K.409
line
Ruf vom Berge, WoO 147, 5
line
Bar Trio H.35/iii
line
Sym H.55/i, 45
line
Die Bürgshaft, D.246, 112
line
Bar Trio H.49/iii
line
SQ H.61/iv
line
WW Div K.213/iii


line
Pf Trio WoO 39
line
Deutsch WoO 13/#2

Δ2^B1, {RR-|-}+NT



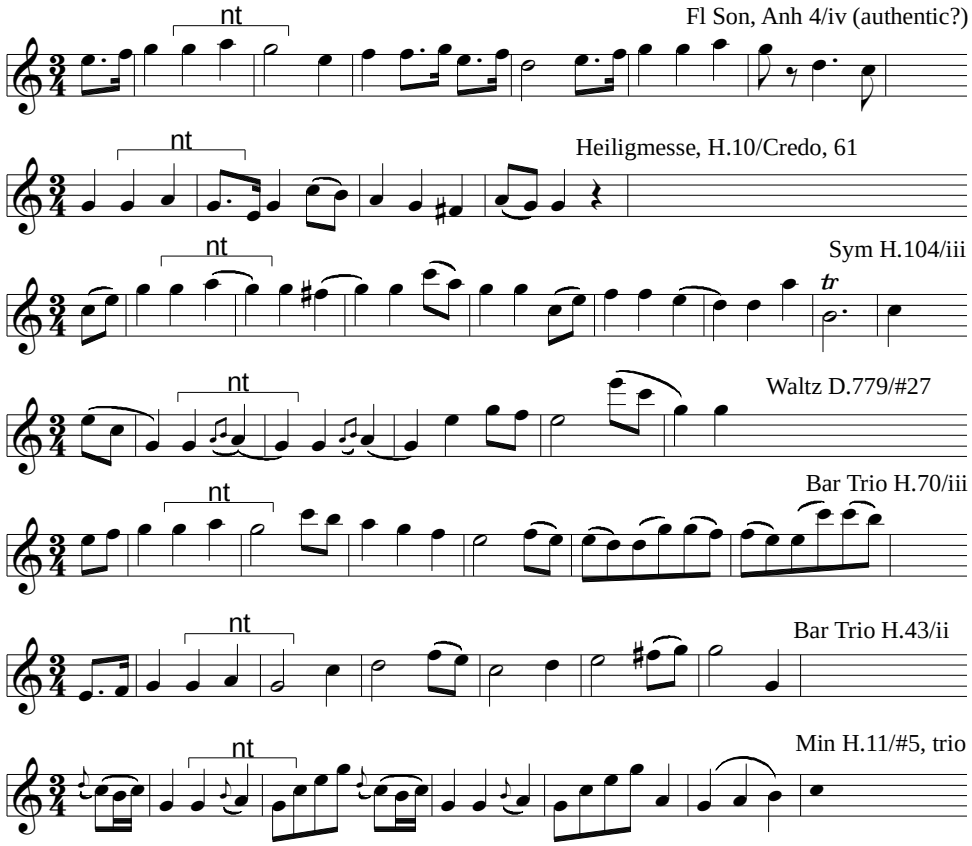
Song fragment H.48d, #4



Octet D.803/iii

Sym H.103/i, 39

March D.968b/#1



Fl Son, Anh 4/iv (authentic?)

Heiligmesse, H.10/Credo, 61

Sym H.104/iii

Waltz D.779/#27

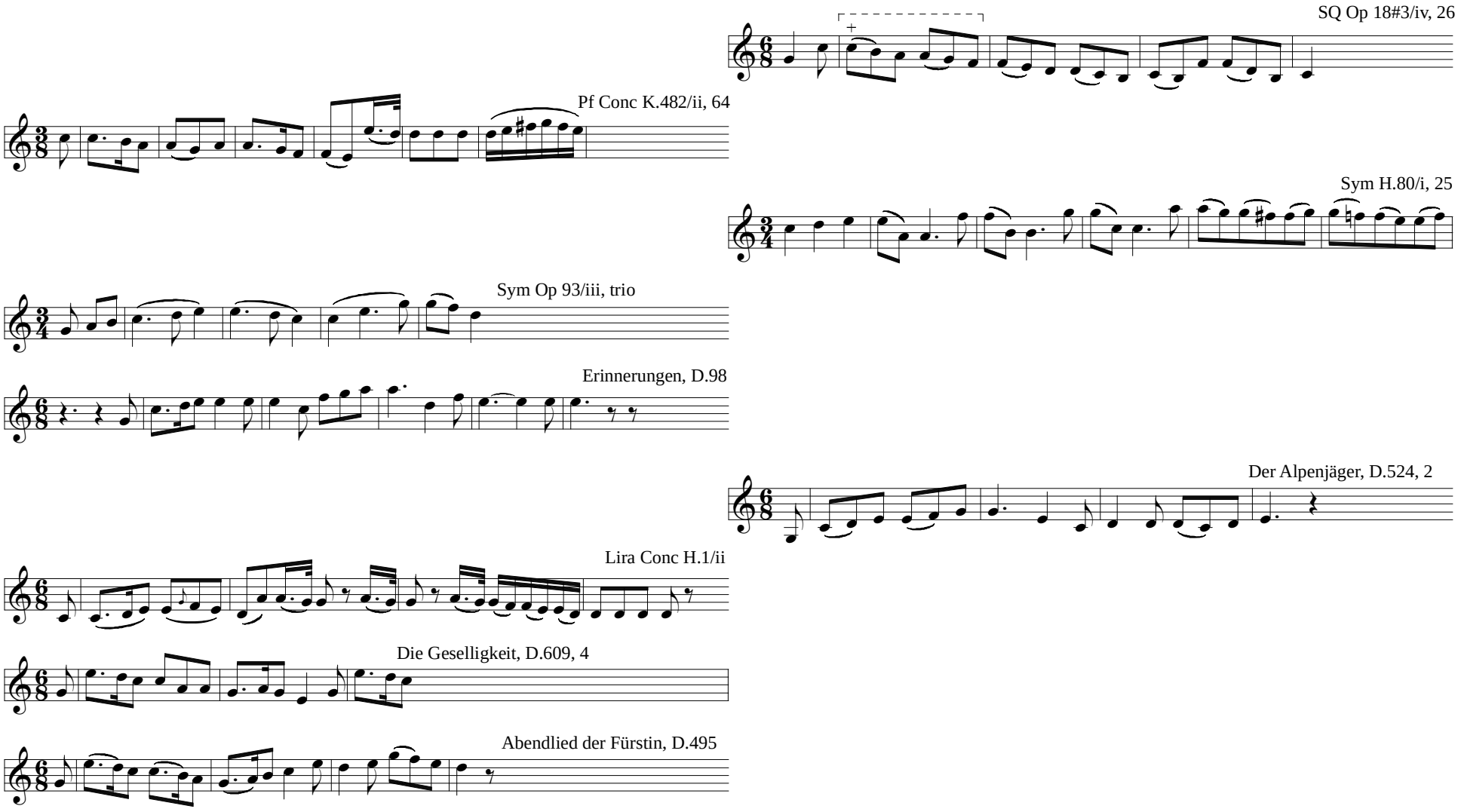
Bar Trio H.70/iii

Bar Trio H.43/ii

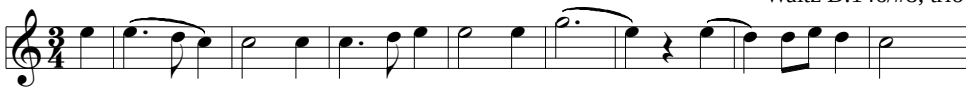
Min H.11/#5, trio

EX 38:
Δ2^B1, {--R|R}

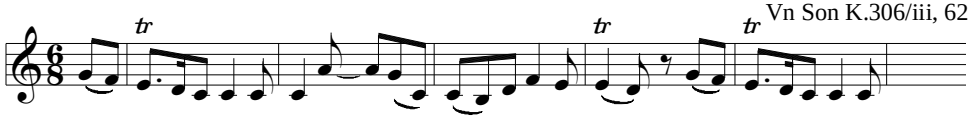
Δ2^B1, 3L+{--R|R}



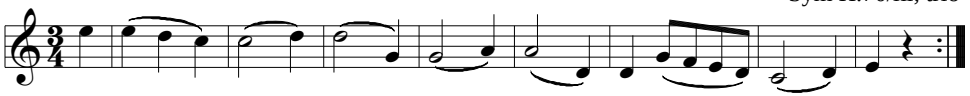
Waltz D.146/#8, trio



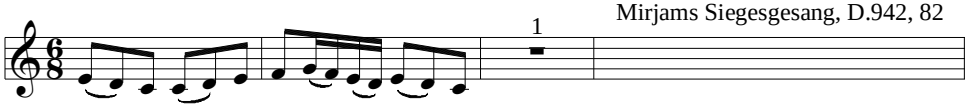
Vn Son K.306/iii, 62



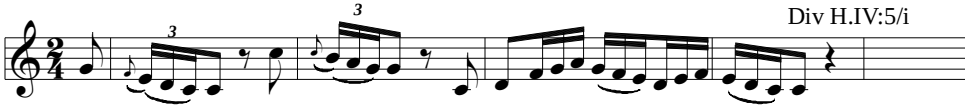
Sym H.70/iii, trio



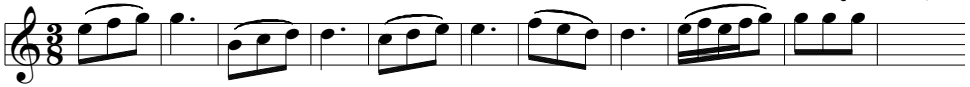
Mirjams Siegesgesang, D.942, 82



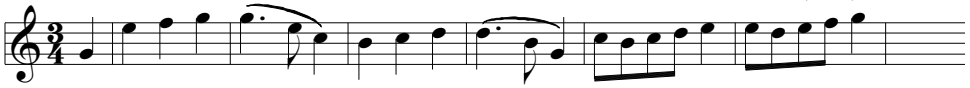
Div H.IV:5/i



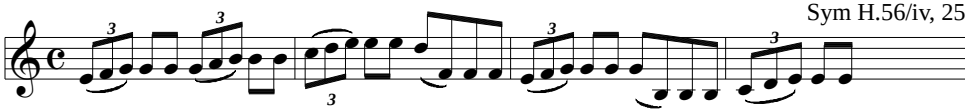
SQ K.156/i, 18



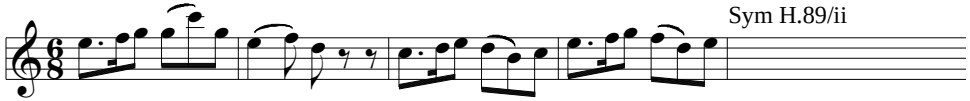
Min, 2 fl, WoO 26/ii



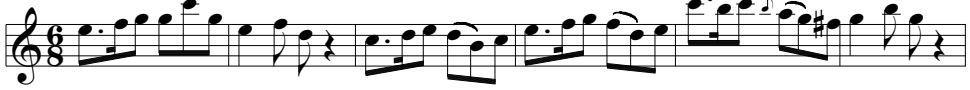
Sym H.56/iv, 25



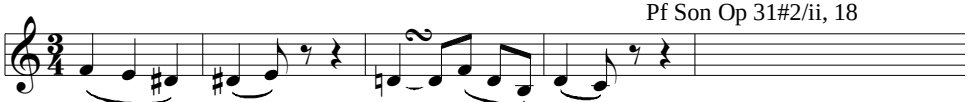
Sym H.89/ii



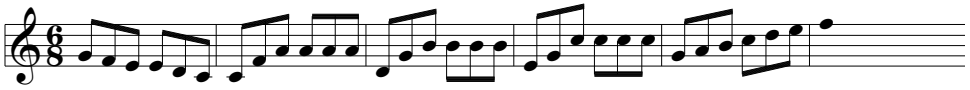
Lira Conc H.5/ii



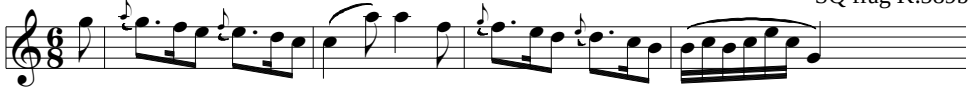
Pf Son Op 31#2/ii, 18



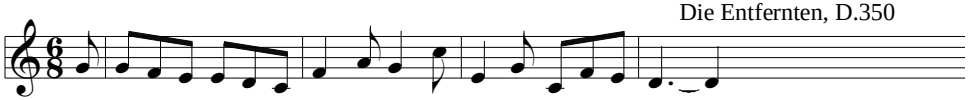
March D.928, trio



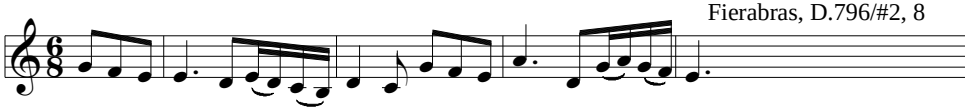
SQ frag K.589b



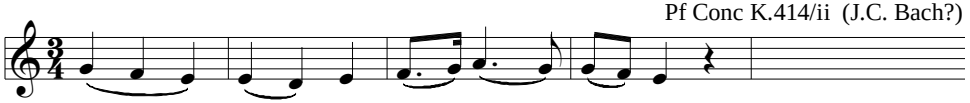
Die Entfernten, D.350



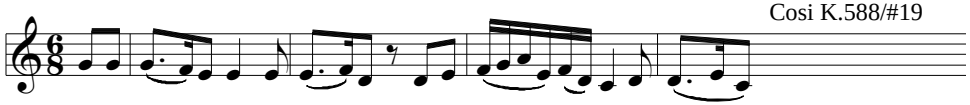
Fierabras, D.796/#2, 8



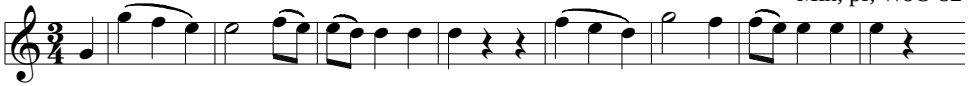
Pf Conc K.414/ii (J.C. Bach?)



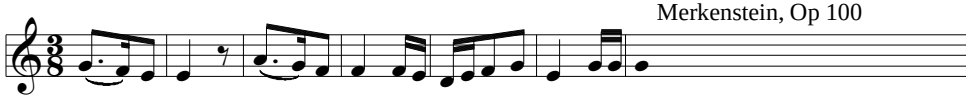
Cosi K.588/#19



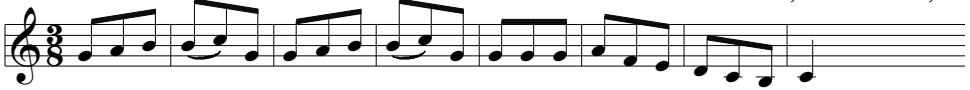
Min, pf, WoO 82



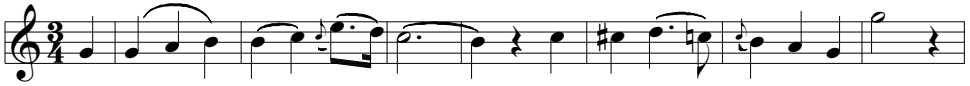
Merkenstein, Op 100



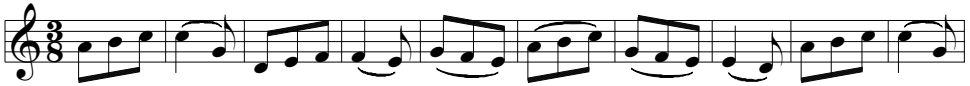
La Marchesa, H.XXX:1/#7, 26



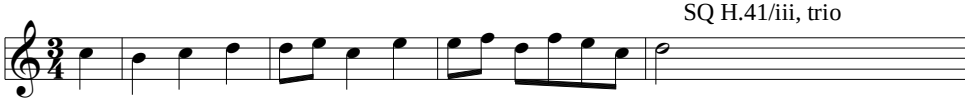
Pf Son D.568/iii



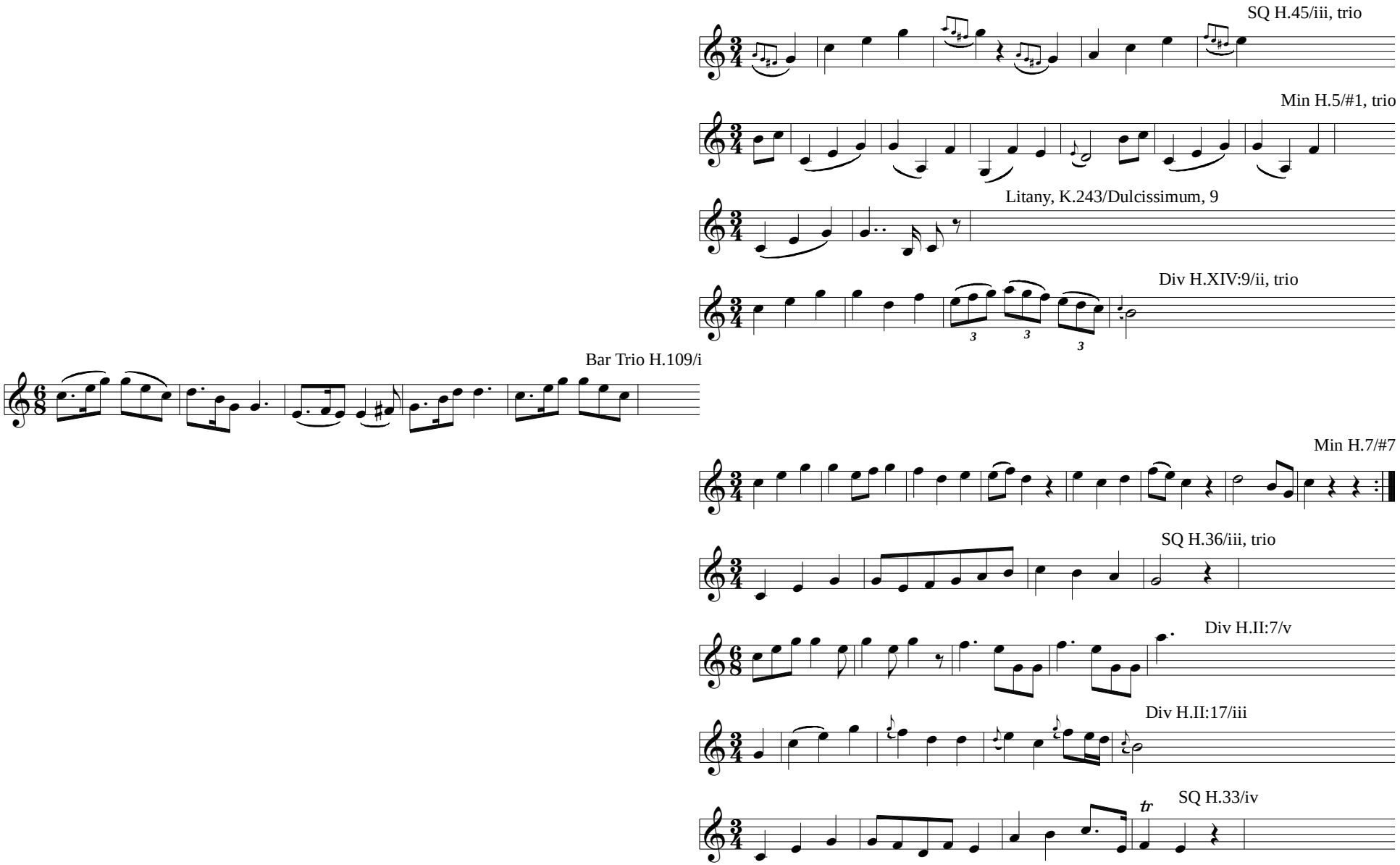
Lucio Silla K.135/Ov/iii, 17

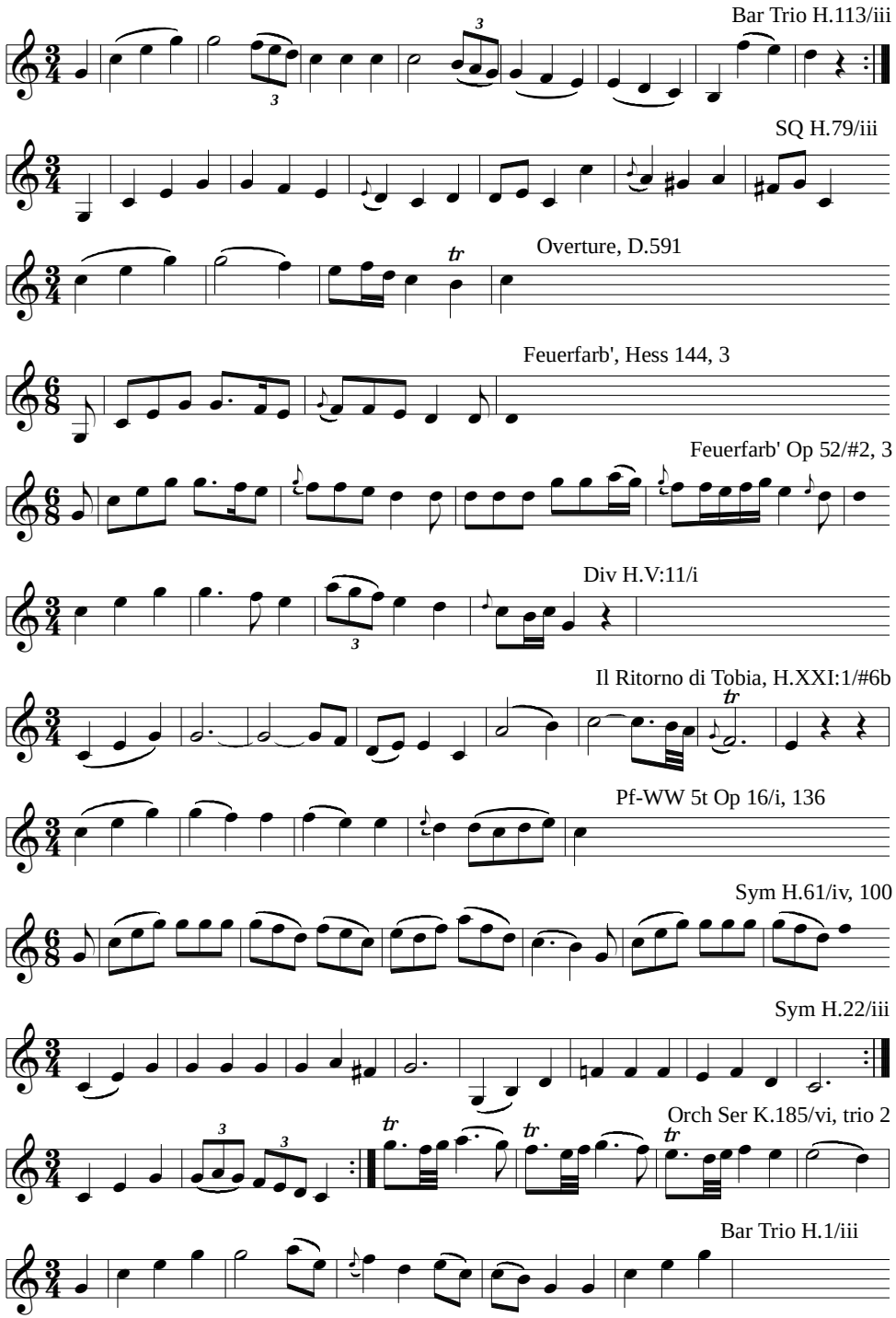


SQ H.41/iii, trio

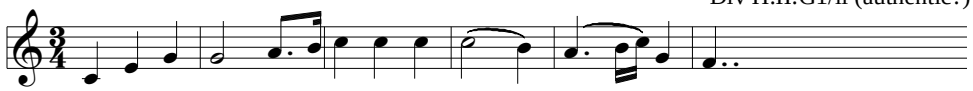


Δ2^B1, 3ARP+{--R|R}

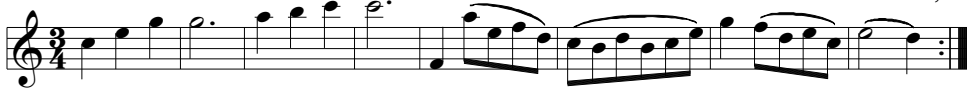

SQ H.45/iii, trio
Min H.5/#1, trio
Litany, K.243/Dulcissimum, 9
Div H.XIV:9/ii, trio
Bar Trio H.109/i
Min H.7/#7
SQ H.36/iii, trio
Div H.II:7/v
Div H.II:17/iii
SQ H.33/iv


Bar Trio H.113/iii
SQ H.79/iii
Overture, D.591
Feuerfarb', Hess 144, 3
Feuerfarb' Op 52/#2, 3
Div H.V:11/i
Il Ritorno di Tobia, H.XXI:1/#6b
Pf-WW 5t Op 16/i, 136
Sym H.61/iv, 100
Sym H.22/iii
Orch Ser K.185/vi, trio 2
Bar Trio H.1/iii

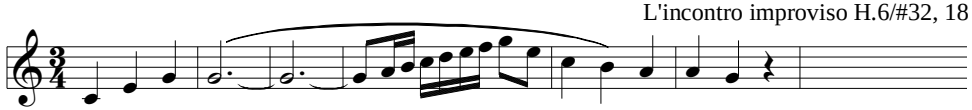
Div H.II:G1/ii (authentic?)



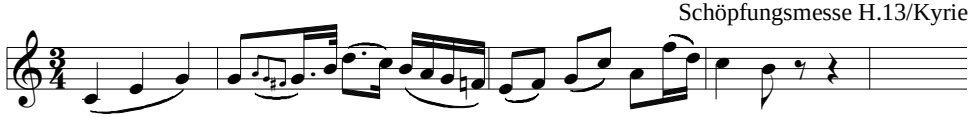
Bar Octet H.6/iii, 49



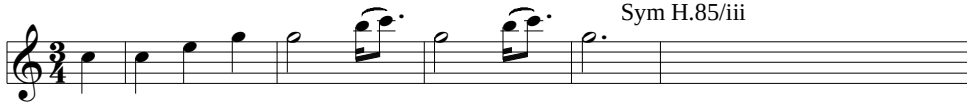
L'incontro improviso H.6/#32, 18



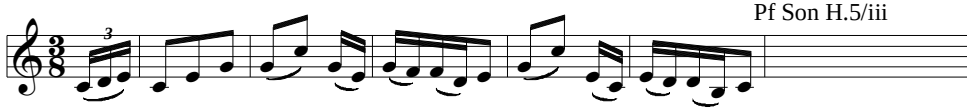
Schöpfungsmesse H.13/Kyrie



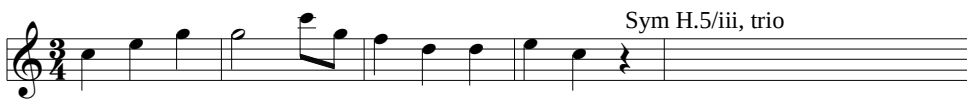
Sym H.85/iii



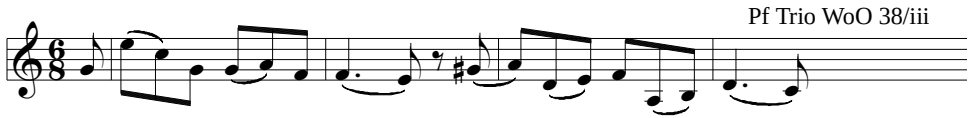
Pf Son H.5/iii



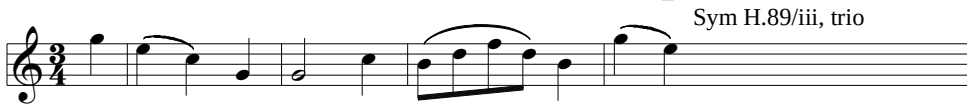
Sym H.5/iii, trio



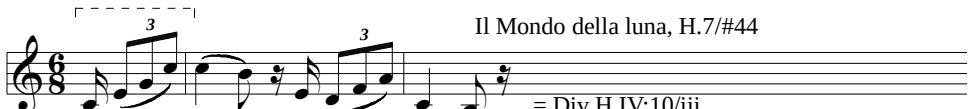
Pf Trio WoO 38/iii



Sym H.89/iii, trio

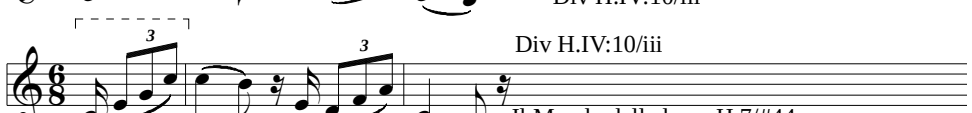


Il Mondo della luna, H.7/#44



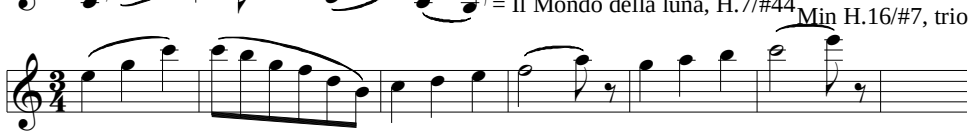
= Div H.IV:10/iii

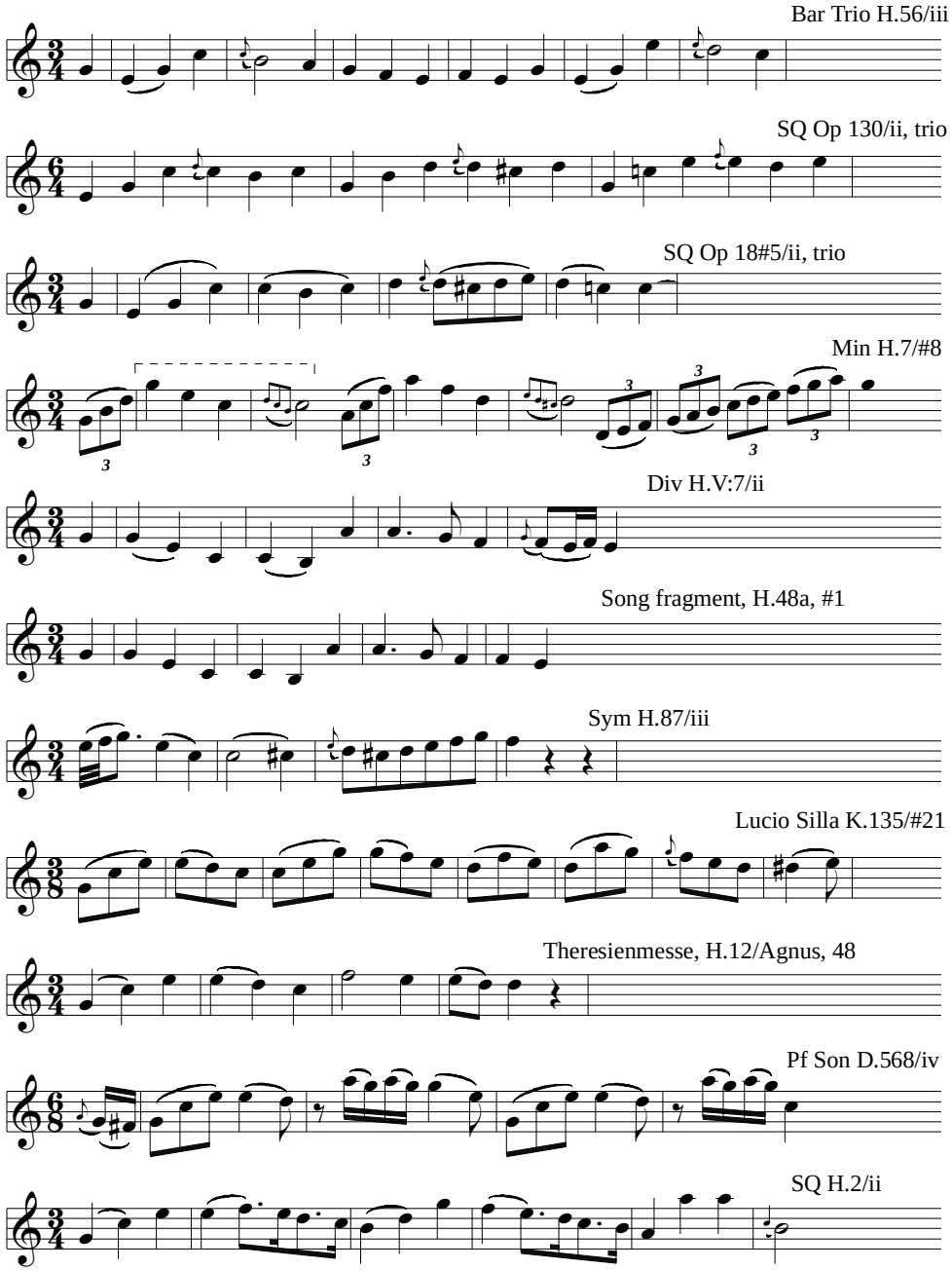
Div H.IV:10/iii



= Il Mondo della luna, H.7/#44

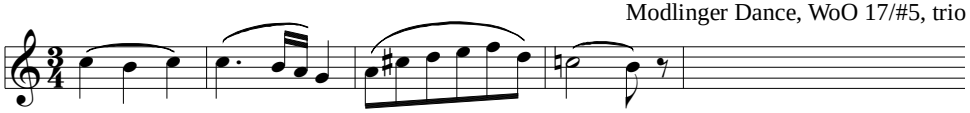
Min H.16/#7, trio



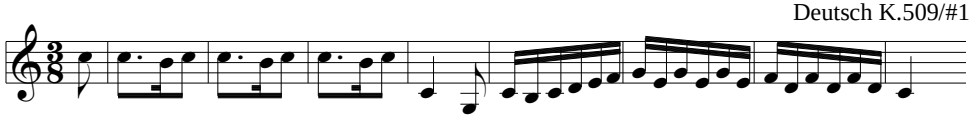

Bar Trio H.56/iii
SQ Op 130/ii, trio
SQ Op 18#5/ii, trio
Min H.7/#8
Div H.V:7/ii
Song fragment, H.48a, #1
Sym H.87/iii
Lucio Silla K.135/#21
Theresienmesse, H.12/Agnus, 48
Pf Son D.568/iv
SQ H.2/ii

Δ2^B1, NT+{--R|R}

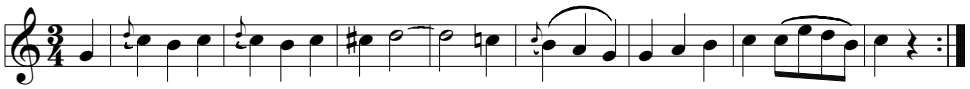
Modlinger Dance, WoO 17/#5, trio



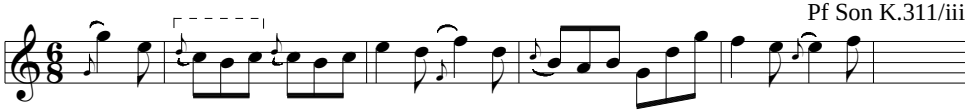
Deutsch K.509/#1



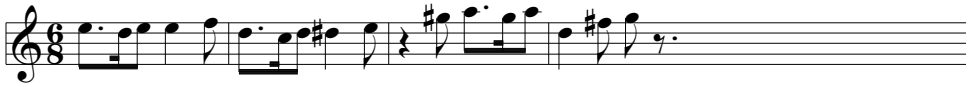
Deutsch WoO 8/#12



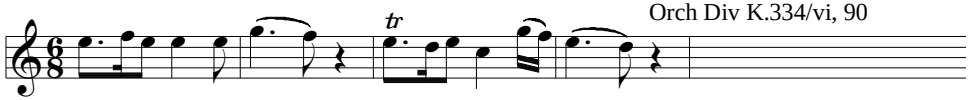
Pf Son K.311/iii



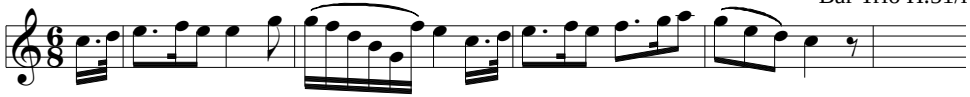
Des Teufels Lustschloß, D.84/#15, 3



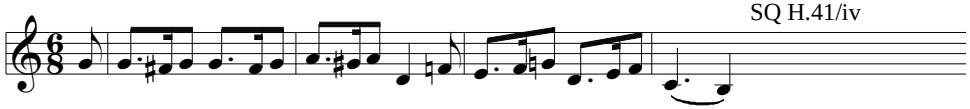
Orch Div K.334/vi, 90



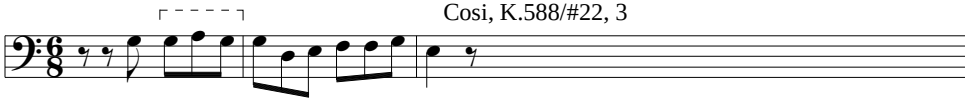
Bar Trio H.51/i



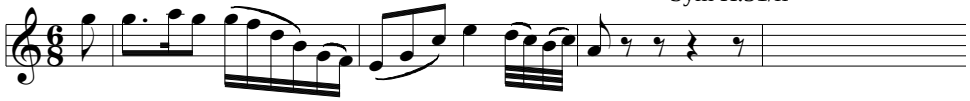
SQ H.41/iv



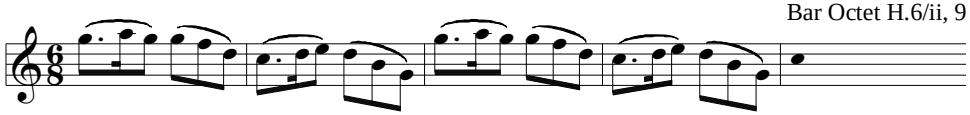
Cosi, K.588/#22, 3



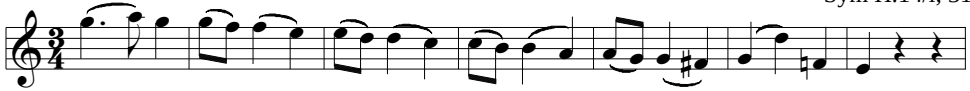
Sym H.31/ii



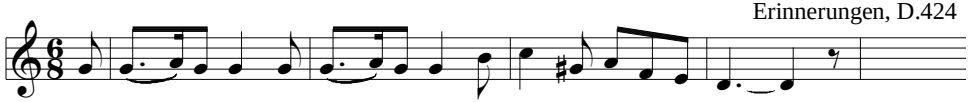
Bar Octet H.6/ii, 9



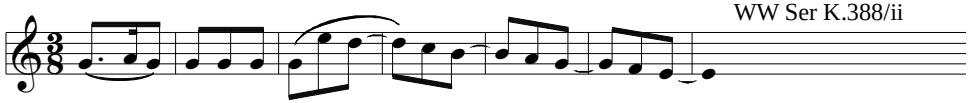
Sym H.14/i, 31



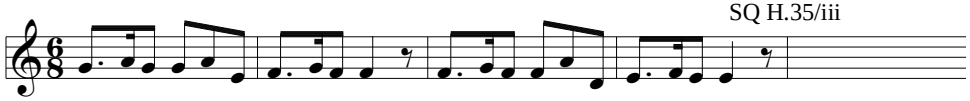
Erinnerungen, D.424



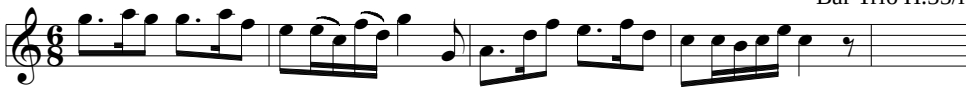
WW Ser K.388/ii



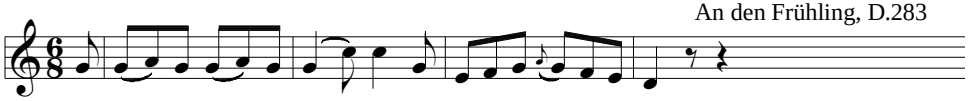
SQ H.35/iii



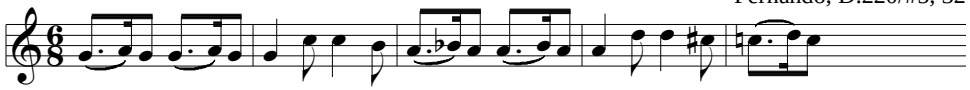
Bar Trio H.35/i



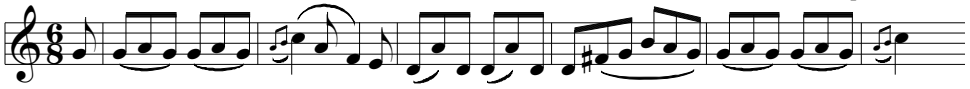
An den Frühling, D.283



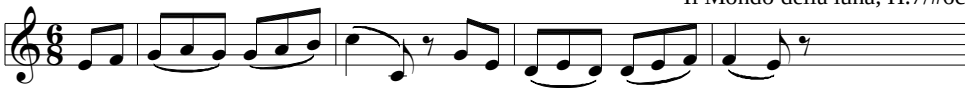
Fernando, D.220/#5, 32



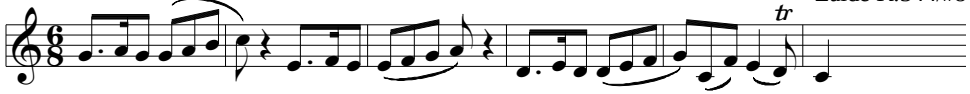
Moderato, pf, D.613/ii



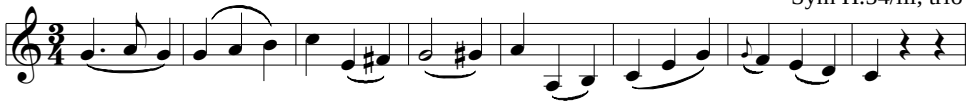
Il Mondo della luna, H.7/#6c



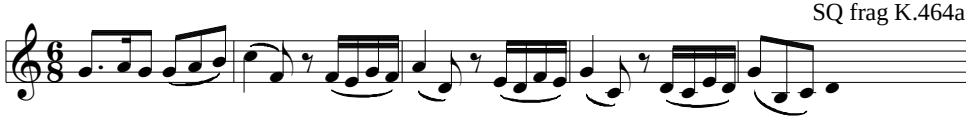
Zaide K.344/#8



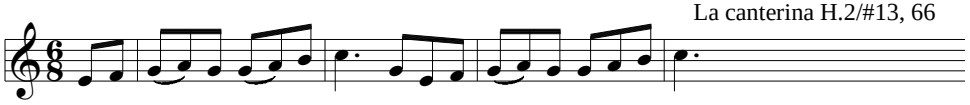
Sym H.54/iii, trio



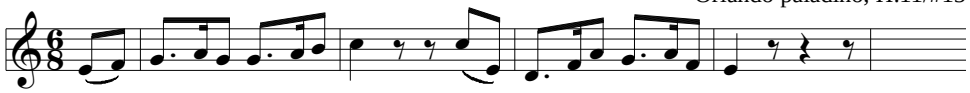
SQ frag K.464a



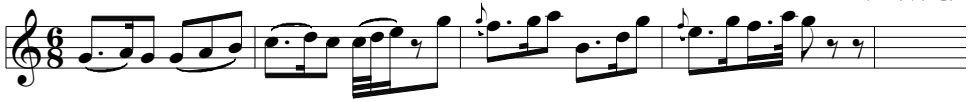
La canterina H.2/#13, 66



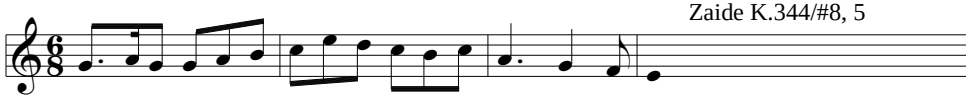
Orlando paladino, H.11/#15



Div H.V:13/i

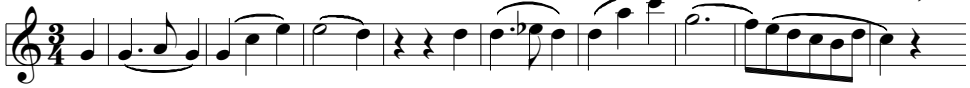


Zaide K.344/#8, 5

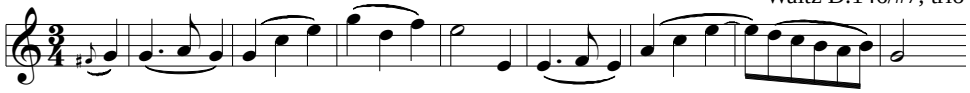


Bar Trio H.77/i

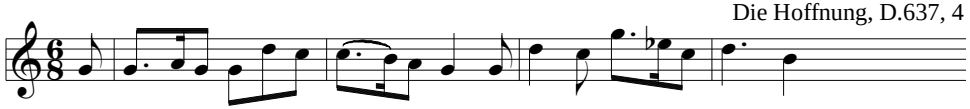
Min D.334, trio



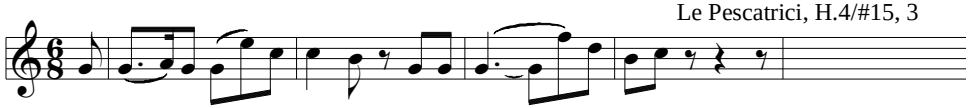
Waltz D.146/#7, trio



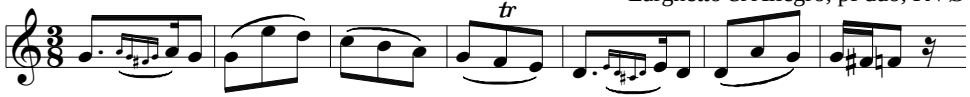
Die Hoffnung, D.637, 4



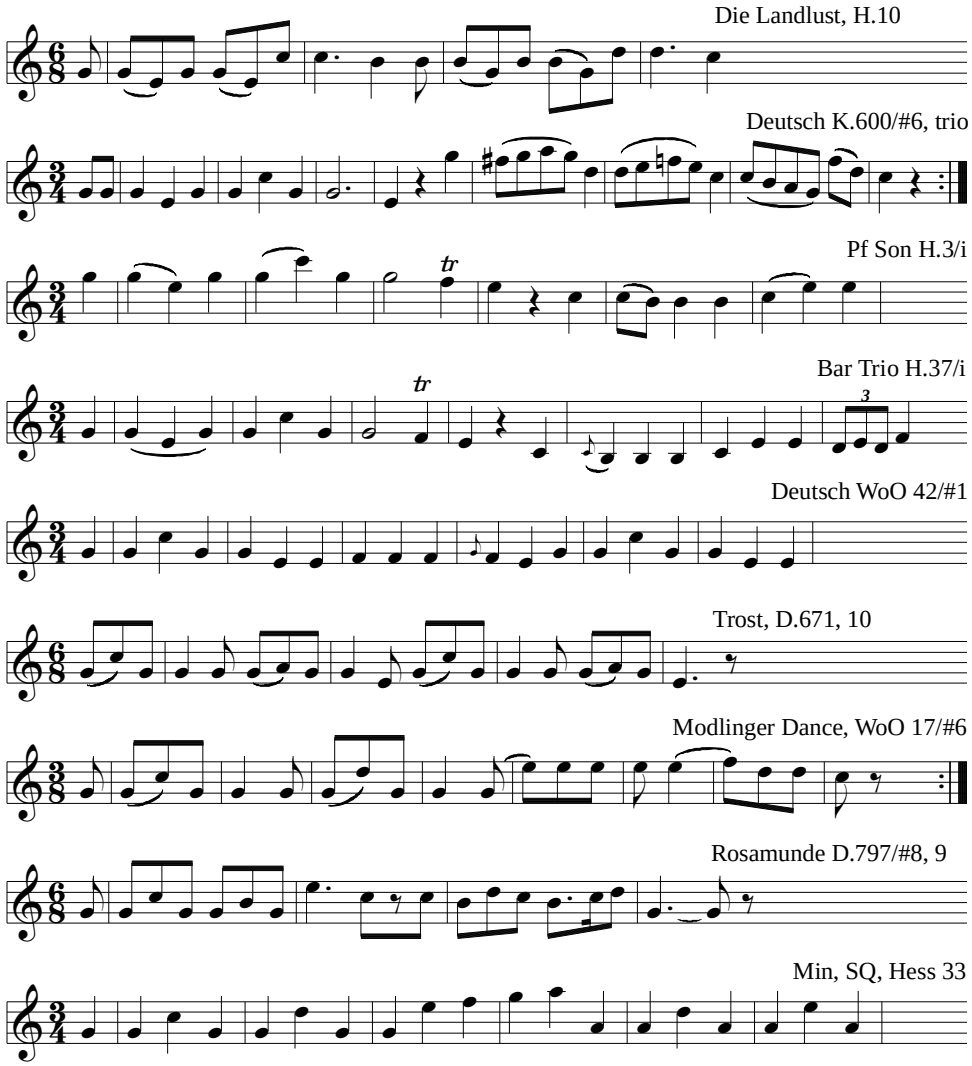
Le Pescatrici, H.4/#15, 3



Larghetto & Allegro, pf duo, KVØ

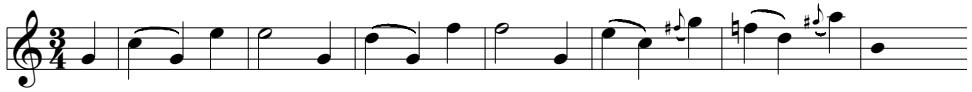


Δ2^B1, OSC+{--R|R}

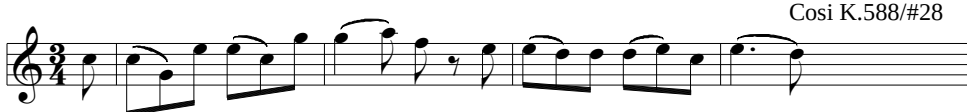

Die Landlust, H.10
Deutsch K.600/#6, trio
Pf Son H.3/i
Bar Trio H.37/i
Deutsch WoO 42/#1
Trost, D.671, 10
Modlinger Dance, WoO 17/#6
Rosamunde D.797/#8, 9
Min, SQ, Hess 33

Δ2^B1, misc+{--R|R}

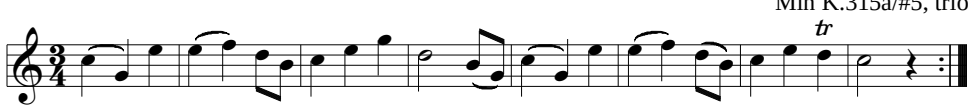
Deutsch WoO 13/#6



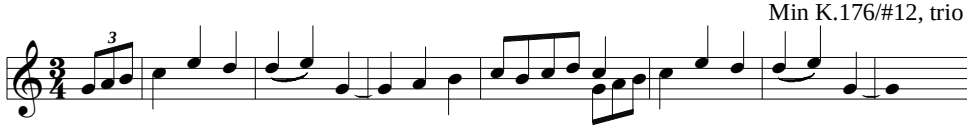
Cosi K.588/#28



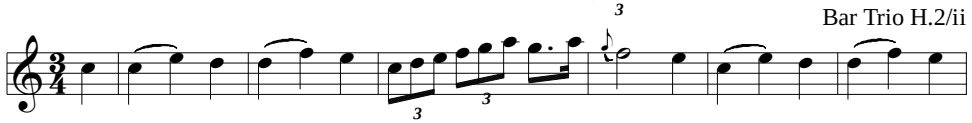
Min K.315a/#5, trio



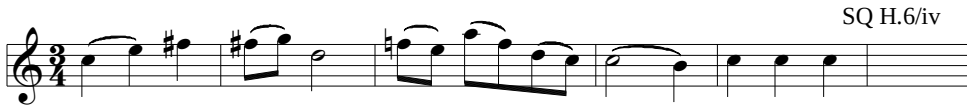
Min K.176/#12, trio



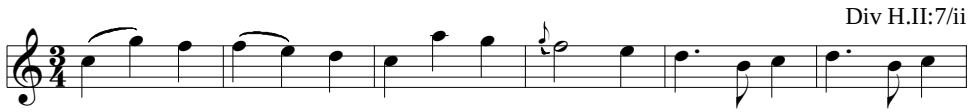
Bar Trio H.2/ii



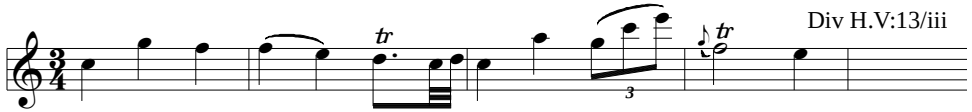
SQ H.6/iv



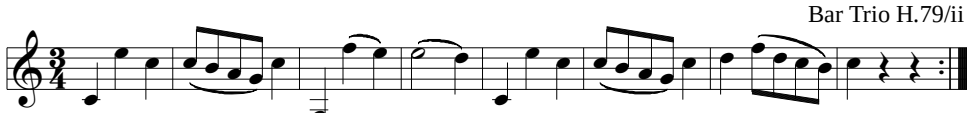
Div H.II:7/ii



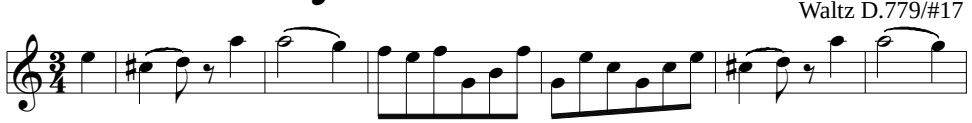
Div H.V:13/iii



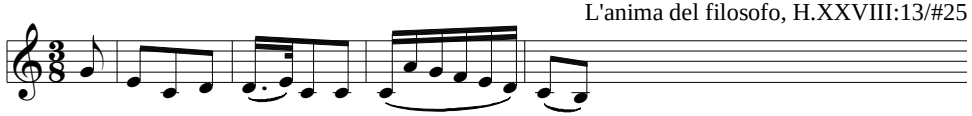
Bar Trio H.79/ii



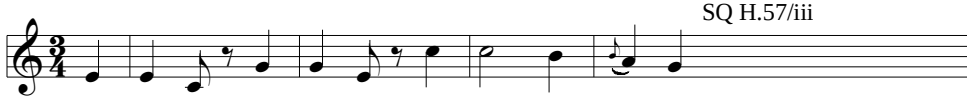
Waltz D.779/#17



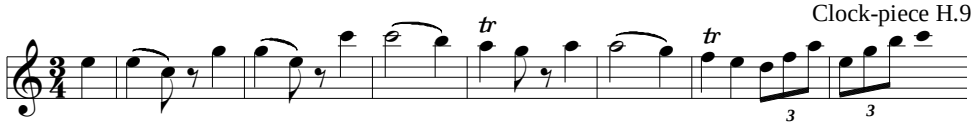
L'anima del filosofo, H.XXVIII:13/#25



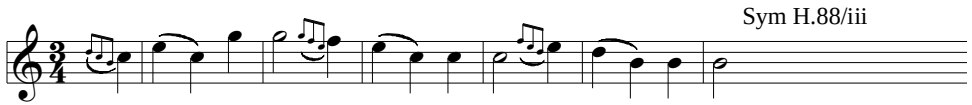
SQ H.57/iii



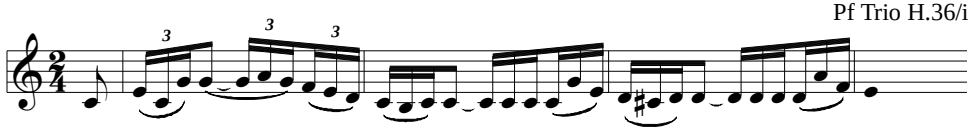
Clock-piece H.9



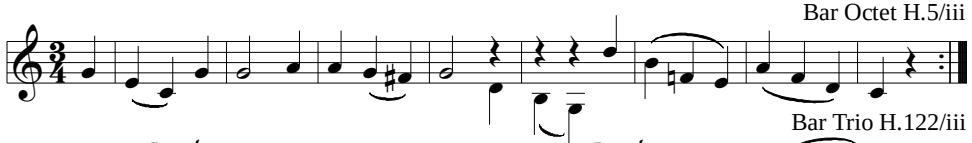
Sym H.88/iii



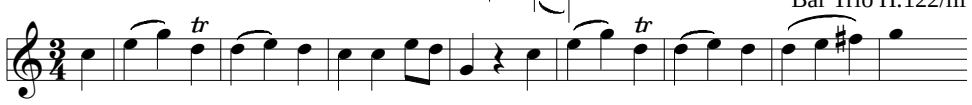
Pf Trio H.36/i



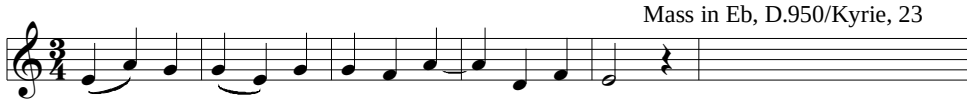
Bar Octet H.5/iii



Bar Trio H.122/iii

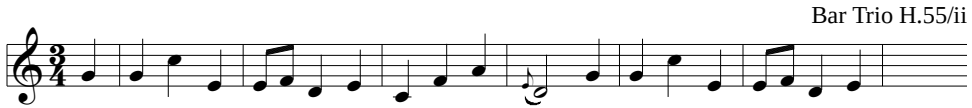


Mass in Eb, D.950/Kyrie, 23

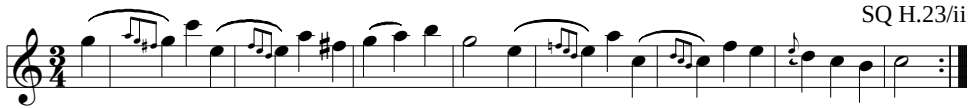


Min H.11/#2, trio

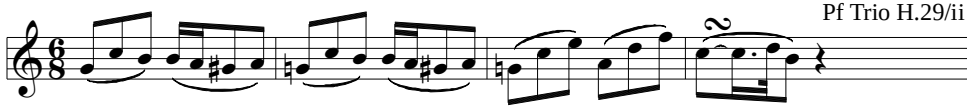
Bar Trio H.55/ii



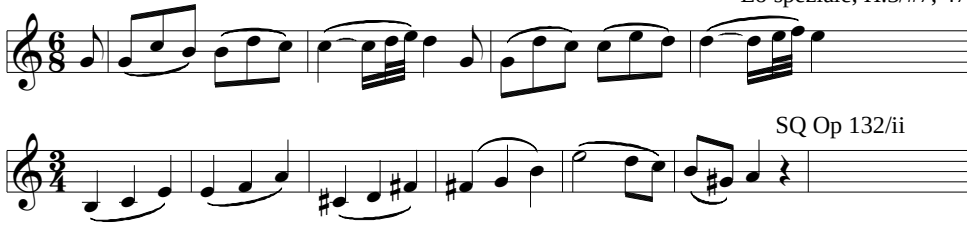
SQ H.23/ii



Pf Trio H.29/ii



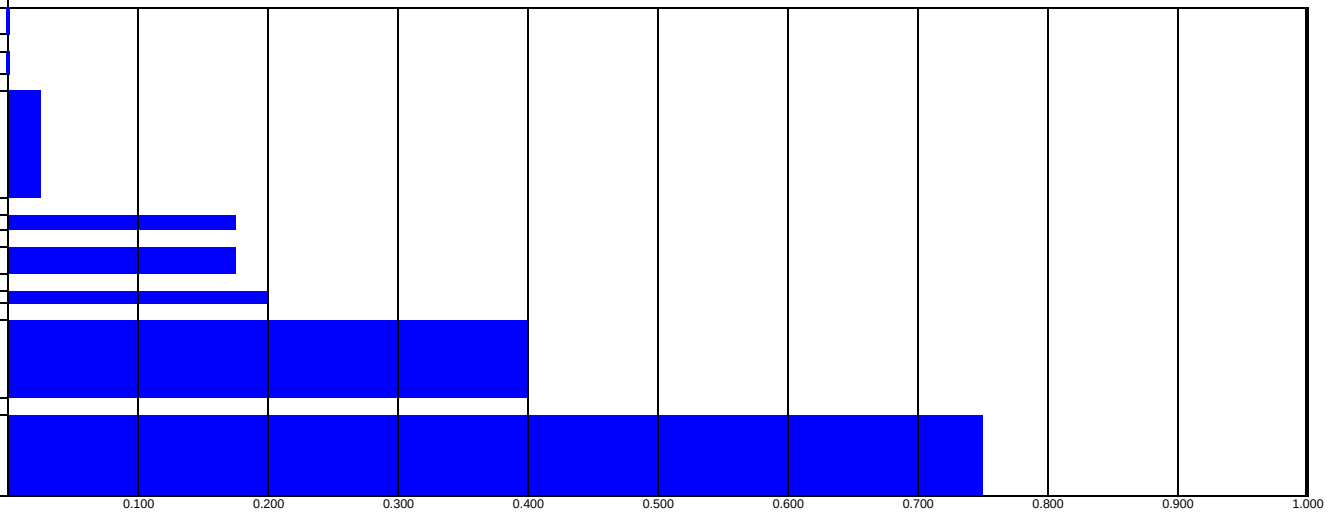
Lo speziale, H.3/#7, 47



SQ Op 132/ii

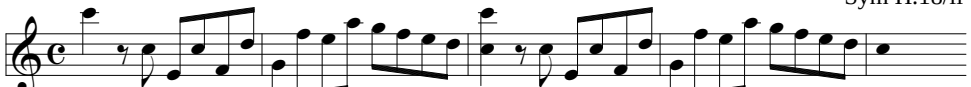
Δ2^B1

contour	population	dotted ratio	%	C-value (° from ambiguity)
2P+L	12	0/12=	0.000	12
OSC+RP	9	0/9=	0.000	10
3ARP+RP	45	1/45=	0.022	10
3P+NT	6	1/6=	0.167	8
2P+NT	11	2/11=	0.182	8
4L+ARP	5	1/5=	0.200	7
3L+RP	32	13/32=	0.406	6
NT+RP	33	25/33=	0.758	4

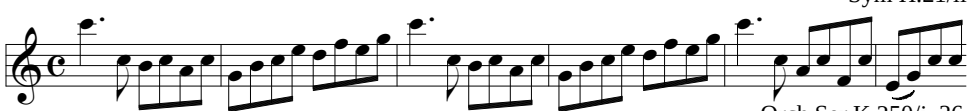


EX 41:
Z5^A3, miscellaneous contours

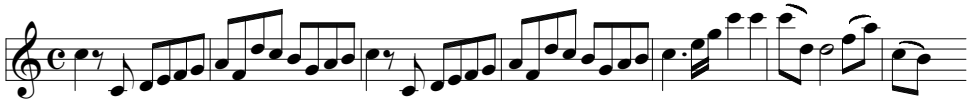
Sym H.18/ii



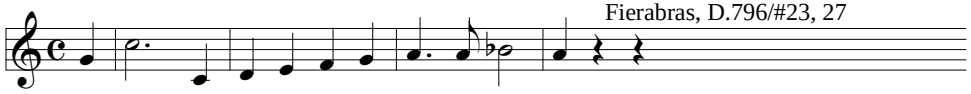
Sym H.21/ii



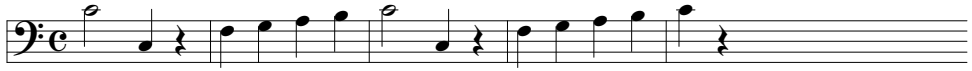
Orch Ser K.250/i, 36



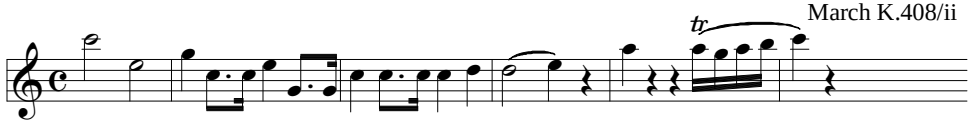
Fierabras, D.796/#23, 27



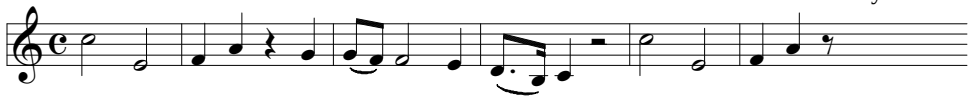
Die Zwillingsbrüder, D.647/#9, 5



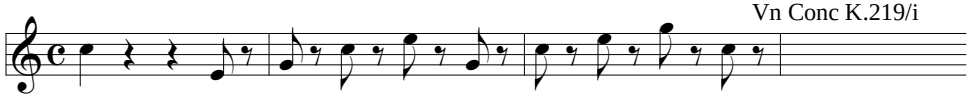
March K.408/ii



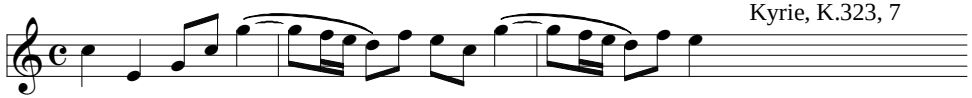
Sym H.46/i



Vn Conc K.219/i

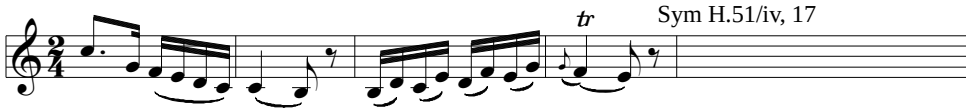


Kyrie, K.323, 7

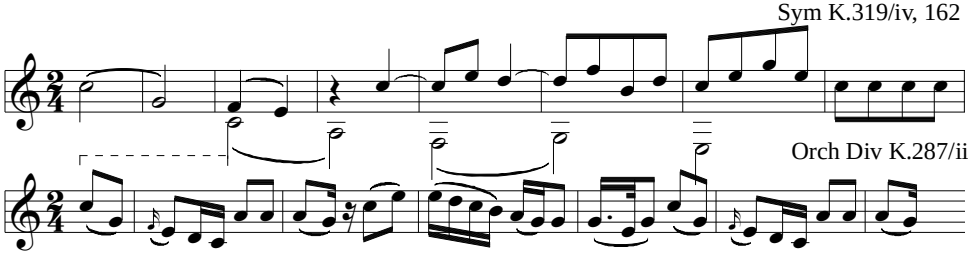


SQ H.78/i, 37

Sym H.51/iv, 17

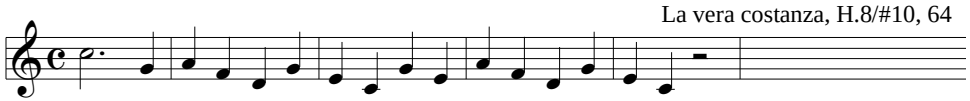


Sym K.319/iv, 162

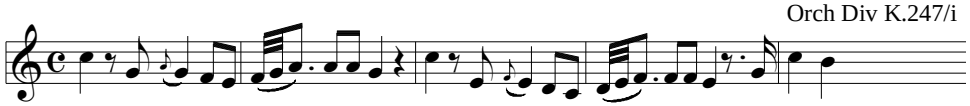


Orch Div K.287/ii

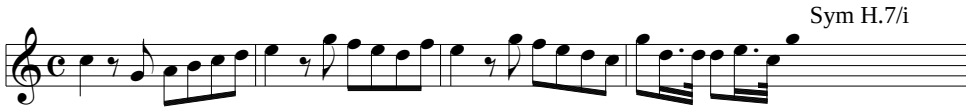
La vera costanza, H.8/#10, 64



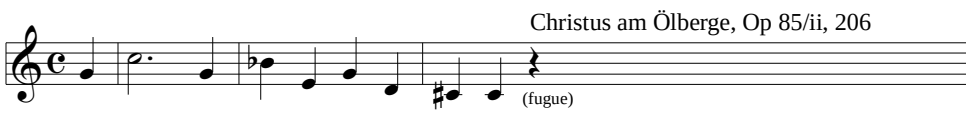
Orch Div K.247/i



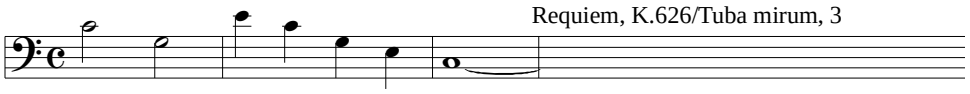
Sym H.7/i



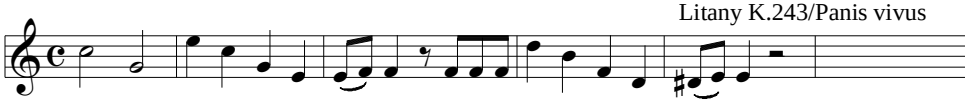
Christus am Ölberge, Op 85/ii, 206



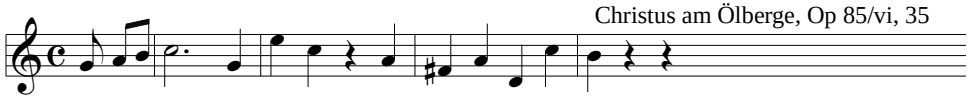
Requiem, K.626/Tuba mirum, 3



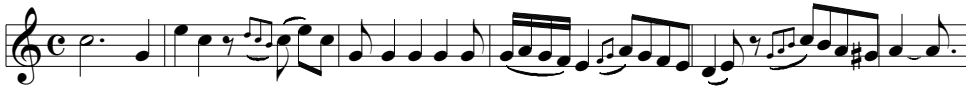
Litany K.243/Panis vivus



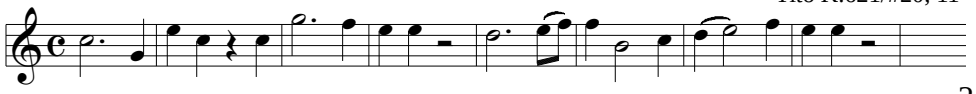
Christus am Ölberge, Op 85/vi, 35



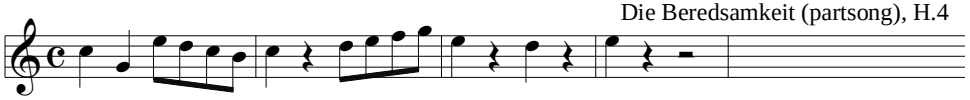
Tito K.621/#20



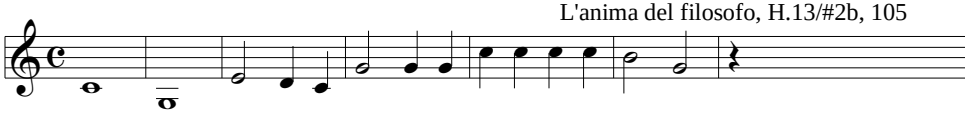
Tito K.621/#20, 11



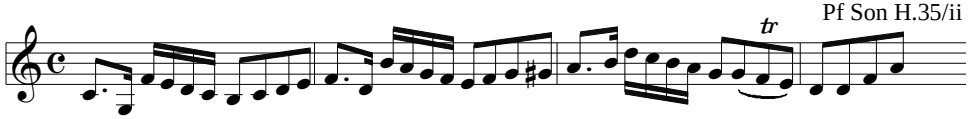
Die Beredsamkeit (partsong), H.4



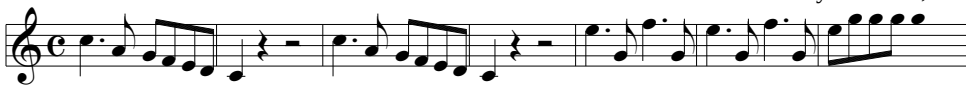
L'anima del filosofo, H.13/#2b, 105



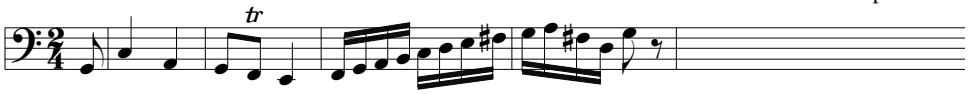
Pf Son H.35/ii



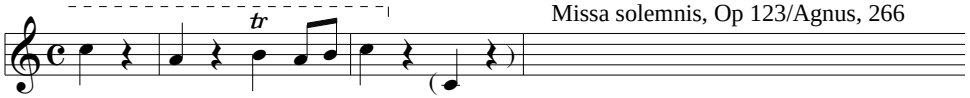
Sym H.21/ii, 17



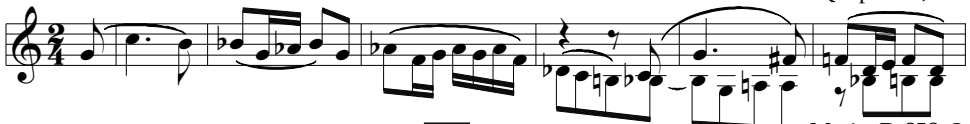
Pf Son Op 27#1/iv



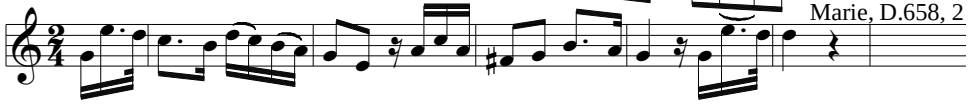
Missa solemnis, Op 123/Agnus, 266



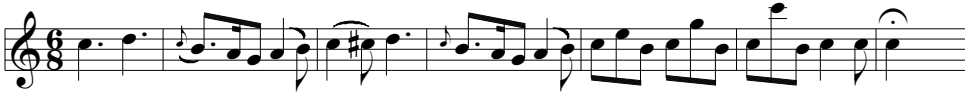
SQ Op 95/ii, 34



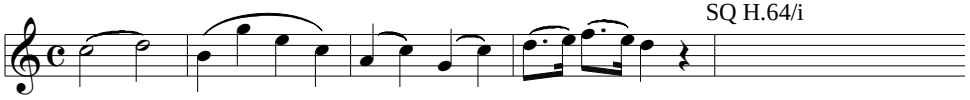
Marie, D.658, 2



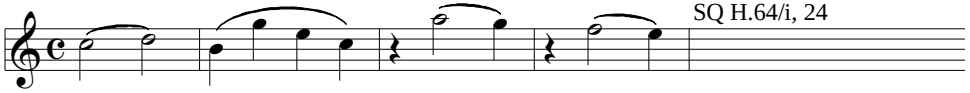
Rondo, vn-orch, K.269, 68



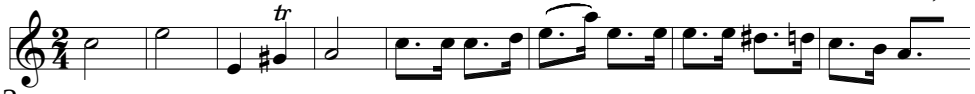
SQ H.64/i



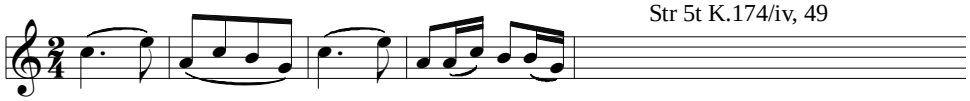
SQ H.64/i, 24



Pf Trio D.898/iv, 52



Str 5t K.174/iv, 49



Die Freunde von Salamanka, D.326/Ov, 61

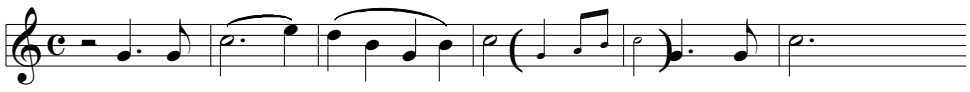
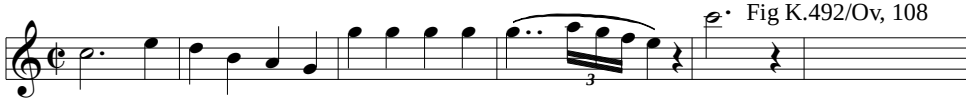
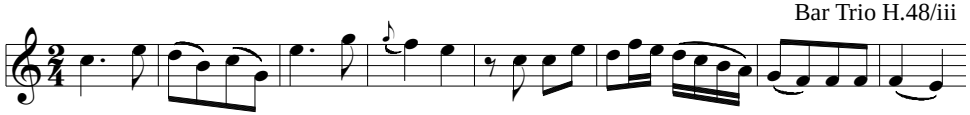


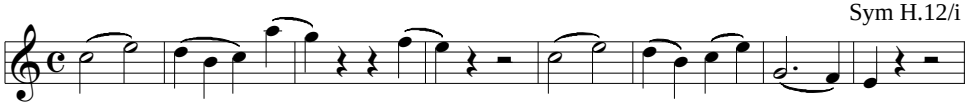
Fig K.492/Ov, 108



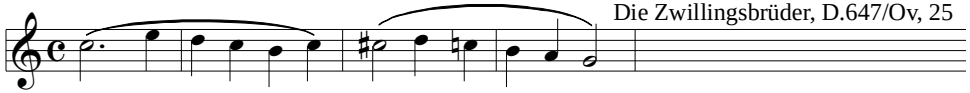
Bar Trio H.48/iii



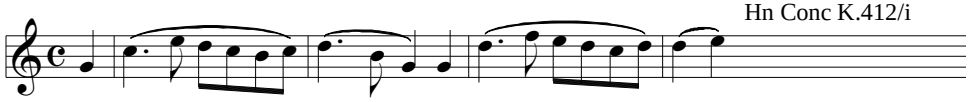
Sym H.12/i



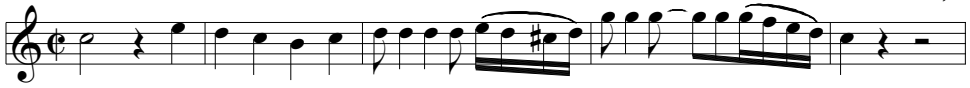
Die Zwillingsbrüder, D.647/Ov, 25



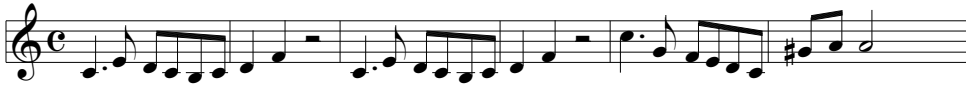
Hn Conc K.412/i



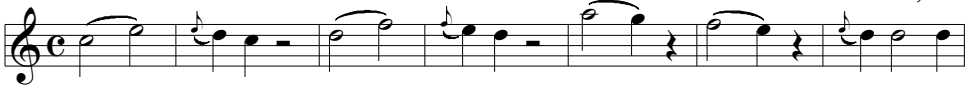
Tito K.621/Ov, 8



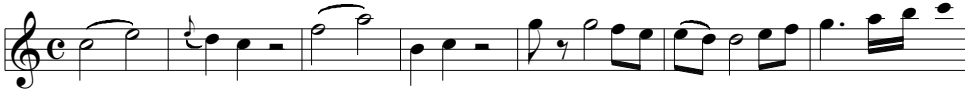
Sym H.22/ii



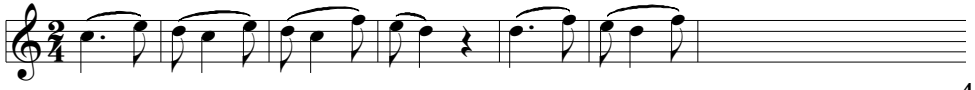
WW Ser K.361/i, 40

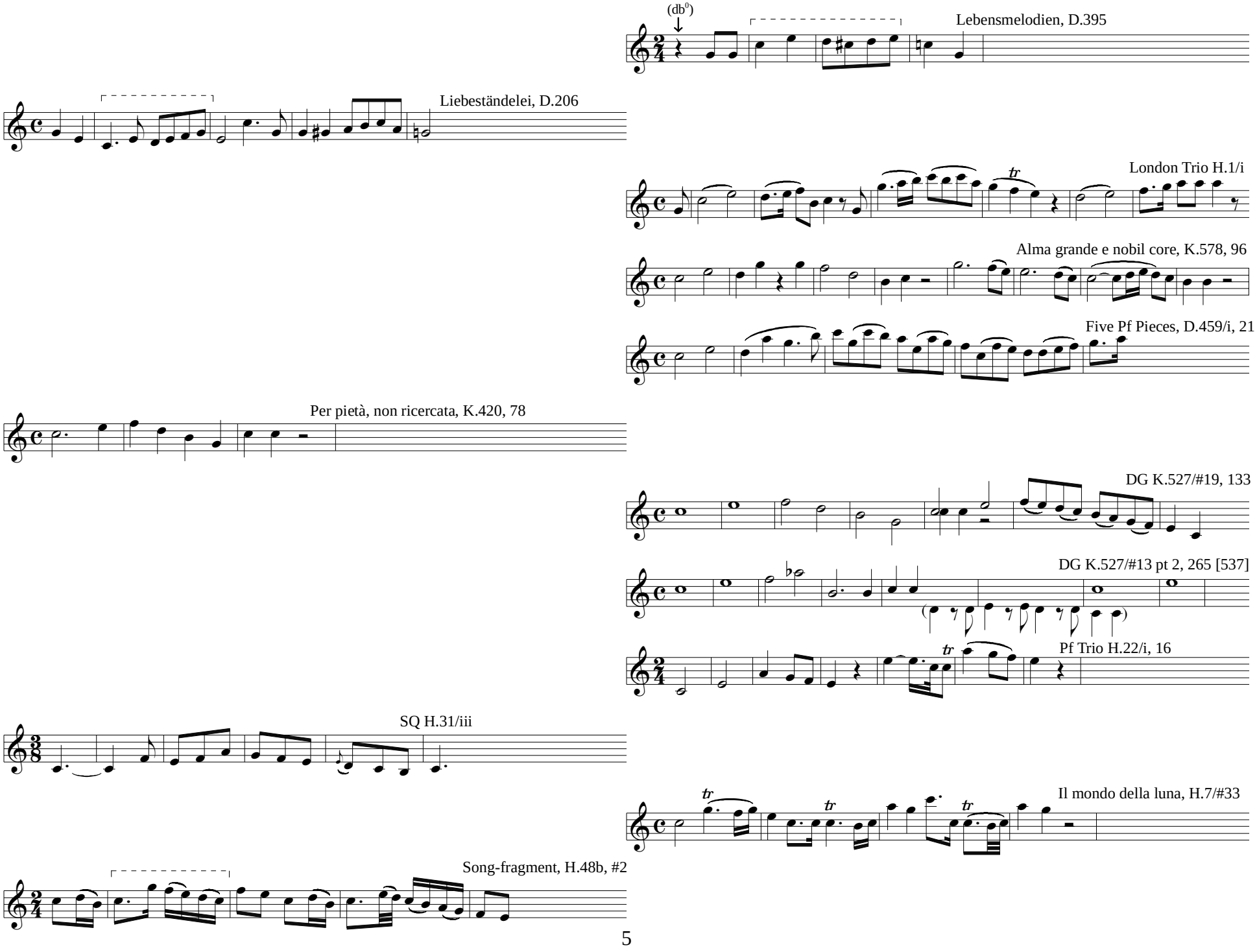


WW Ser K.361/i, 15



Pf Conc K.503/iii, 163




(db⁰)
Lebensmelodien, D.395
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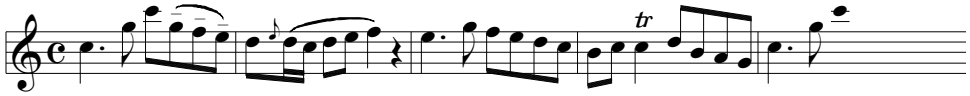
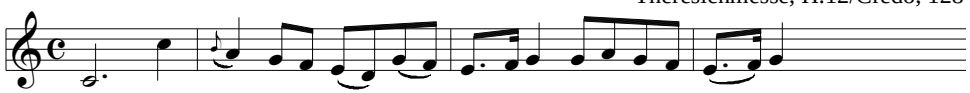
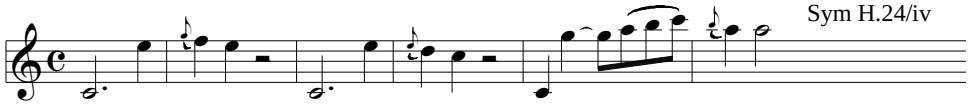


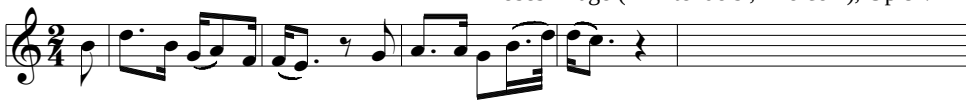
Theresienmesse, H.12/Credo, 128



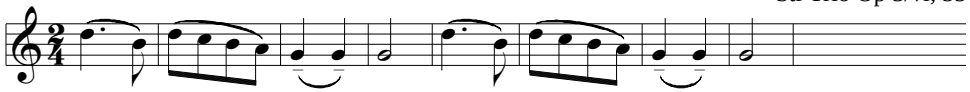
Sym H.24/iv



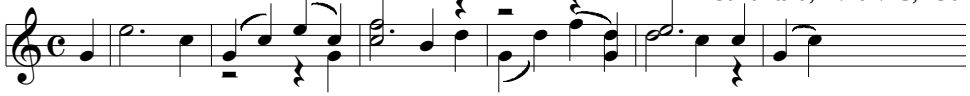
Liebes-Klage ("T'intendo si, mio cor"), Op 82/#2



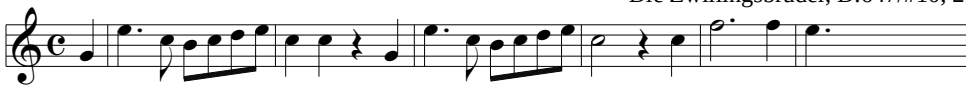
Str Trio Op 3/vi, 55



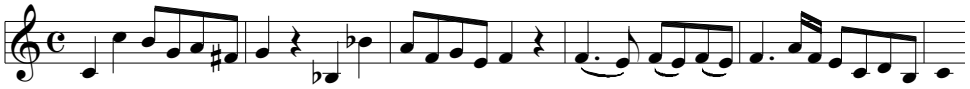
Sakuntala, D.701/#3, 190



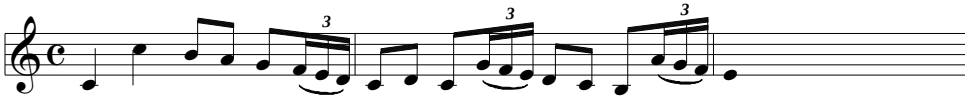
Die Zwillingsbrüder, D.647/#10, 2



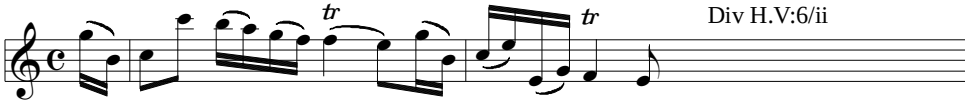
Bar Trio H.86/ii



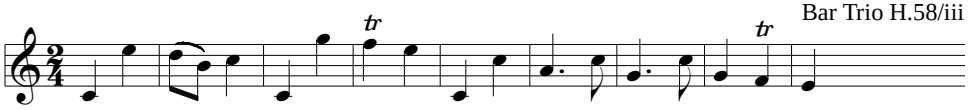
Regina coeli, K.127/Regina, 29



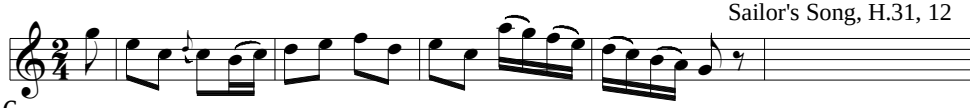
Div H.V:6/ii

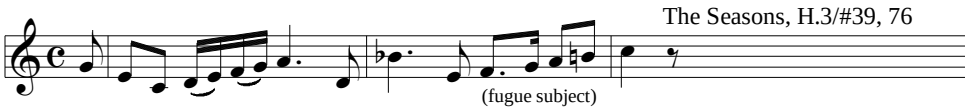


Bar Trio H.58/iii



Sailor's Song, H.31, 12




The Seasons, H.3/#39, 76
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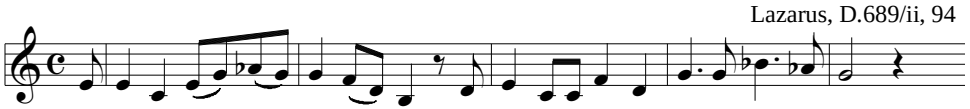
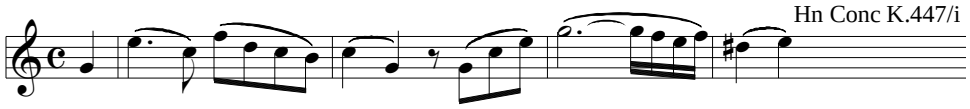
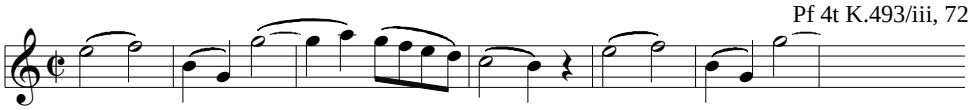
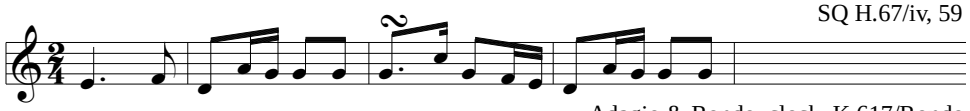
Pf-WW 5t K.452/i, 43

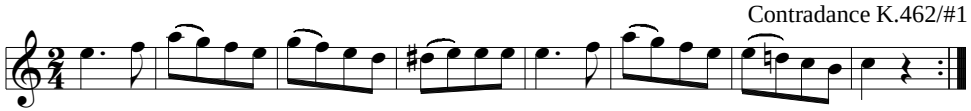

Lazarus, D.689/ii, 94

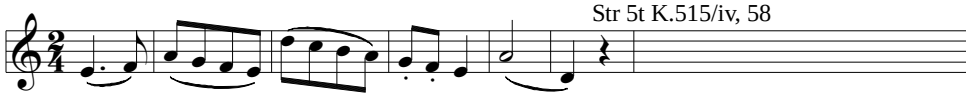

Hn Conc K.447/i

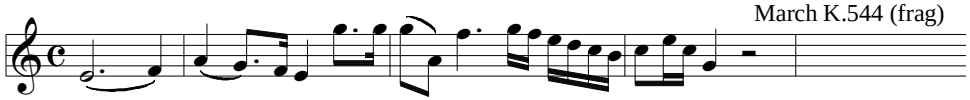

Pf 4t K.493/iii, 72

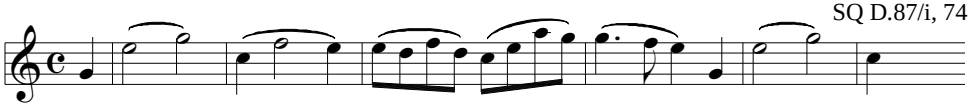

SQ H.67/iv, 59

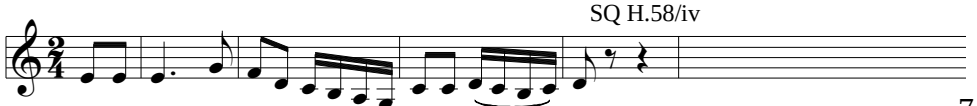
Adagio & Rondo, clock, K.617/Rondo


Contradance K.462/#1

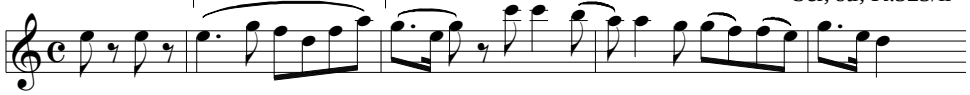

Str 5t K.515/iv, 58


March K.544 (frag)

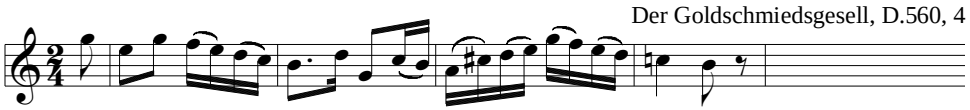

SQ D.87/i, 74


SQ H.58/iv

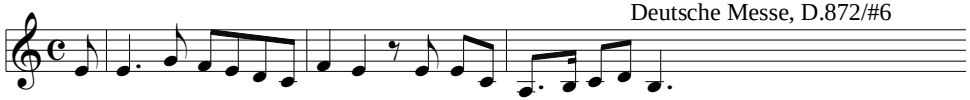
Ser, str, K.525/ii



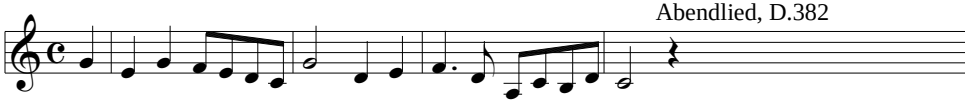
Der Goldschmiedsgesell, D.560, 4



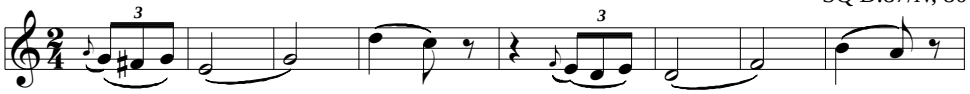
Deutsche Messe, D.872/#6



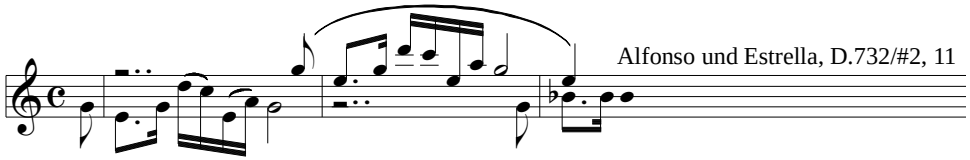
Abendlied, D.382



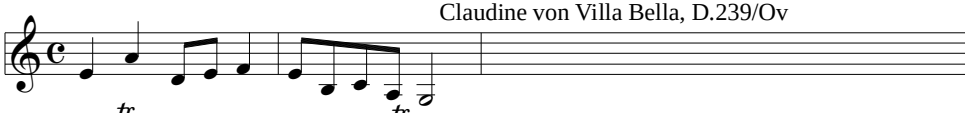
SQ D.87/iv, 80



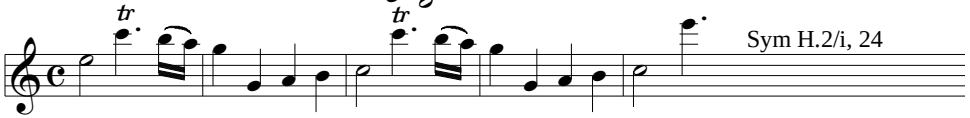
Alfonso und Estrella, D.732/#2, 11



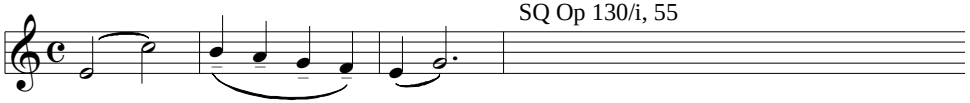
Claudine von Villa Bella, D.239/Ov



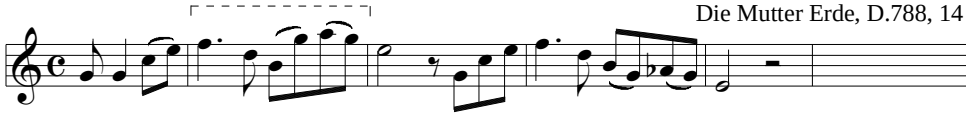
Sym H.2/i, 24



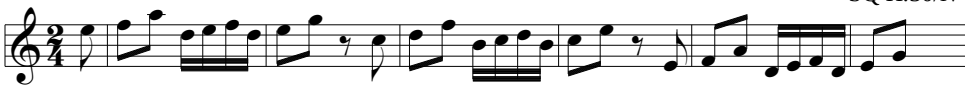
SQ Op 130/i, 55



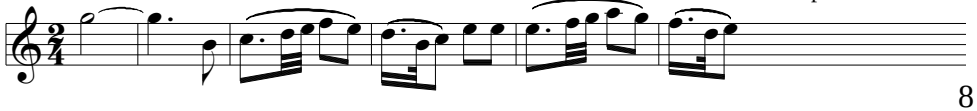
Die Mutter Erde, D.788, 14



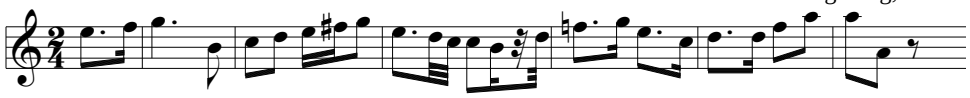
SQ H.30/iv



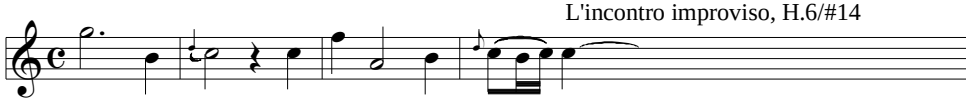
L'incontro improviso H.6/#41



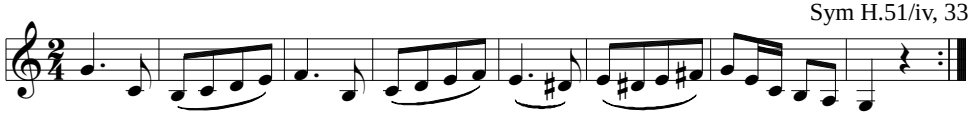
Ida's Nachtgesang, D.227



L'incontro improviso, H.6/#14

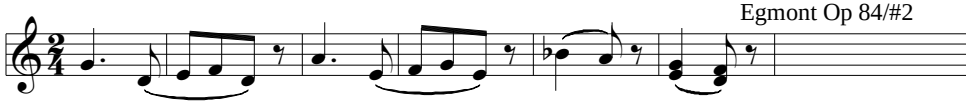


Sym H.51/iv, 33

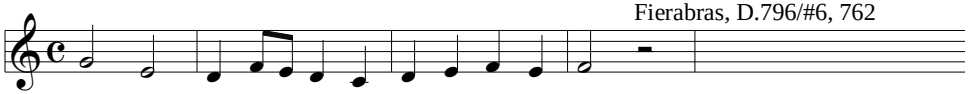


Div H.IV:9/i

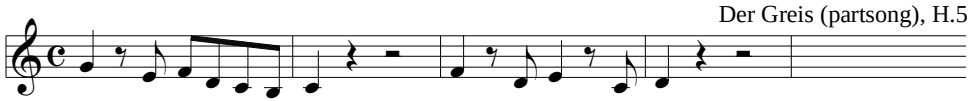
Egmont Op 84/#2



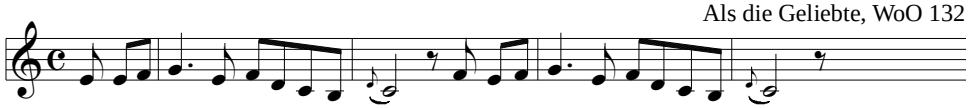
Fierabras, D.796/#6, 762



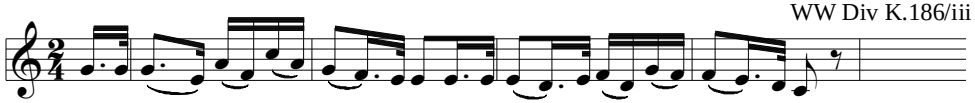
Der Greis (partsong), H.5



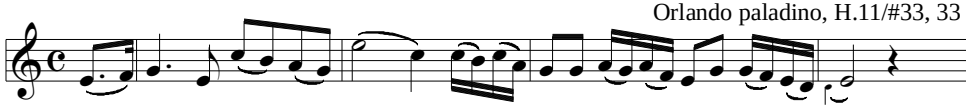
Als die Geliebte, WoO 132



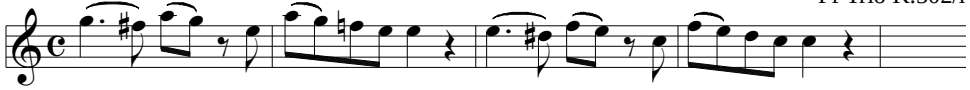
WW Div K.186/iii



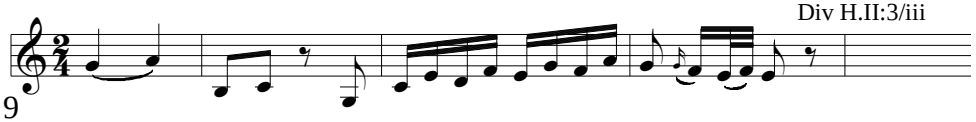
Orlando paladino, H.11/#33, 33



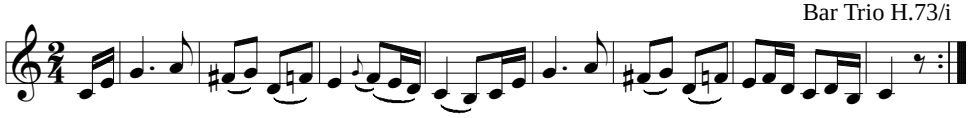
Pf Trio K.502/i



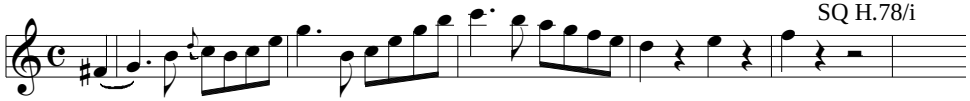
Div H.II:3/iii



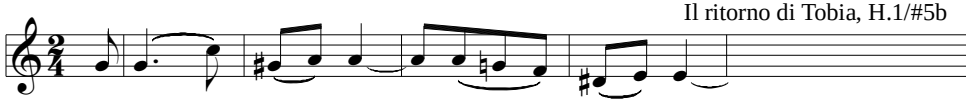
Bar Trio H.73/i



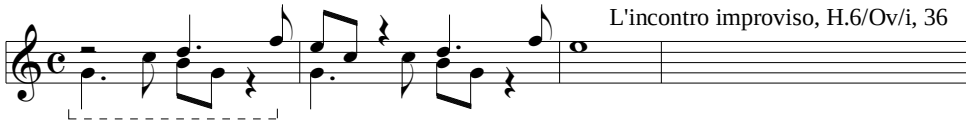
SQ H.78/i



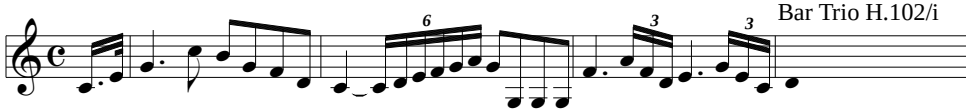
Il ritorno di Tobia, H.1/#5b



L'incontro improviso, H.6/Ov/i, 36

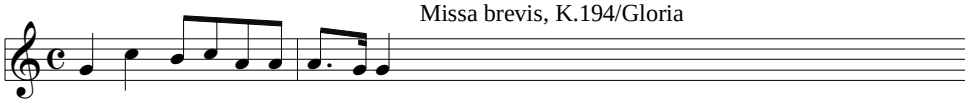


Bar Trio H.102/i



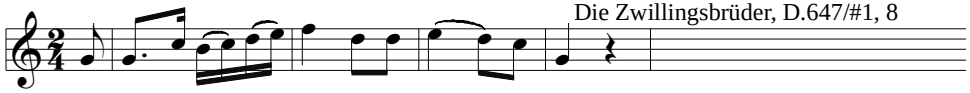
Fl 4t K.285/iii

Missa brevis, K.194/Gloria

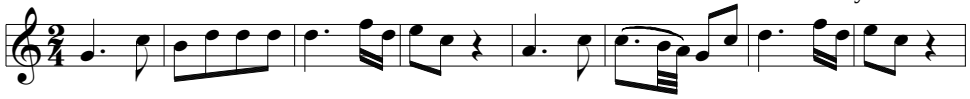


Die Zwillingsbrüder, D.647/#1, 3

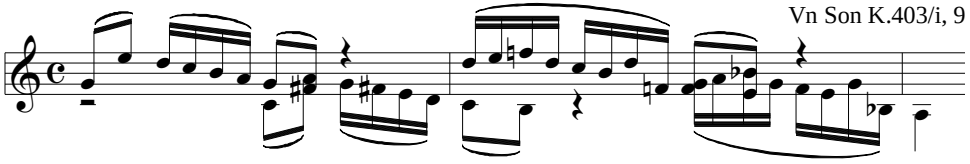
Die Zwillingsbrüder, D.647/#1, 8



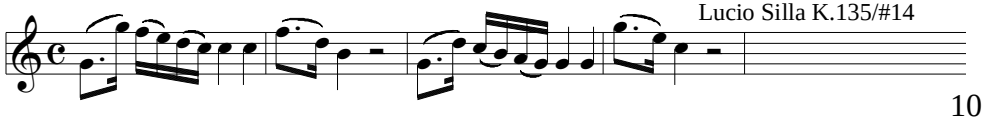
Sym H.60/v

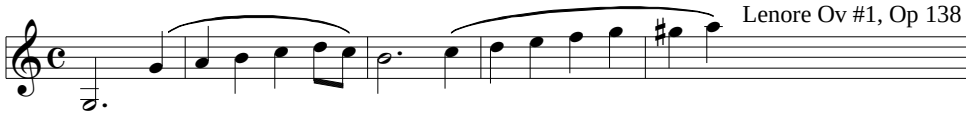


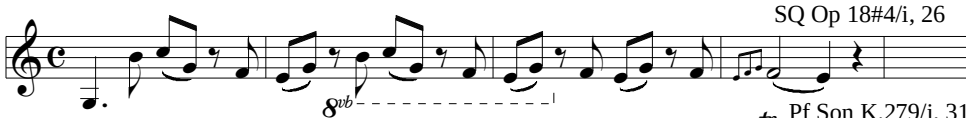
Vn Son K.403/i, 9

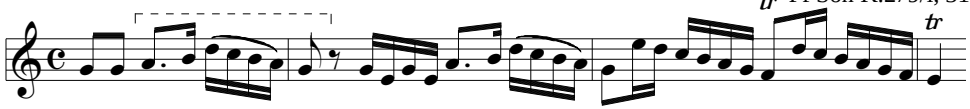


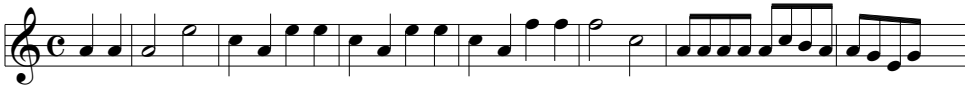
Lucio Silla K.135/#14

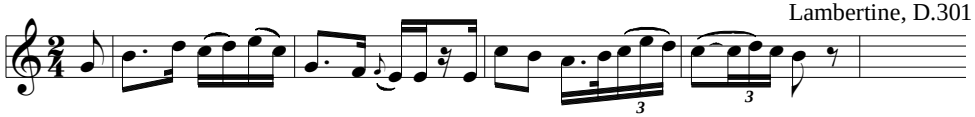



Lenore Ov #1, Op 138


SQ Op 18#4/i, 26


Pf Son K.279/i, 31

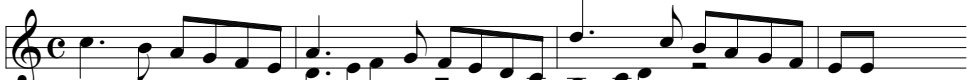

Sym K.425/i, 71


Lambertine, D.301

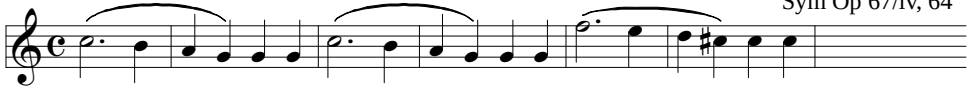
EX 42:
Z5^A3, linear

(Z5^A2, 4-linear)

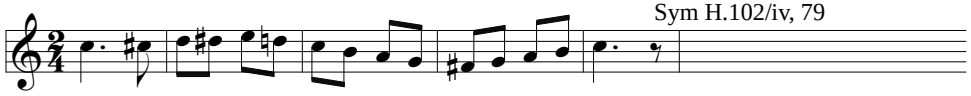
Don G. K.527/#13 pt 2, 237 [509]



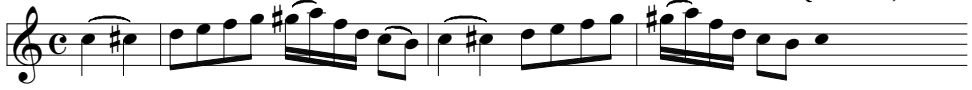
Sym Op 67/iv, 64



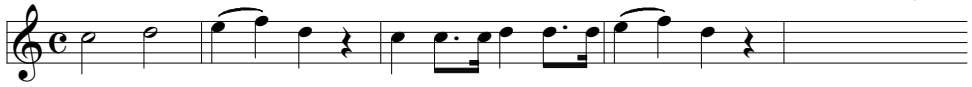
Sym H.102/iv, 79



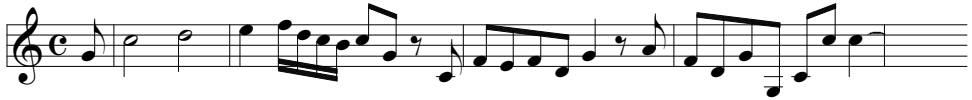
SQ K.421/i, 32



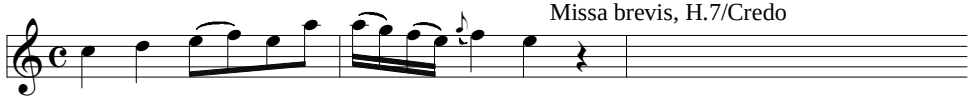
Vn Conc K.216/i, 19



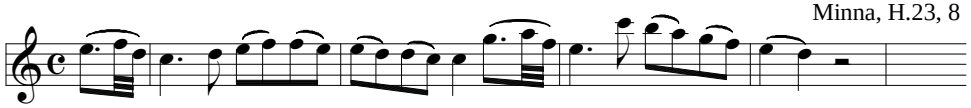
Bar Trio H.34/i



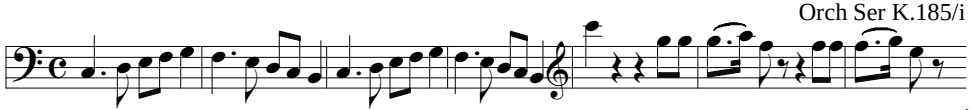
Missa brevis, H.7/Credo

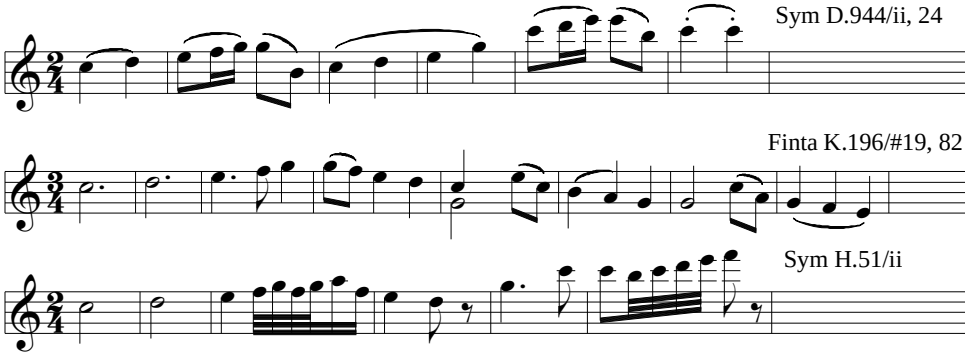


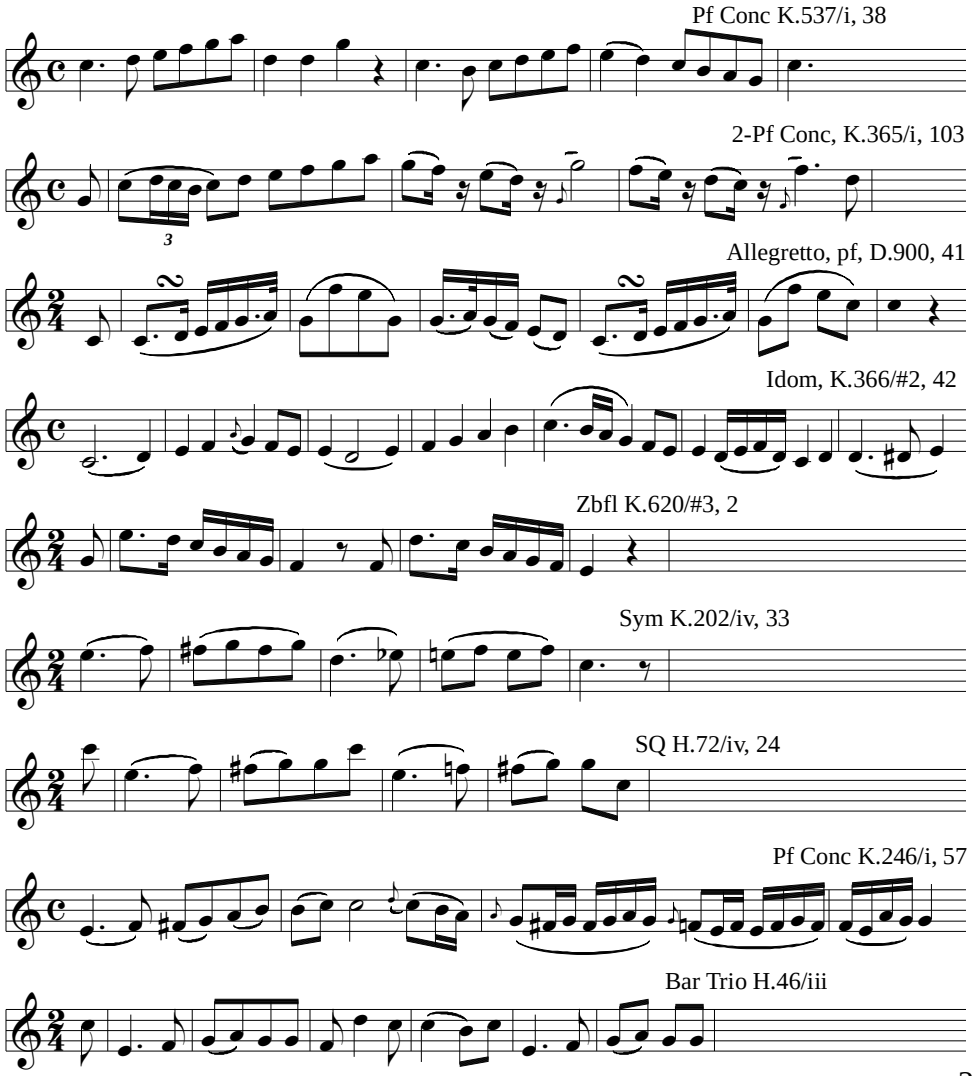
Minna, H.23, 8



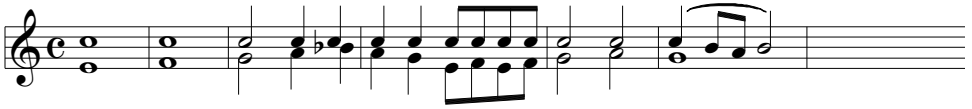
Orch Ser K.185/i



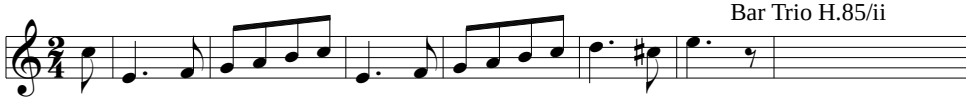

Sym D.944/ii, 24
Finta K.196/#19, 82
Sym H.51/ii


Pf Conc K.537/i, 38
2-Pf Conc, K.365/i, 103
Allegretto, pf, D.900, 41
Idom, K.366/#2, 42
Zbfl K.620/#3, 2
Sym K.202/iv, 33
SQ H.72/iv, 24
Pf Conc K.246/i, 57
Bar Trio H.46/iii

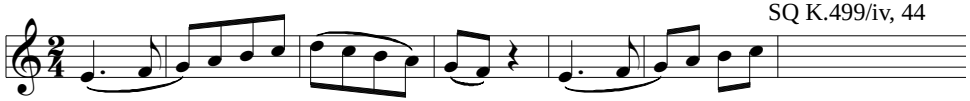
Pf Son D.959/i



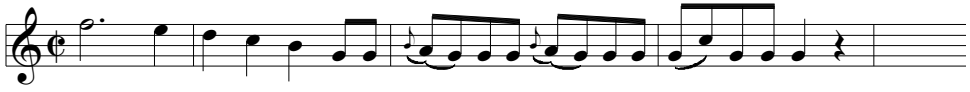
Bar Trio H.85/ii



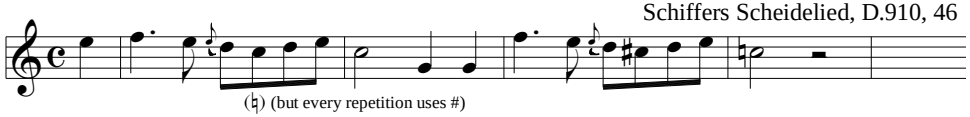
SQ K.499/iv, 44



Don G K.527/Ov, 77

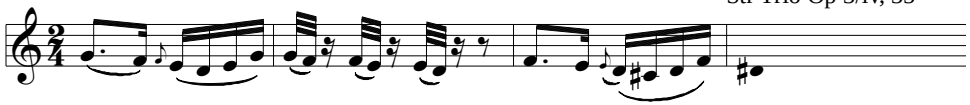


Schiffers Scheidelied, D.910, 46

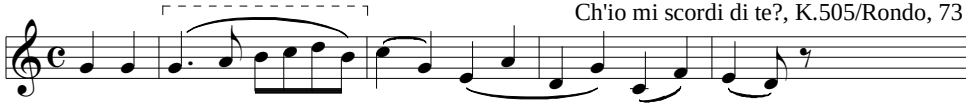


(♮) (but every repetition uses #)

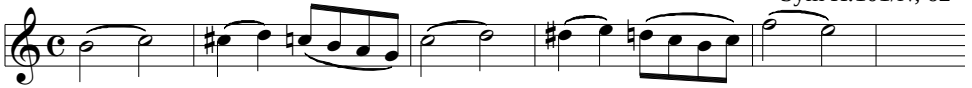
Str Trio Op 3/iv, 35



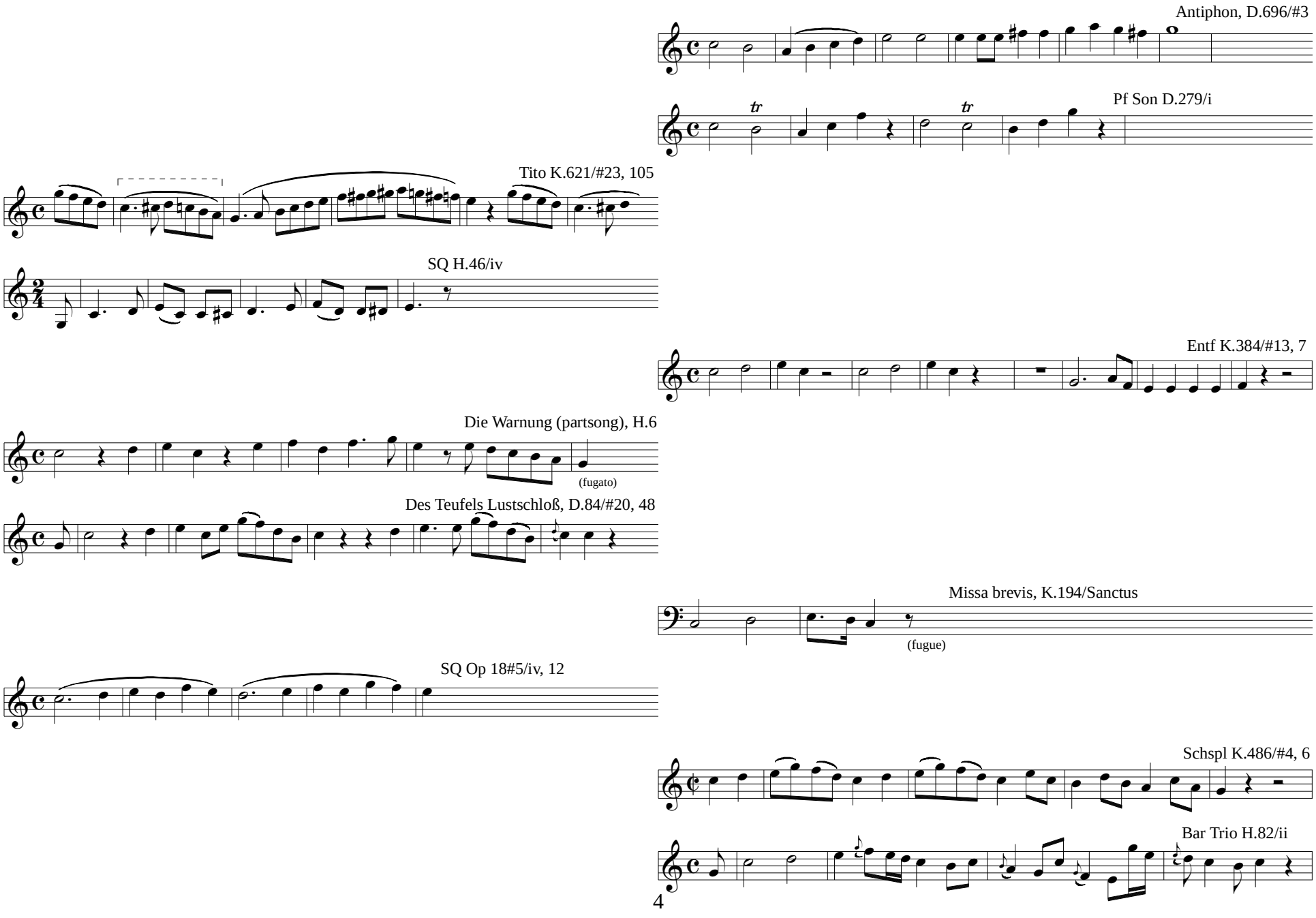
Ch'io mi scordi di te?, K.505/Rondo, 73



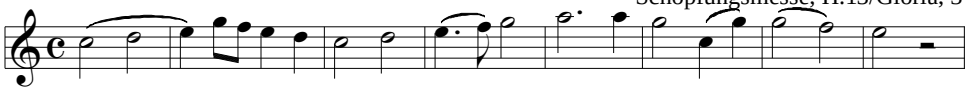
Sym H.101/iv, 62



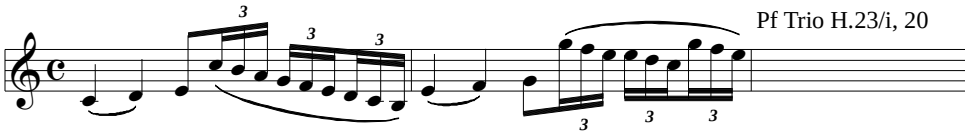
(Z5^A2, 3-linear)



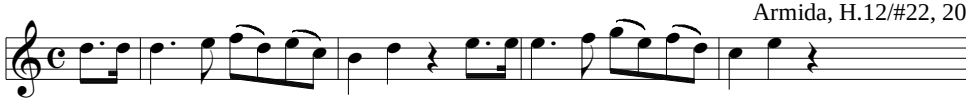
Schöpfungsmesse, H.13/Gloria, 3



Pf Trio H.23/i, 20



Armida, H.12/#22, 20



Pf Son Op 81a/i, 50

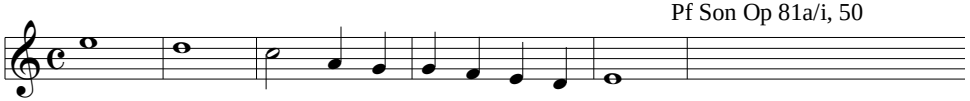
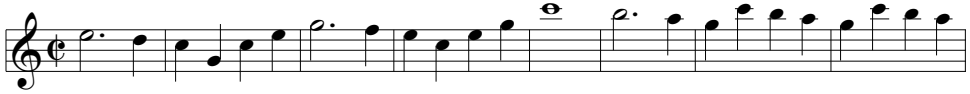
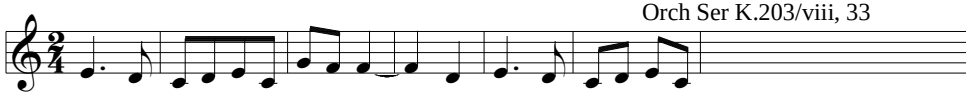


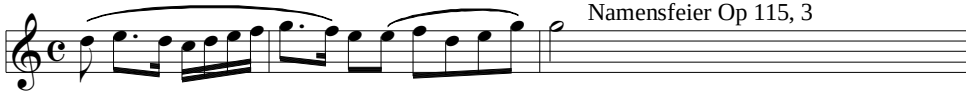
Fig K.492/Ov, 8



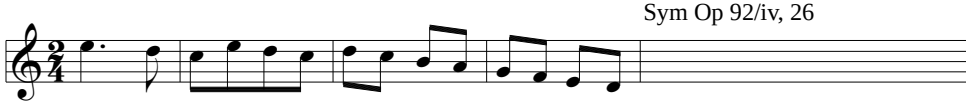
Orch Ser K.203/viii, 33



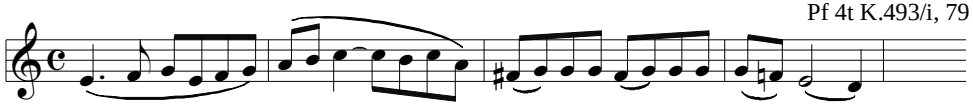
Namensfeier Op 115, 3



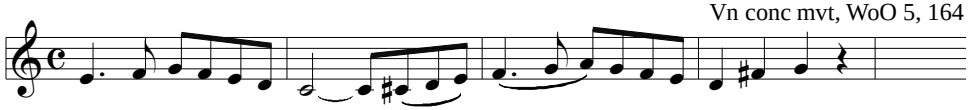
Sym Op 92/iv, 26



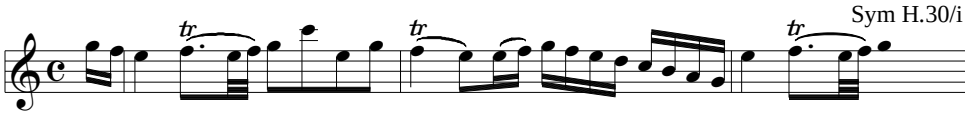
Pf 4t K.493/i, 79



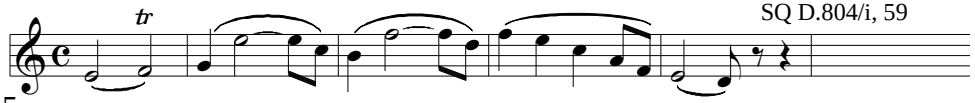
Vn conc mvt, WoO 5, 164

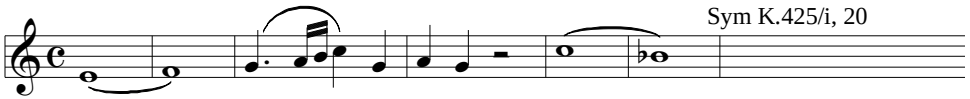


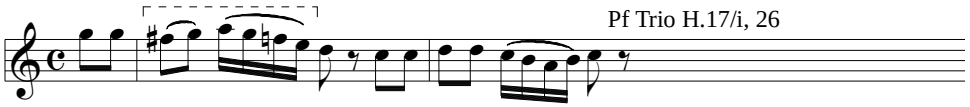
Sym H.30/i

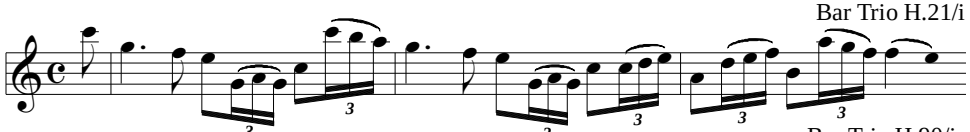


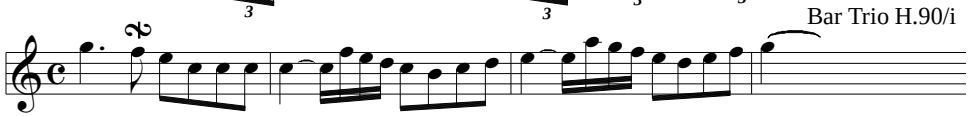
SQ D.804/i, 59

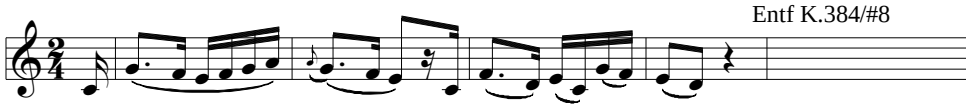


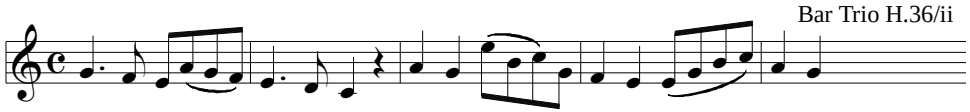

Sym K.425/i, 20

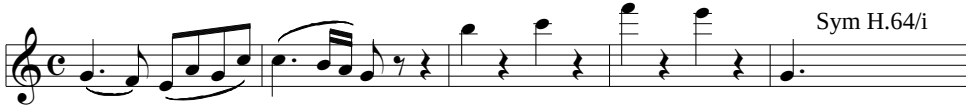

Pf Trio H.17/i, 26

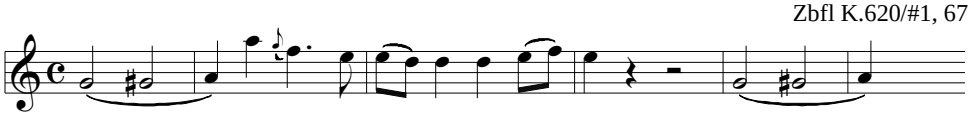

Bar Trio H.21/i

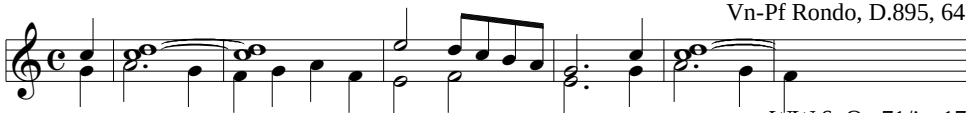

Bar Trio H.90/i

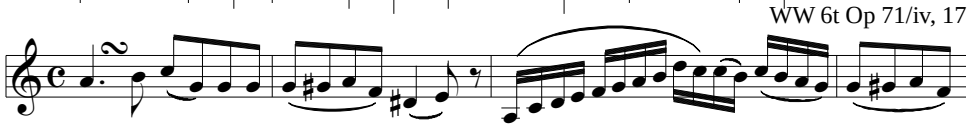

Entf K.384/#8

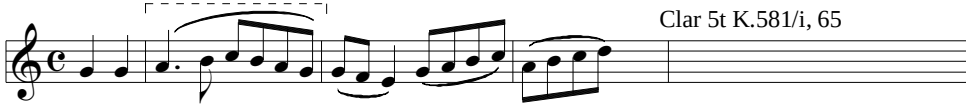

Bar Trio H.36/ii

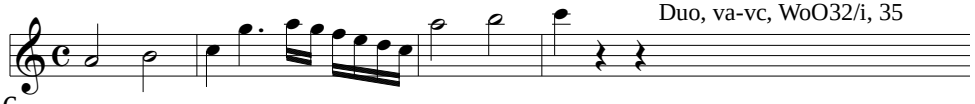

Sym H.64/i


Zbfl K.620/#1, 67


Vn-Pf Rondo, D.895, 64

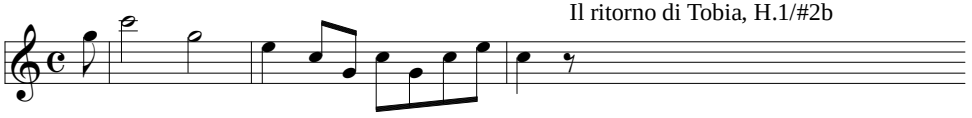

WW 6t Op 71/iv, 17


Clar 5t K.581/i, 65

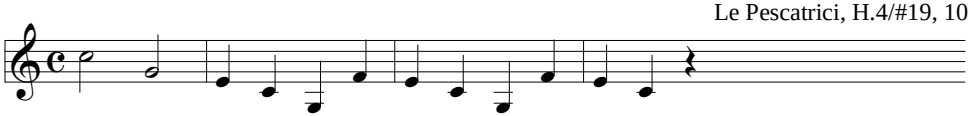

Duo, va-vc, WoO32/i, 35

EX 43:
Z5^A3, ARP

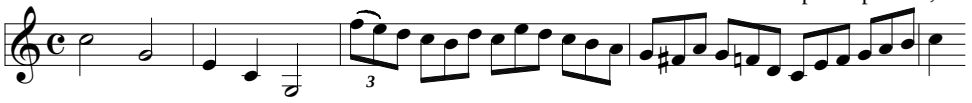
Il ritorno di Tobia, H.1/#2b



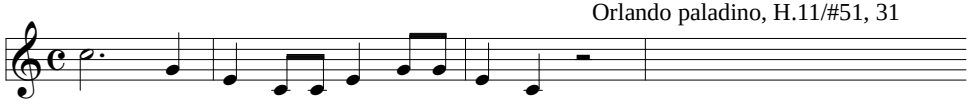
Le Pescatrici, H.4/#19, 10



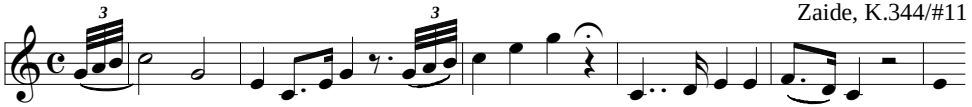
Septet Op 20/vi, 33



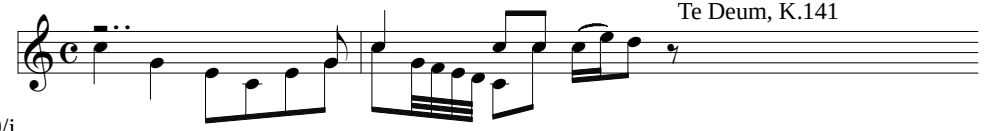
Orlando paladino, H.11/#51, 31



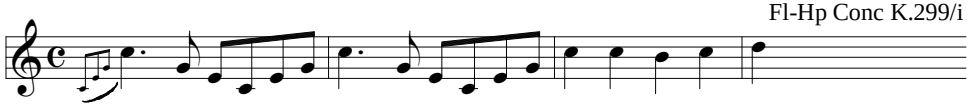
Zaide, K.344/#11



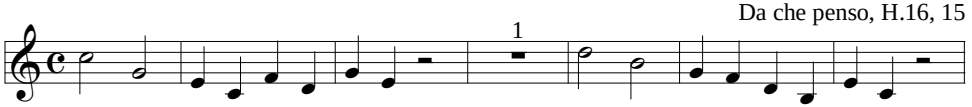
Te Deum, K.141



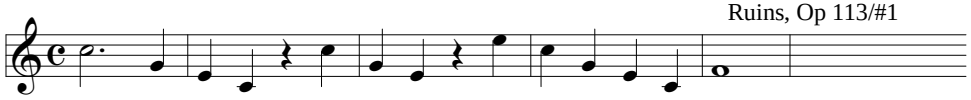
Fl-Hp Conc K.299/i



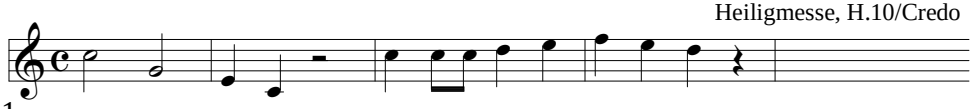
Da che penso, H.16, 15



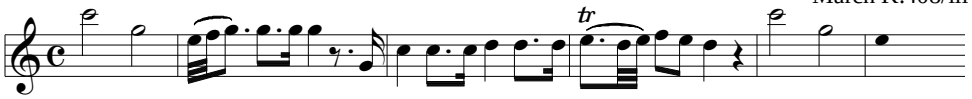
Ruins, Op 113/#1



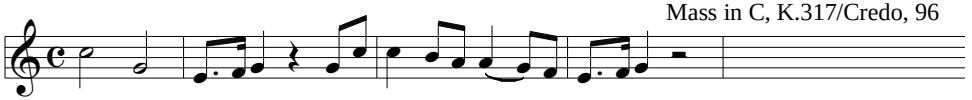
Heiligmesse, H.10/Credo



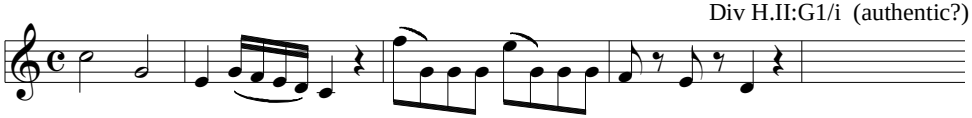
March K.408/iii



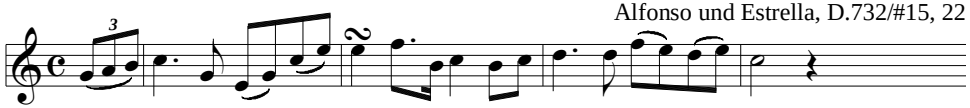
Mass in C, K.317/Credo, 96



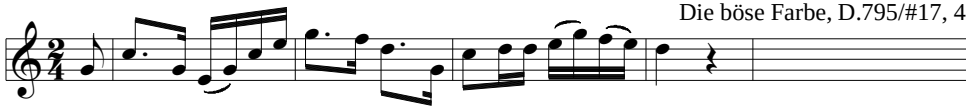
Div H.II:G1/i (authentic?)



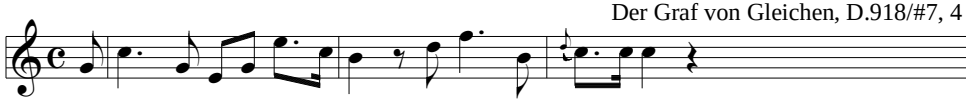
Alfonso und Estrella, D.732/#15, 22



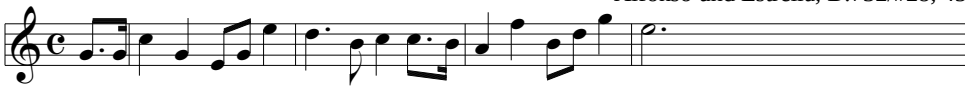
Die böse Farbe, D.795/#17, 4



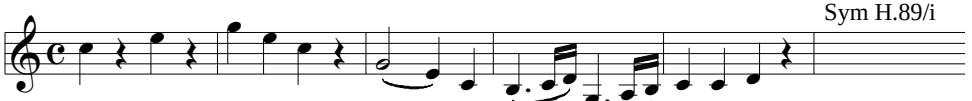
Der Graf von Gleichen, D.918/#7, 4



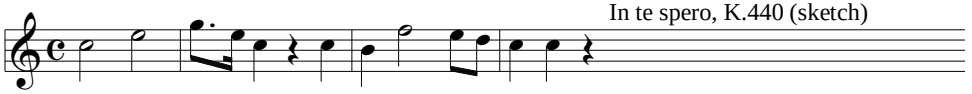
Alfonso und Estrella, D.732/#28, 45



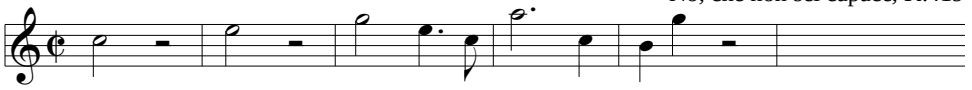
Sym H.89/i



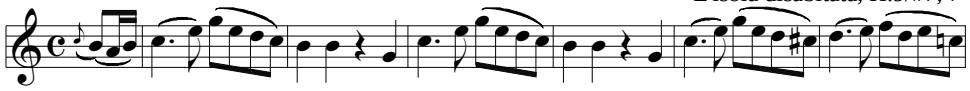
In te spero, K.440 (sketch)



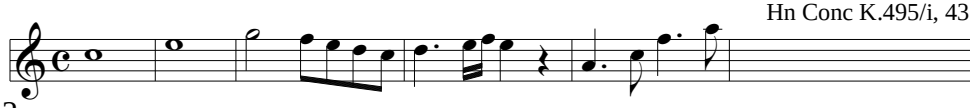
No, che non sei capace, K.419



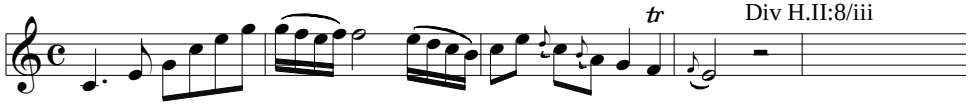
L'isola disabitata, H.9/#7, 7



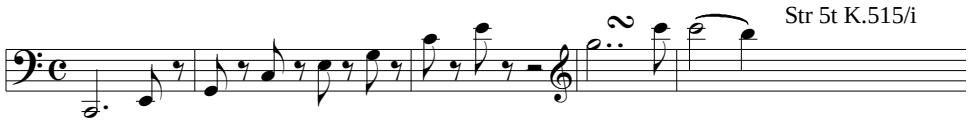
Hn Conc K.495/i, 43



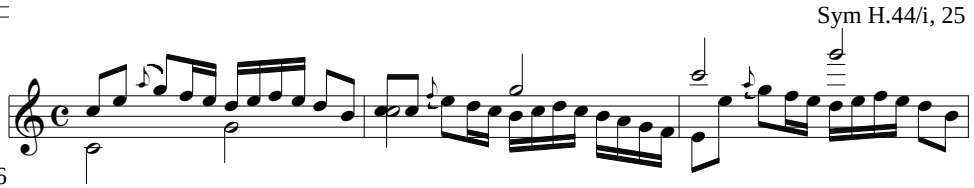
Div H.II:8/iii



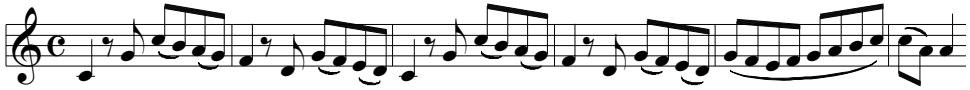
Str 5t K.515/i



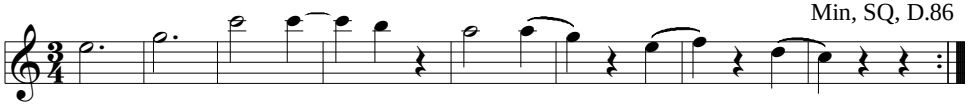
Sym H.44/i, 25



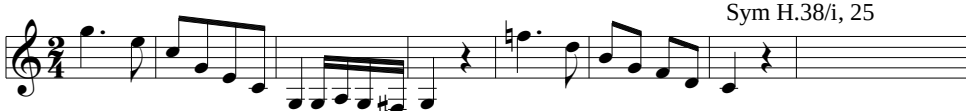
WW Div K.166/i, 26



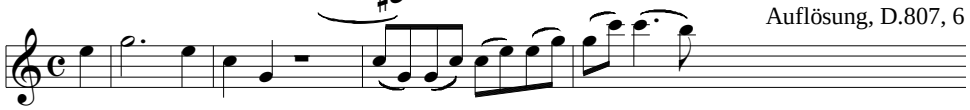
Min, SQ, D.86



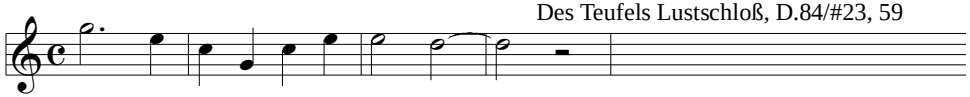
Sym H.38/i, 25



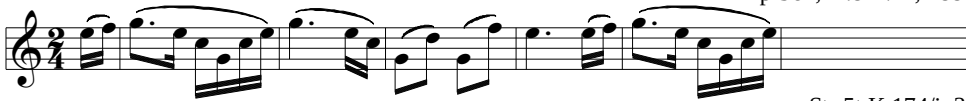
Auflösung, D.807, 6



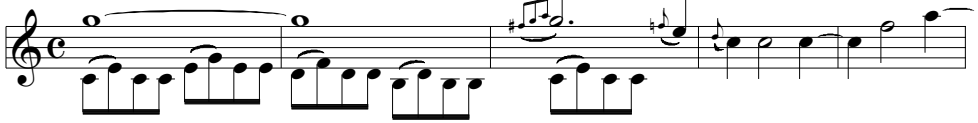
Des Teufels Lustschloß, D.84/#23, 59



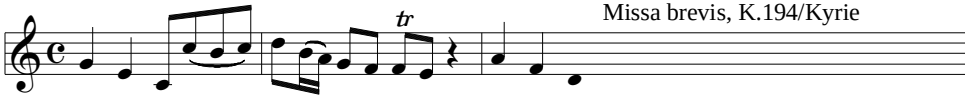
Arp Son, D.821/iii, 188



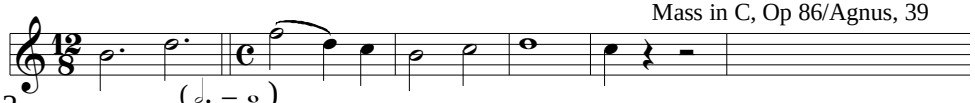
Str 5t K.174/i, 3



Missa brevis, K.194/Kyrie

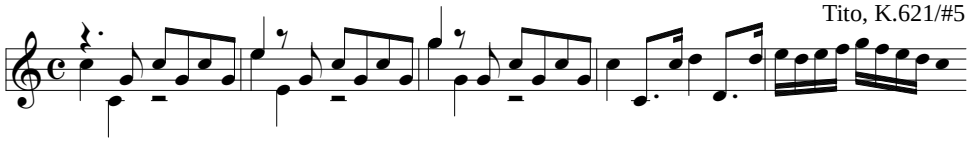


Mass in C, Op 86/Agnus, 39

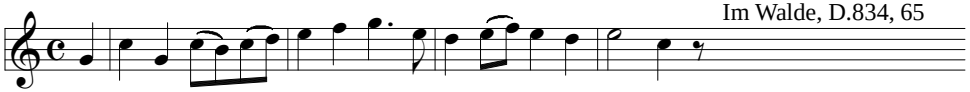


EX 44:
Z5^A3, OSC

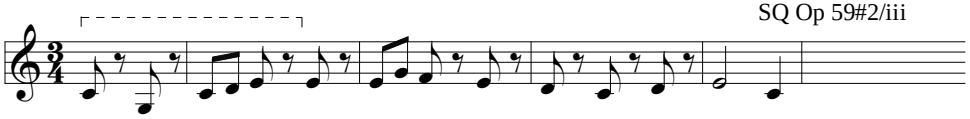
Tito, K.621/#5



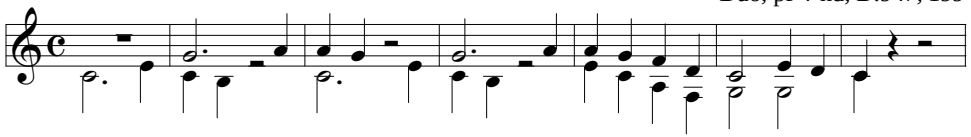
Im Walde, D.834, 65



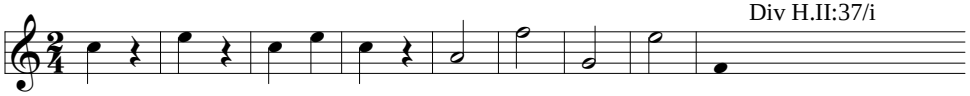
SQ Op 59#2/iii



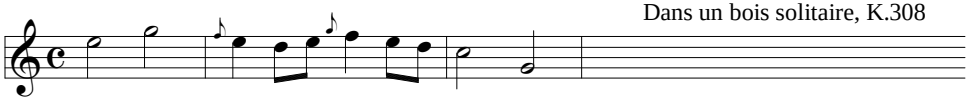
Duo, pf 4-hd, D.947, 199



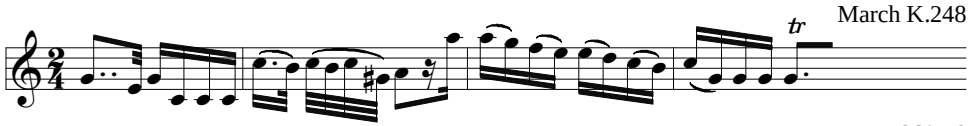
Div H.II:37/i



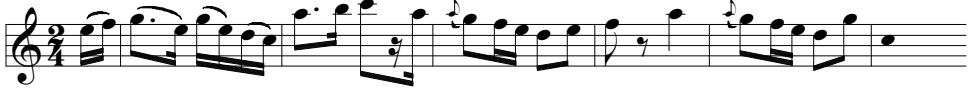
Dans un bois solitaire, K.308



March K.248

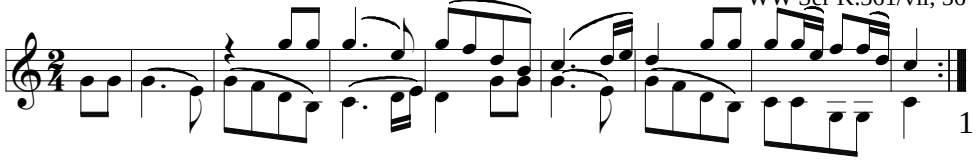


Finta K.196/#20

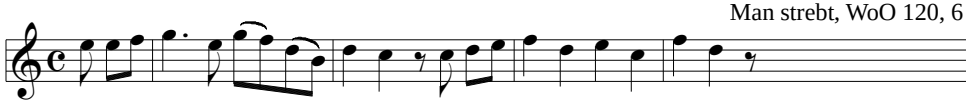


March, K.335/#2, 18

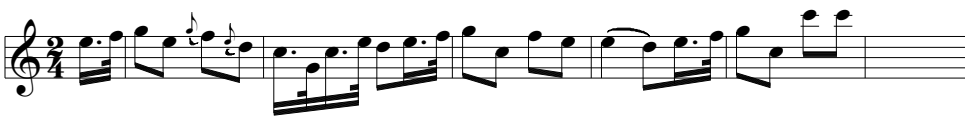
WW Ser K.361/vii, 56



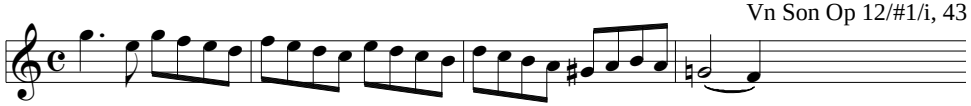
Man strebt, WoO 120, 6



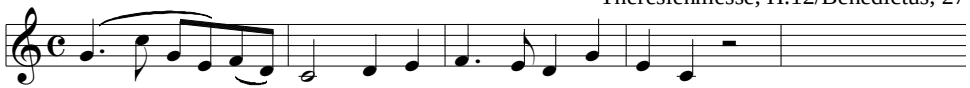
Bar Trio H.12/i



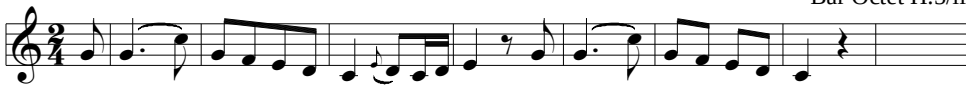
Vn Son Op 12/#1/i, 43



Theresienmesse, H.12/Benedictus, 27

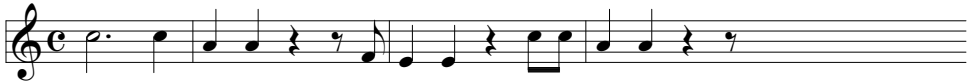


Bar Octet H.5/ii

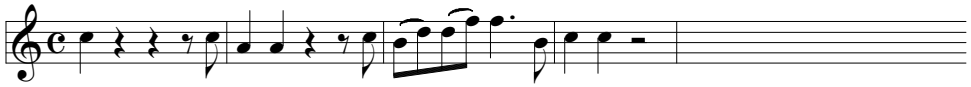


EX 45:
Z5^A3, {SS'RR}

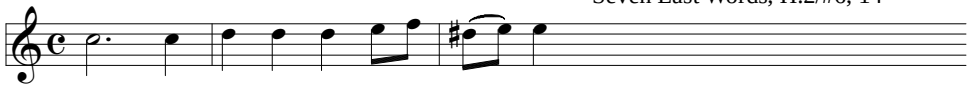
Mass, K.167/Benedictus, 21



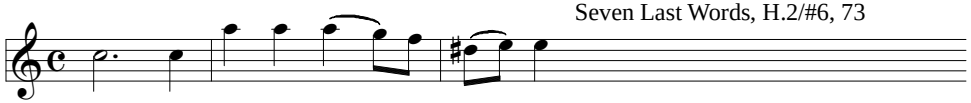
Idomeneo, K.366/#27a, 2



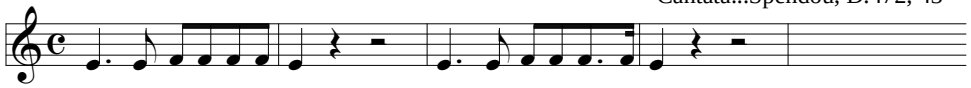
Seven Last Words, H.2/#6, 14



Seven Last Words, H.2/#6, 73

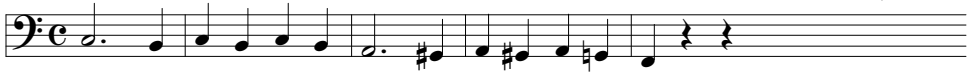


Cantata...Spendou, D.472, 43

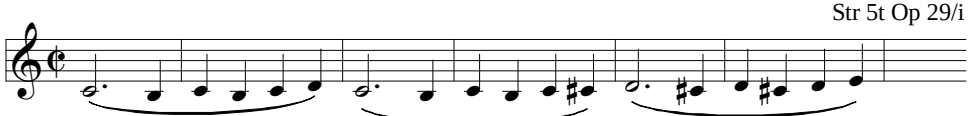


EX 46:
Z5^A3, NT

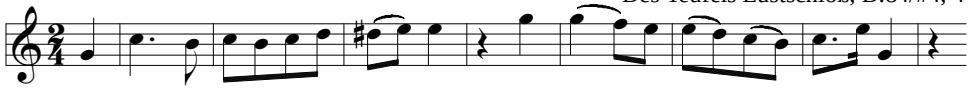
Overture D.470, 49



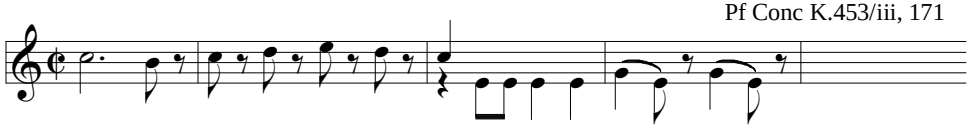
Str 5t Op 29/i



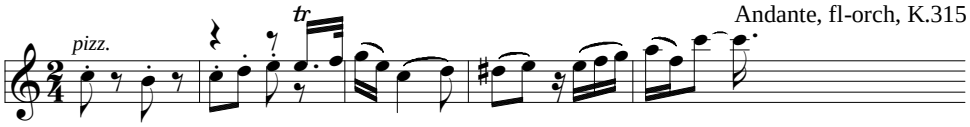
Des Teufels Lustschloß, D.84/#4, 4



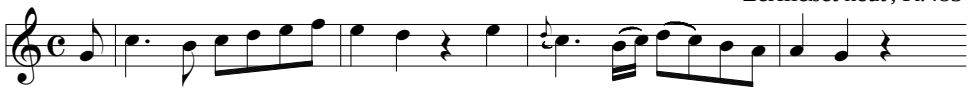
Pf Conc K.453/iii, 171



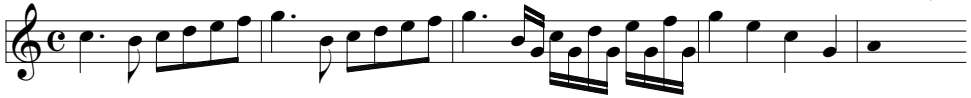
Andante, fl-orch, K.315



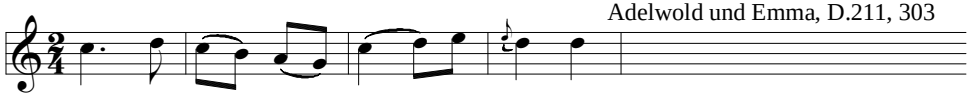
Zerfließet heut', K.483



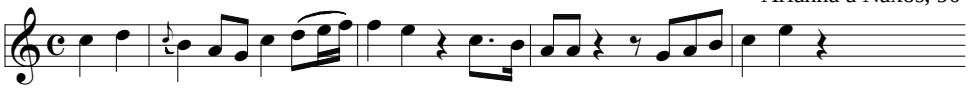
Church Sonata K.328, 24



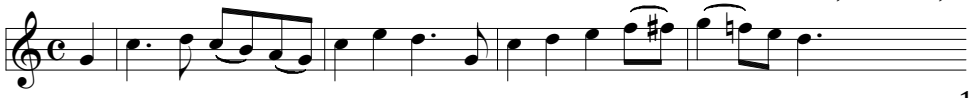
Adelwold und Emma, D.211, 303



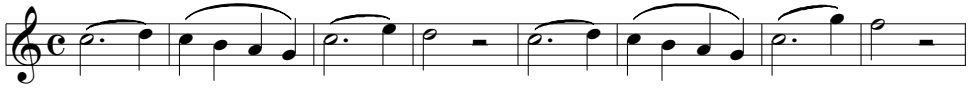
Arianna a Naxos, 90



Die Freunde von Salamanka, D.326/#2, 2



Sym H.47/iv



Harmoniemesse, H.14/Benedictus, 17

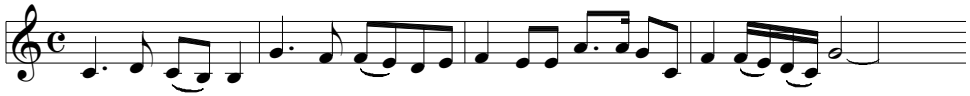
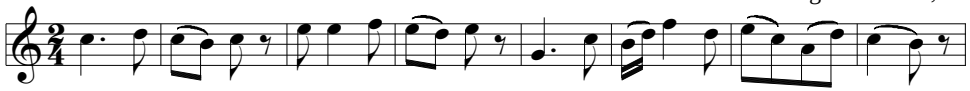
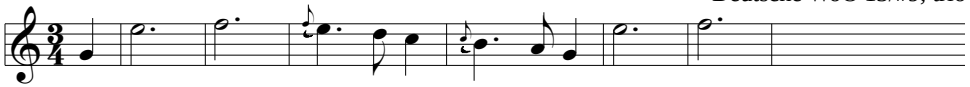


Fig K.492/#20, 26

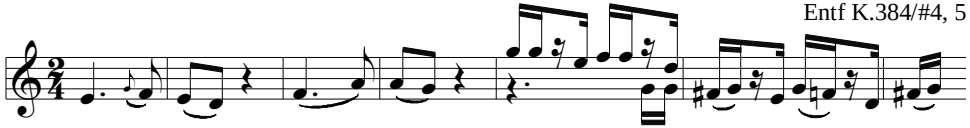


Coriolan Ov, Op 62, 52

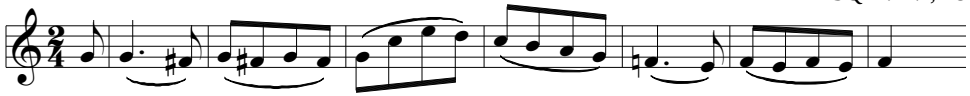
Deutsche WoO 13/#9, trio



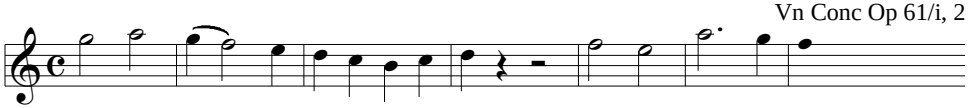
Entf K.384/#4, 5



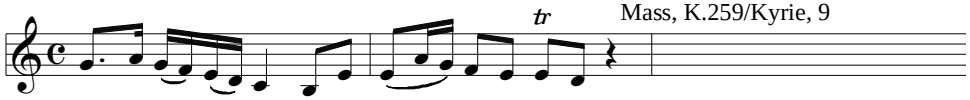
SQ H.41/i, 48



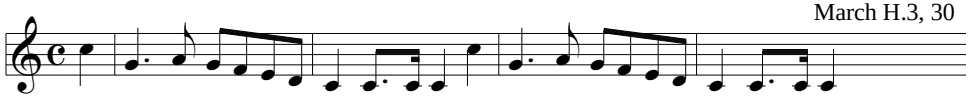
Vn Conc Op 61/i, 2



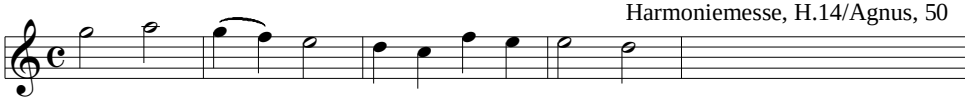
Mass, K.259/Kyrie, 9



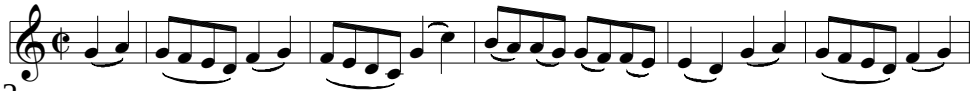
March H.3, 30



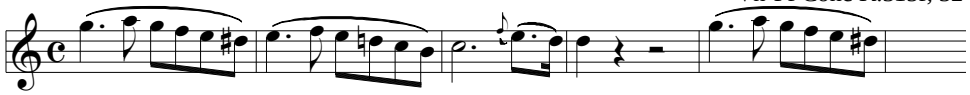
Harmoniemesse, H.14/Agnus, 50



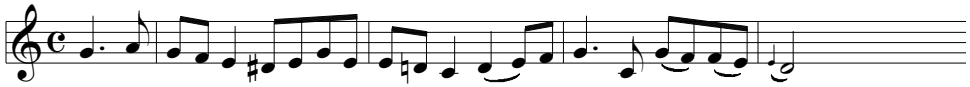
Pf Son K.281/iii



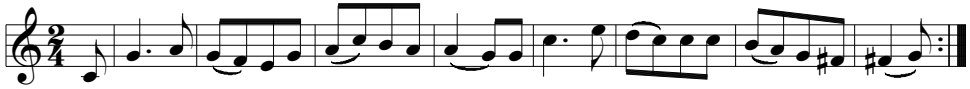
Vn-Pf Conc K.315f, 32



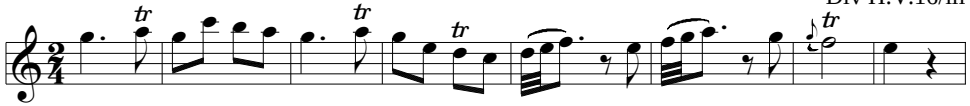
Adelwold und Emma, D.211, 204



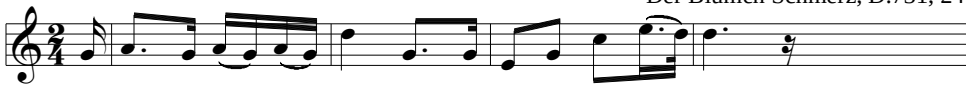
Contradance K.269b/#3, 16



Div H.V:16/iii

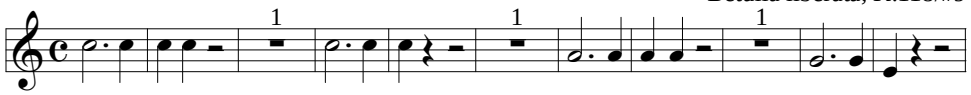


Der Blumen Schmerz, D.731, 24

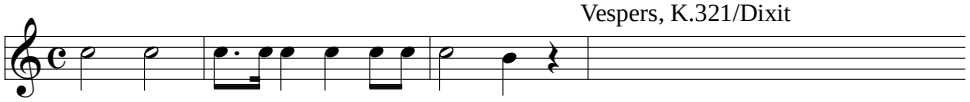


EX 47:
Z5^A3, {RR'RR}

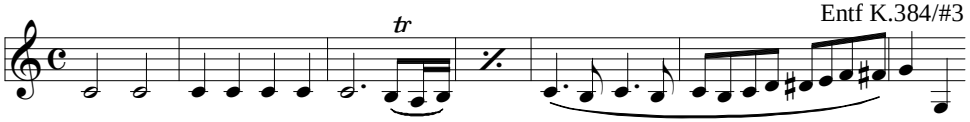
Betulia liberata, K.118/#9



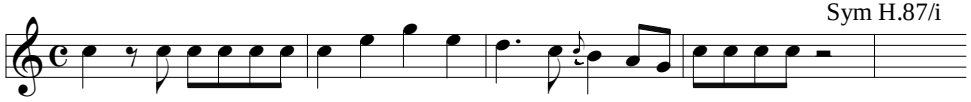
Vespers, K.321/Dixit



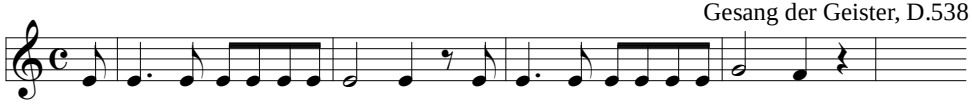
Entf K.384/#3



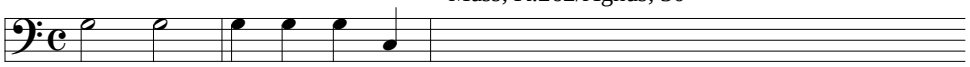
Sym H.87/i



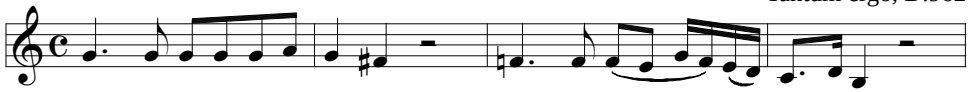
Gesang der Geister, D.538



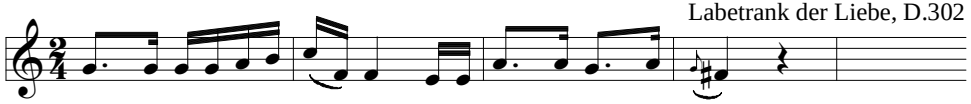
Mass, K.262/Agnus, 30



Tantum ergo, D.962

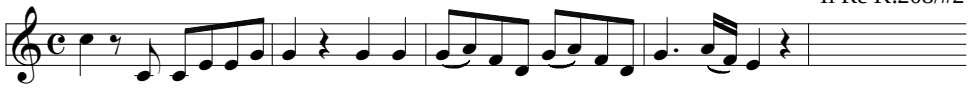


Labetrank der Liebe, D.302

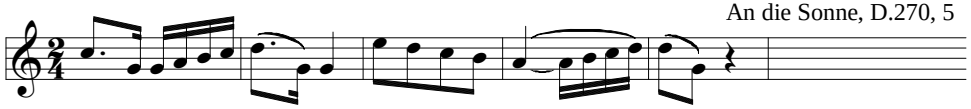


EX 48:
Z5^A3, {-R'R-}

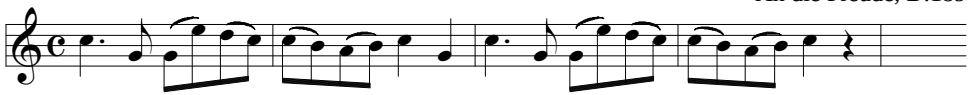
Il Re K.208/#2



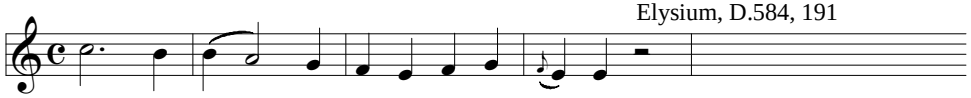
An die Sonne, D.270, 5



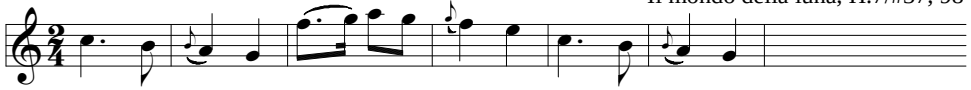
An die Freude, D.189



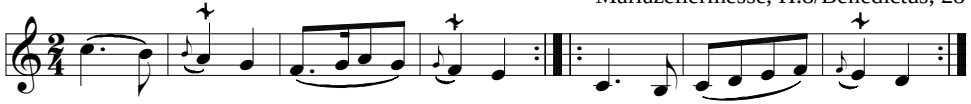
Elysium, D.584, 191



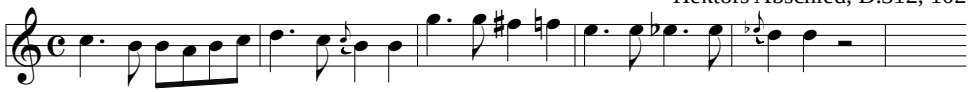
Il mondo della luna, H.7/#37, 98



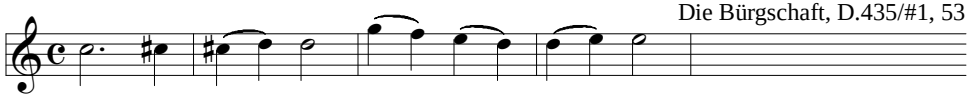
Mariazellermesse, H.8/Benedictus, 28



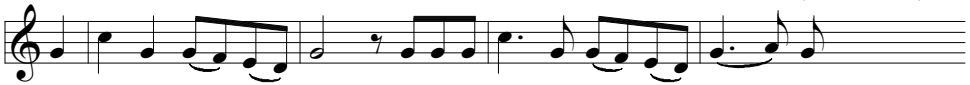
Hektors Abschied, D.312, 102



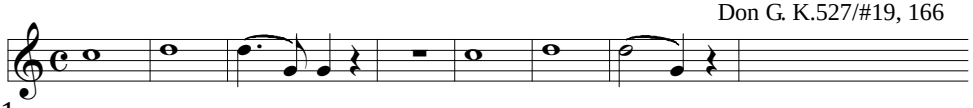
Die Bürgschaft, D.435/#1, 53



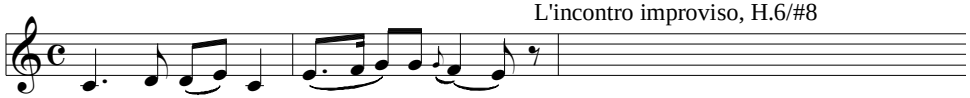
Fierabras, D.796/#22, 60



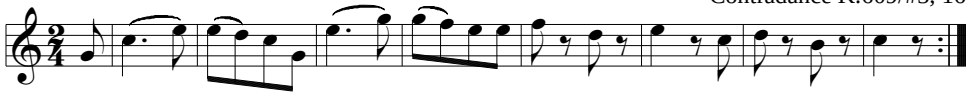
Don G. K.527/#19, 166



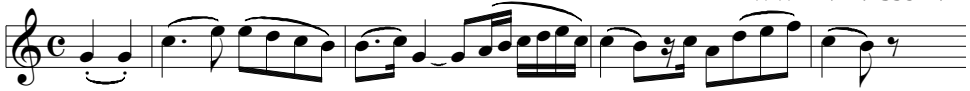
L'incontro improviso, H.6/#8



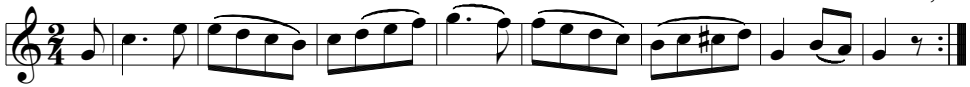
Contradance K.609/#3, 16



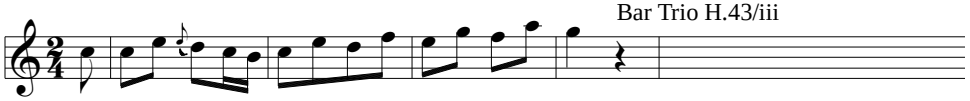
WW Div K.439b#4/ii



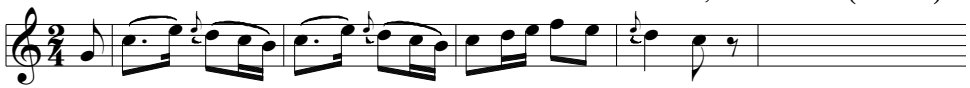
WW Div K.439b#4/v, 48



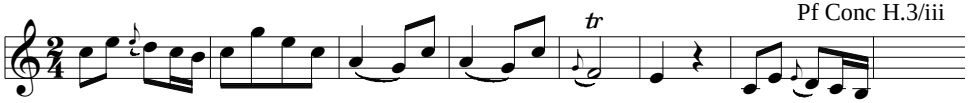
Bar Trio H.43/iii



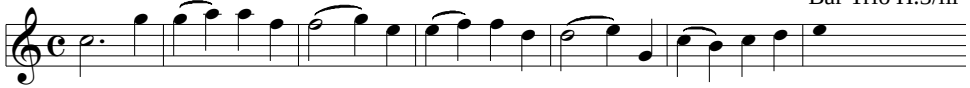
Cl-Bn Duo, WoO 27#3/ii (dubious)



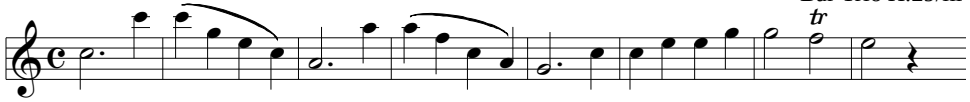
Pf Conc H.3/iii



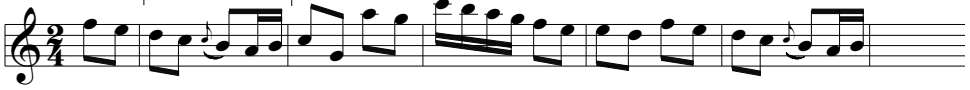
Bar Trio H.3/iii



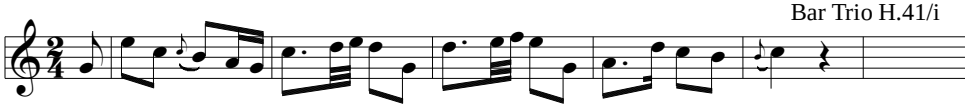
Bar Trio H.29/iii



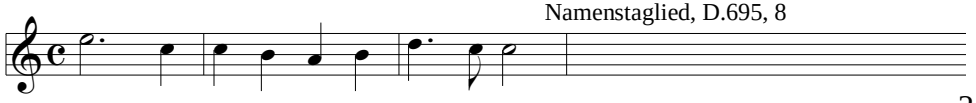
Div H.IV:8/iii



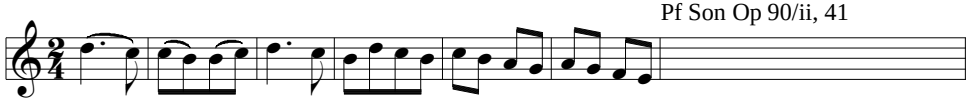
Bar Trio H.41/i



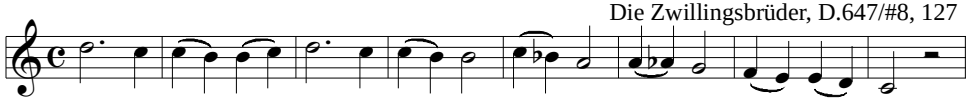
Namenstaglied, D.695, 8



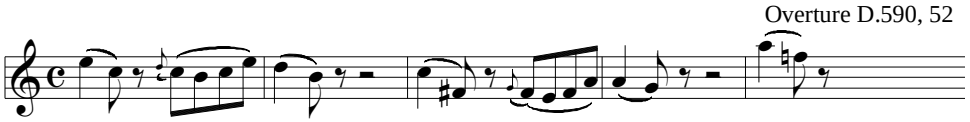
Pf Son Op 90/ii, 41



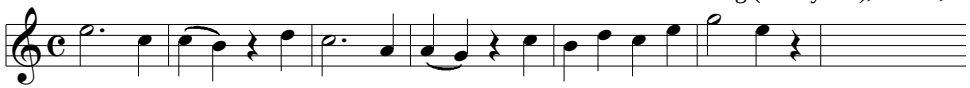
Die Zwillingsbrüder, D.647/#8, 127



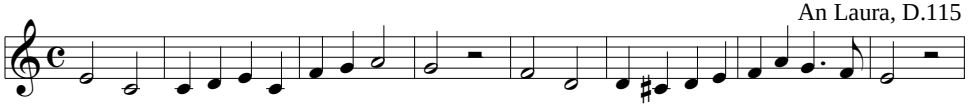
Overture D.590, 52



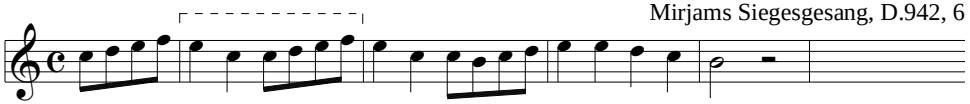
Gesang (An Sylvia), D.891, 5



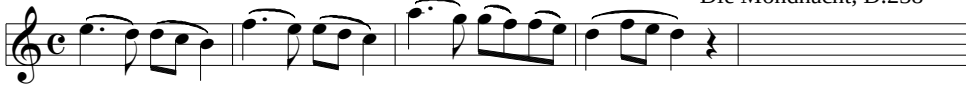
An Laura, D.115



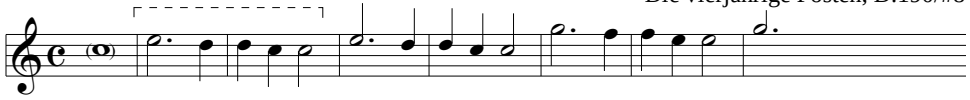
Mirjams Siegesgesang, D.942, 6



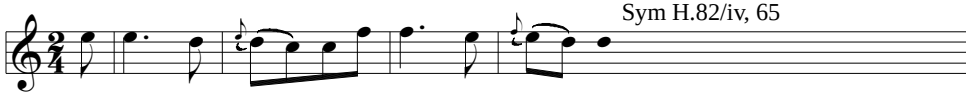
Die Mondnacht, D.238



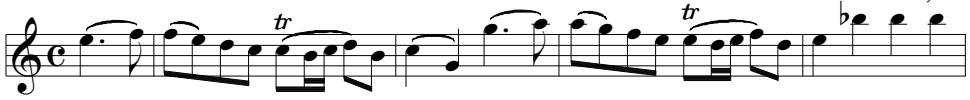
Die vierjährige Posten, D.190/#8



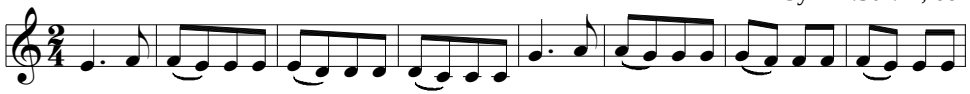
Sym H.82/iv, 65



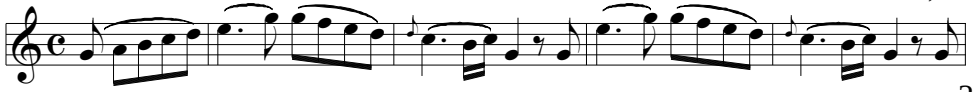
Il Re K.208/#3, 14



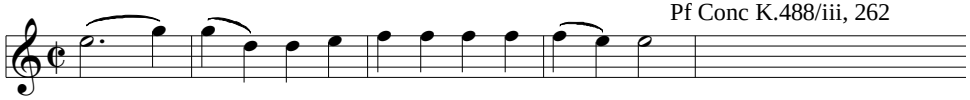
Sym K.504/iii, 66



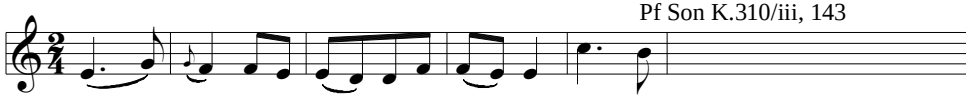
Entf K.384/#17, 44



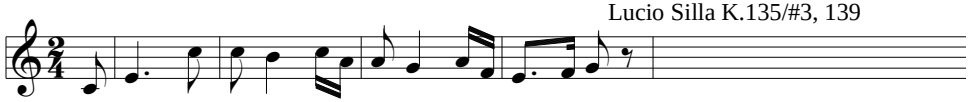
Pf Conc K.488/iii, 262



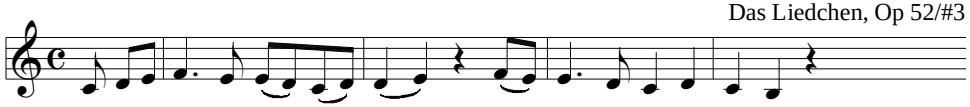
Pf Son K.310/iii, 143



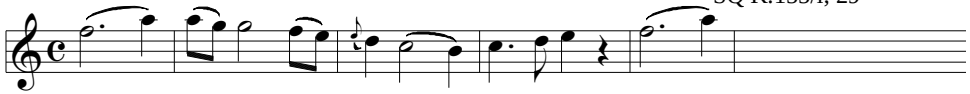
Lucio Silla K.135/#3, 139



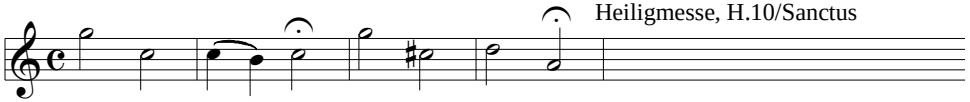
Das Liedchen, Op 52/#3



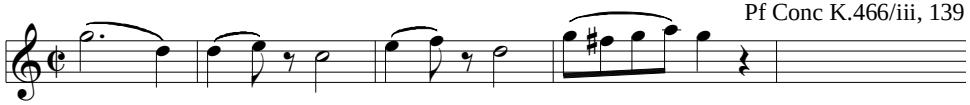
SQ K.155/i, 29



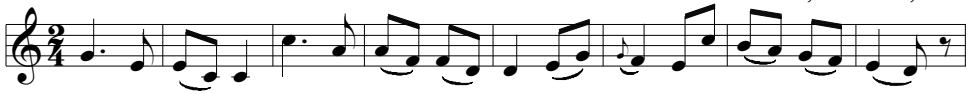
Heiligmesse, H.10/Sanctus



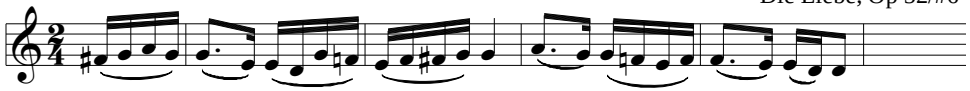
Pf Conc K.466/iii, 139



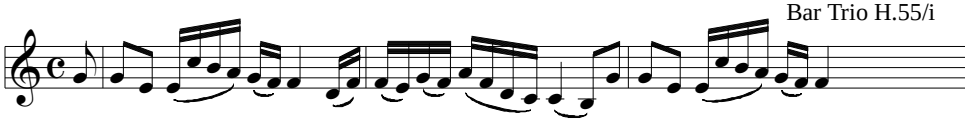
L'anima del filosofo, H.13/#11, 112



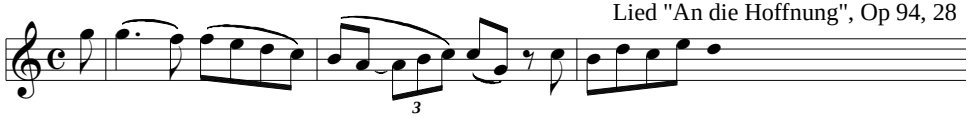
Die Liebe, Op 52/#6



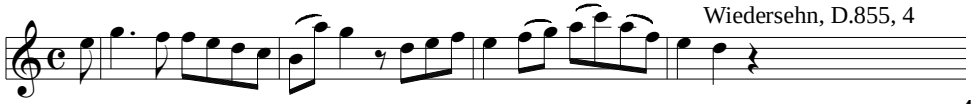
Bar Trio H.55/i



Lied "An die Hoffnung", Op 94, 28



Wiedersehn, D.855, 4



Ritter Toggenburg, D.397

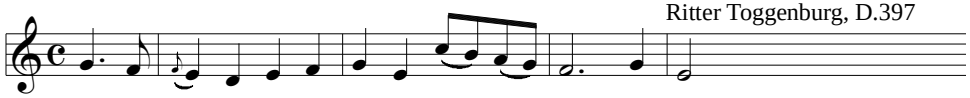
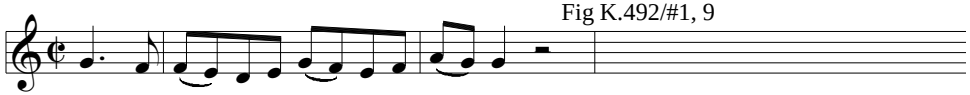
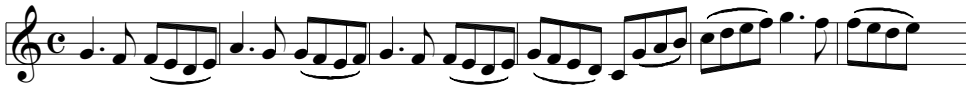


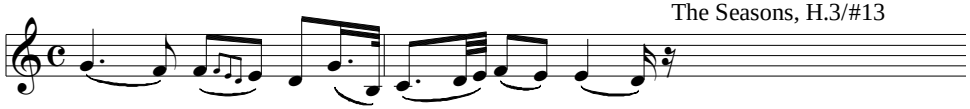
Fig K.492/#1, 9



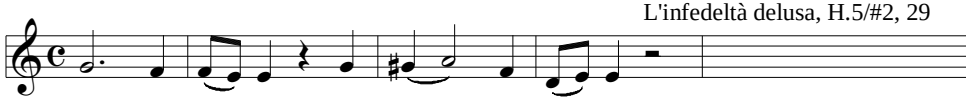
Sym H.65/i, 37



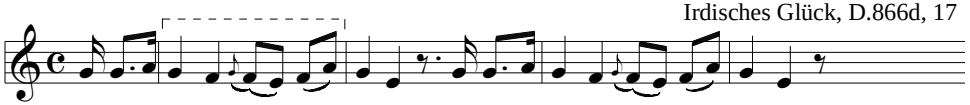
The Seasons, H.3/#13



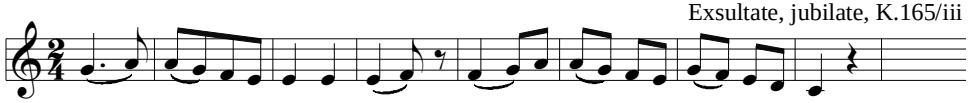
L'infedeltà delusa, H.5/#2, 29



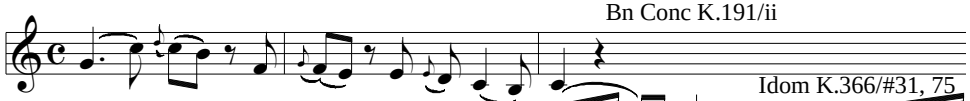
Irdisches Glück, D.866d, 17



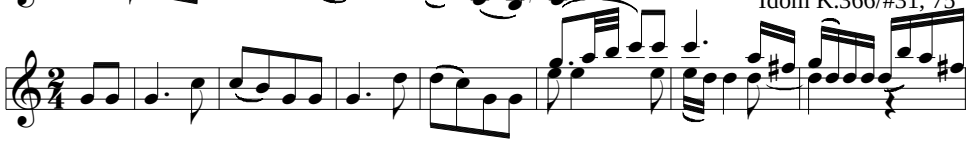
Exsultate, jubilate, K.165/iii



Bn Conc K.191/ii



Idom K.366/#31, 75



Mass K.275/Kyrie

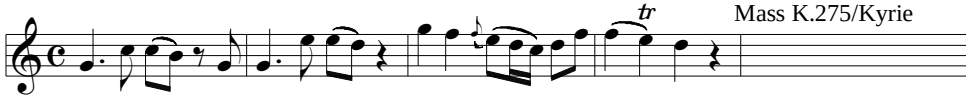
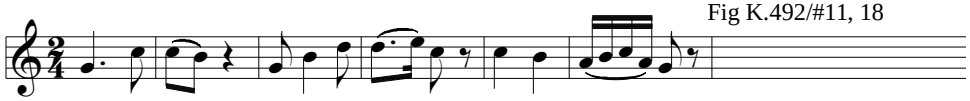
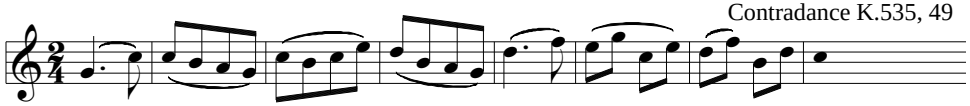


Fig K.492/#11, 18

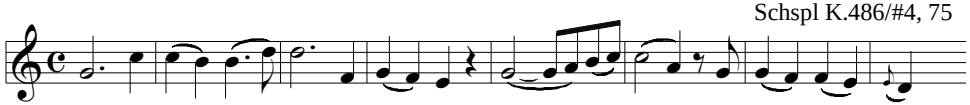


WW Div K.289/i, 28

Contradance K.535, 49

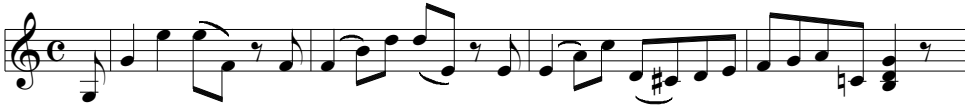


Schspl K.486/#4, 75

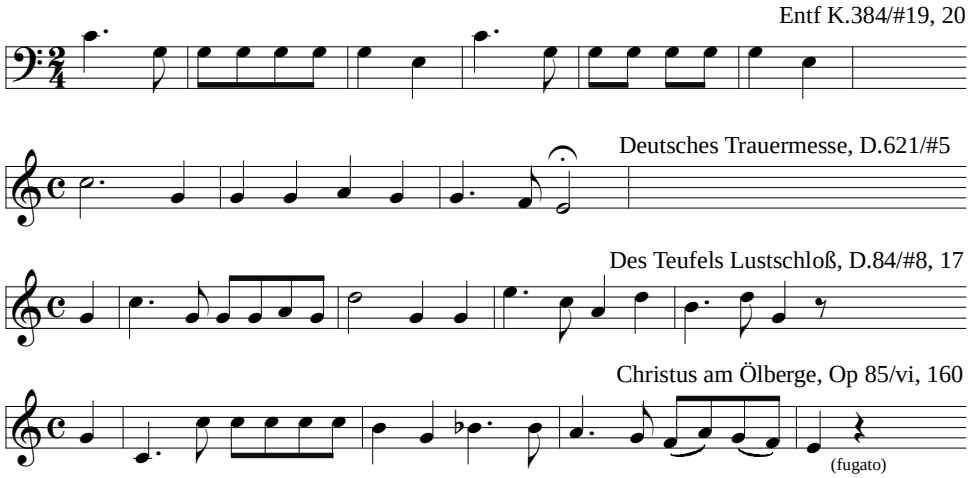


Mass K.337/Agnus, 5

Orch Div K.205/i, 22

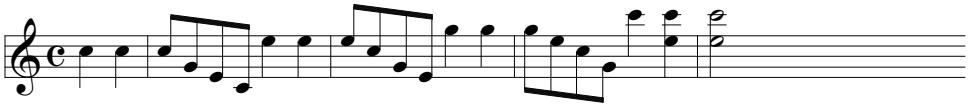


EX 49:
Z5^A3, {-R'RR}

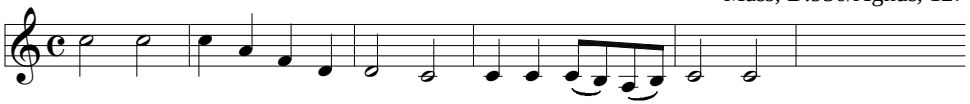


EX 50:
Z5^A3, {RR'R-}

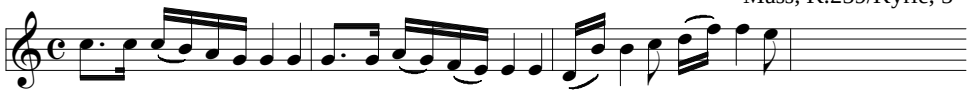
Contredance K.269b/#1, 24



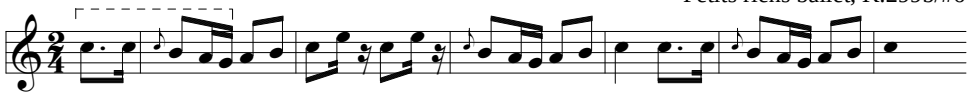
Mass, D.950/Agnus, 127



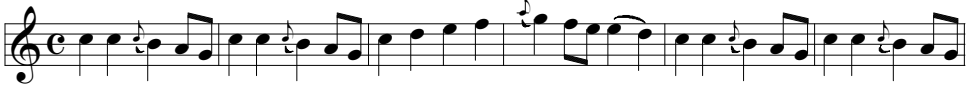
Mass, K.259/Kyrie, 5



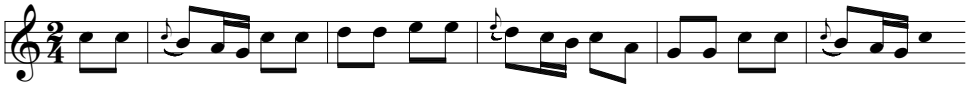
Petits riens ballet, K.299b/#6



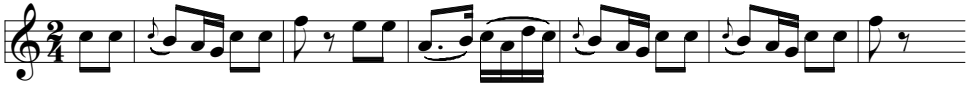
Orch Div K.251/v



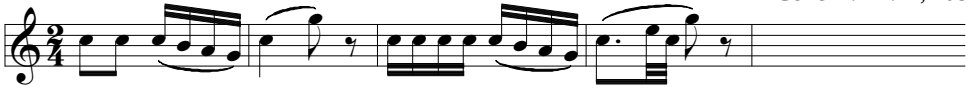
La fedeltà premiata, H.10/#47b, 73



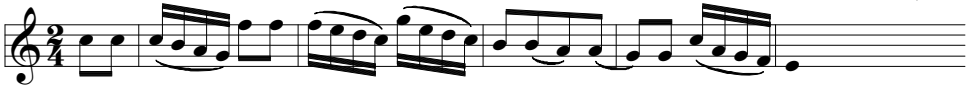
WW Div K.270/ii



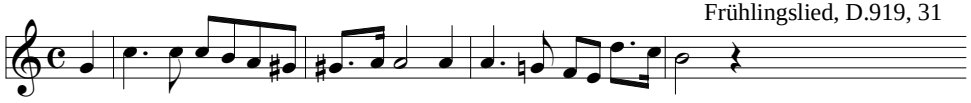
Pf Conc K.414/iii, 108



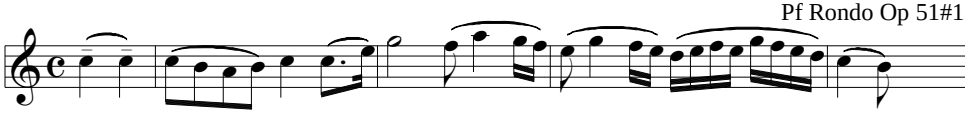
Pf Trio H.16/iii, 112



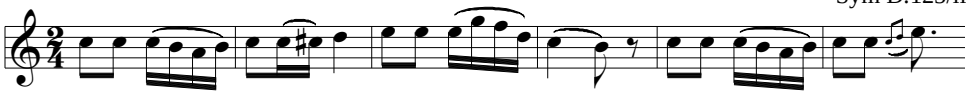
Frühlingslied, D.919, 31



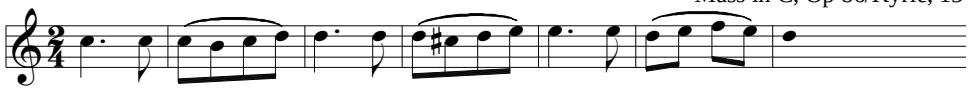
Pf Rondo Op 51#1



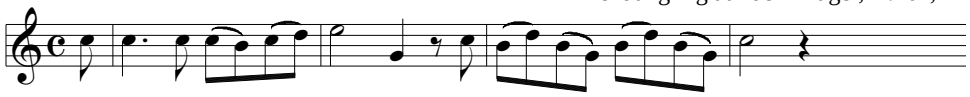
Sym D.125/ii



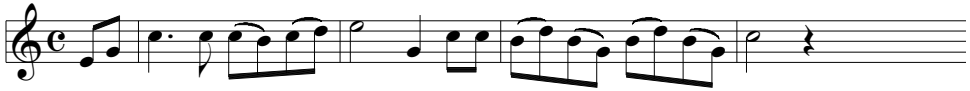
Mass in C, Op 86/Kyrie, 15



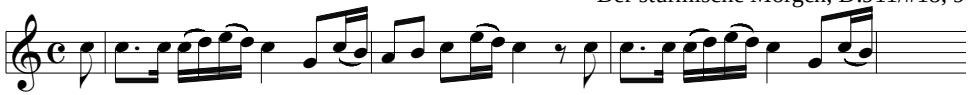
Der Jüngling auf dem Hügel, D.702, 21



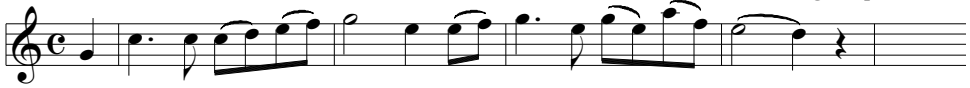
Alfonso und Estrella, D.732/#32, 46



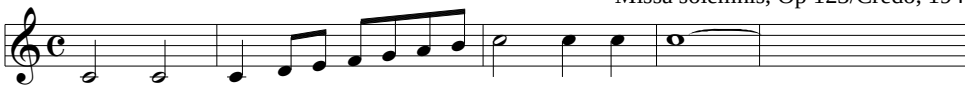
Der stürmische Morgen, D.911/#18, 9



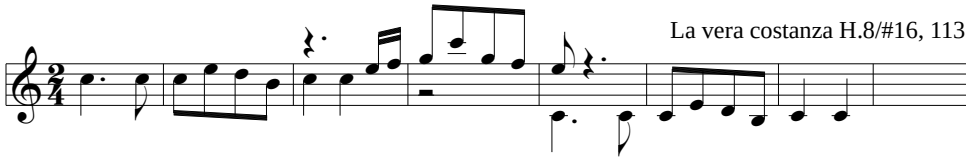
Christus am Ölberge, Op 85/vi, 95



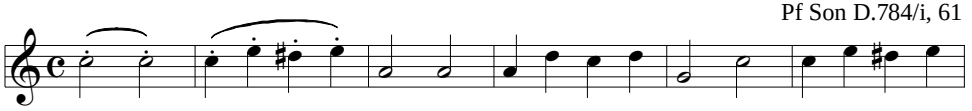
Missa solemnis, Op 123/Credo, 194



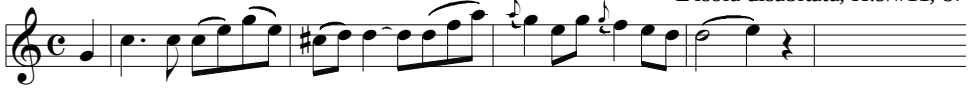
La vera costanza H.8/#16, 113



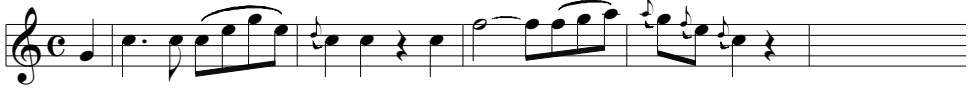
Pf Son D.784/i, 61



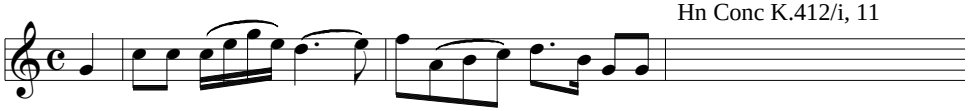
L'isola disabitata, H.9/#11, 87



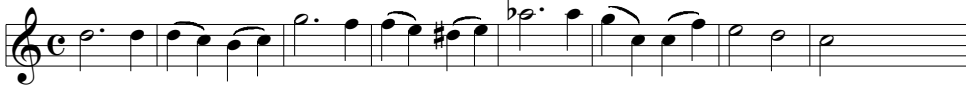
Il mondo della luna, H.7/#53



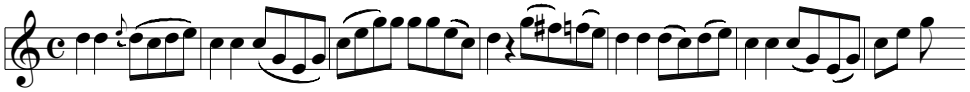
Hn Conc K.412/i, 11



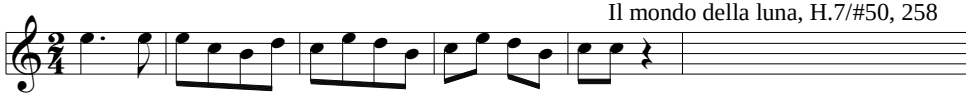
Alfonso und Estrella, D.732/#24, 52



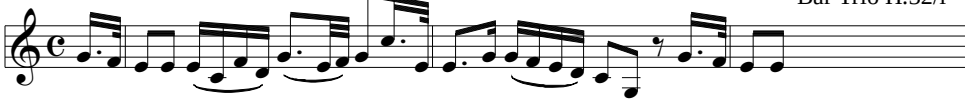
Tito K.621/#19, 54



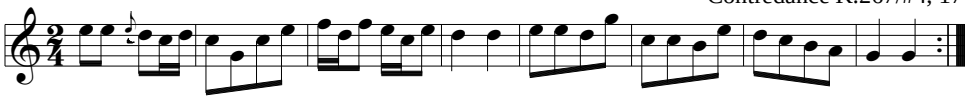
Il mondo della luna, H.7/#50, 258



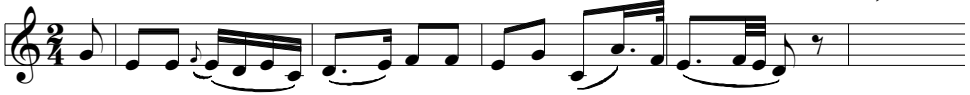
Bar Trio H.32/i



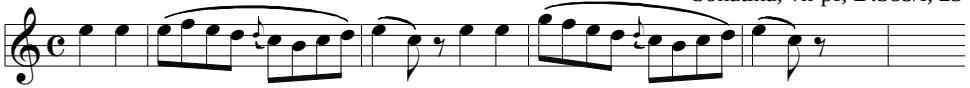
Contredance K.267/#4, 17



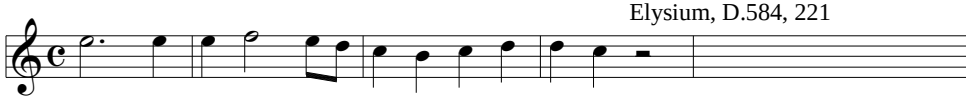
The Seasons, H.3/#18



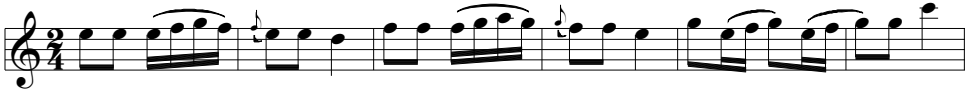
Sonatina, vn-pf, D.385/i, 23



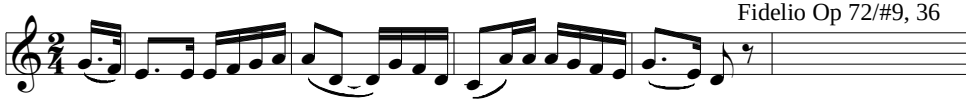
Elysium, D.584, 221



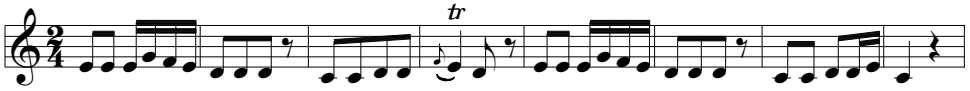
Pf Trio H.3/ii (probably Pleyel)



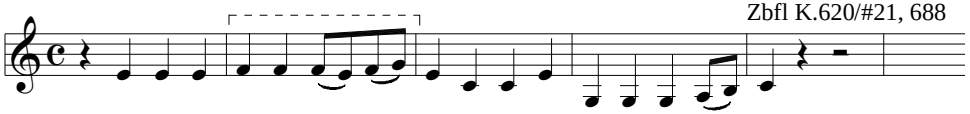
Fidelio Op 72/#9, 36



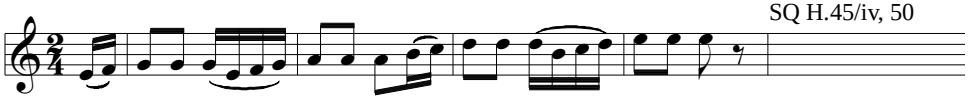
Pf Conc H.4/iii



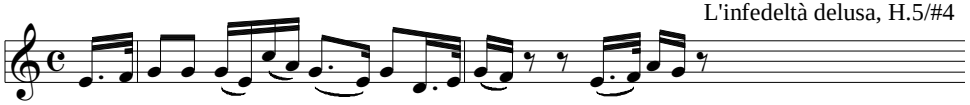
Zbfl K.620/#21, 688



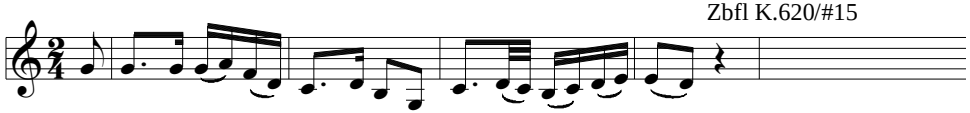
SQ H.45/iv, 50



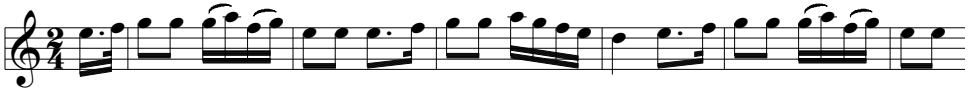
L'infedeltà delusa, H.5/#4



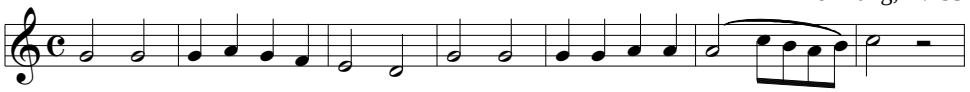
Zbfl K.620/#15



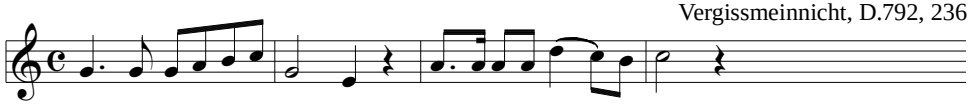
WW Div K.166/iv, 74



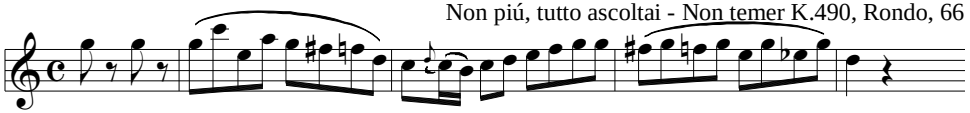
Hoffnung, D.295



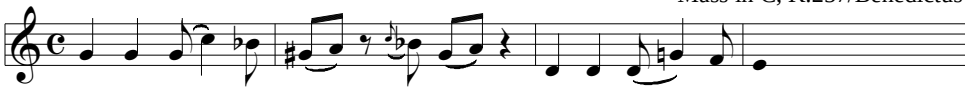
Vergissmeinnicht, D.792, 236



Non piú, tutto ascoltai - Non temer K.490, Rondo, 66

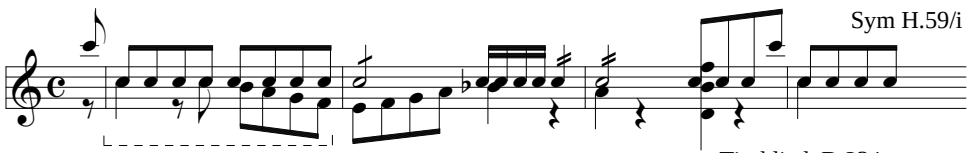


Mass in C, K.257/Benedictus

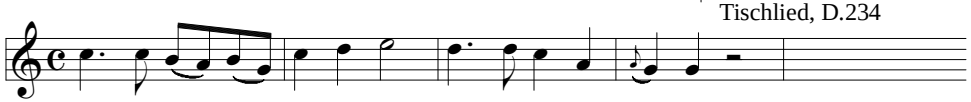


EX 51:
Z5^A3, ARP

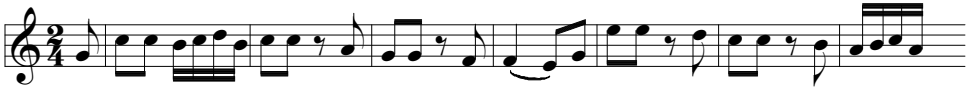
Sym H.59/i



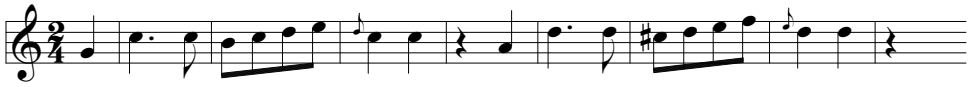
Tischlied, D.234



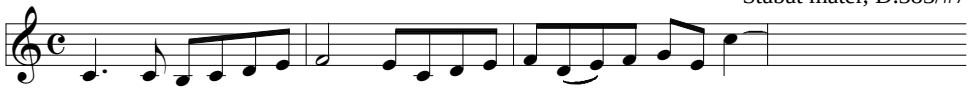
Bar Trio H.108/iii, 47



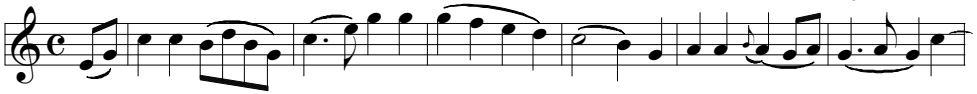
Die vierjährige Posten, D.190/#5, 57



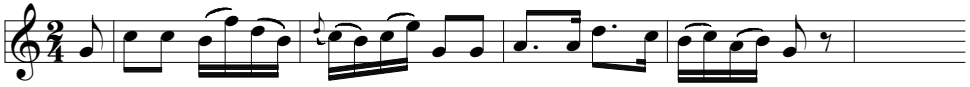
Stabat mater, D.383/#7



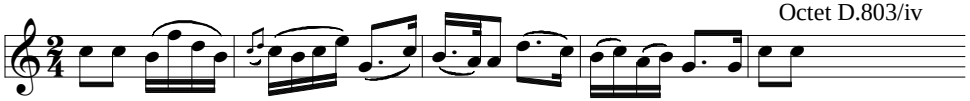
Sym H.75/iv



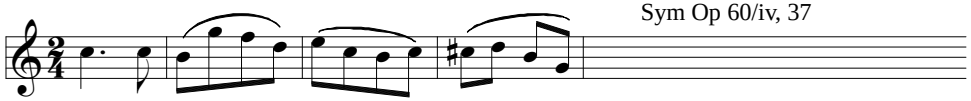
Die Freunde von Salamanka, D.326/#12, 6



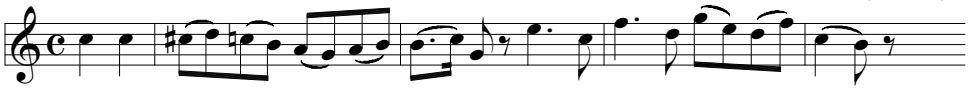
Octet D.803/iv



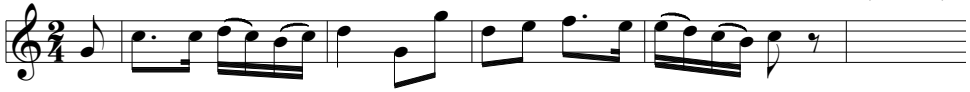
Sym Op 60/iv, 37



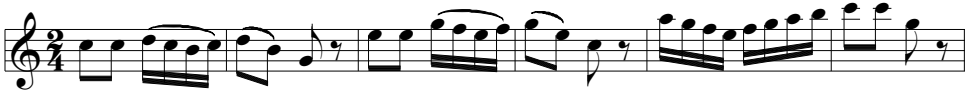
Lied zur Gesellenreise, K.468, 8



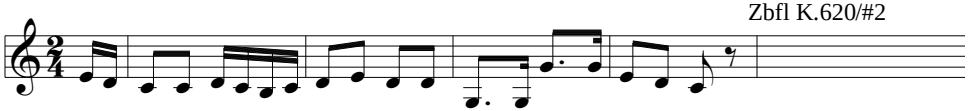
Vaterlandslied, D.287, 2



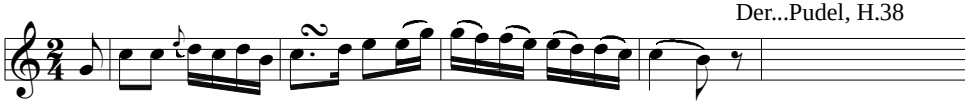
Sinf Conc H.105/iii, 35



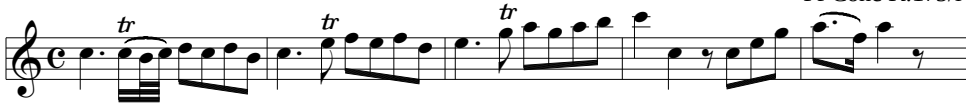
Zbfl K.620/#2



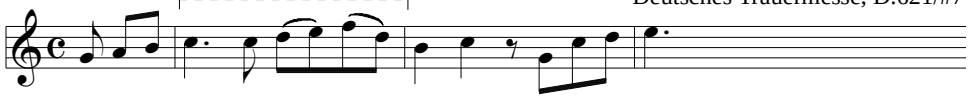
Der...Pudel, H.38



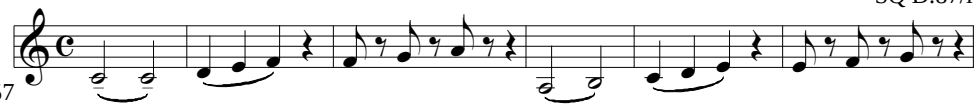
Pf Conc K.175/i



Deutsches Trauermesse, D.621/#7



SQ D.87/i



Vn Conc H.1/i, 57

Lo spezialie, H.3/#3, 9

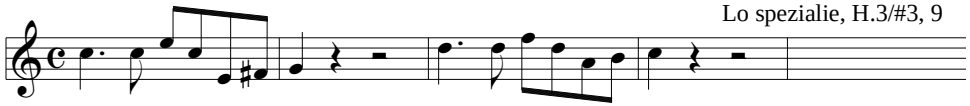
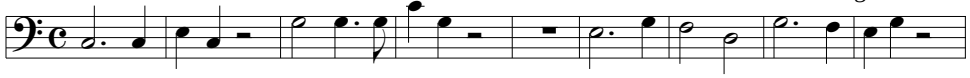
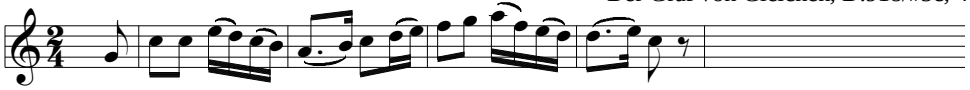


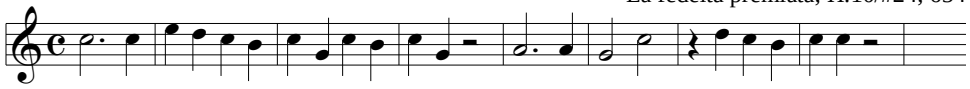
Fig K.492/#4



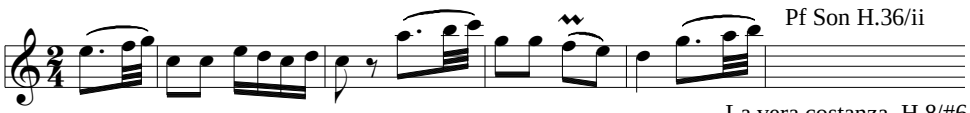
Der Graf von Gleichen, D.918/#5c, 4



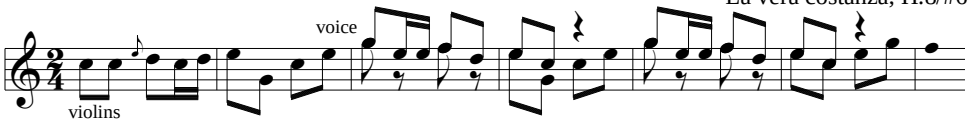
La fedeltà premiata, H.10/#24, 654



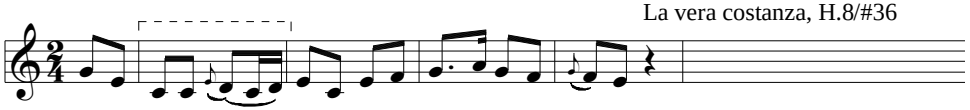
Pf Son H.36/ii



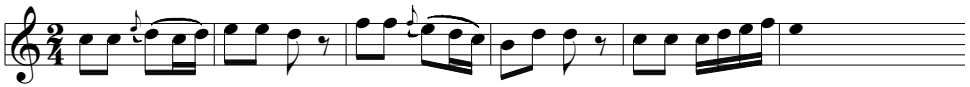
La vera costanza, H.8/#6



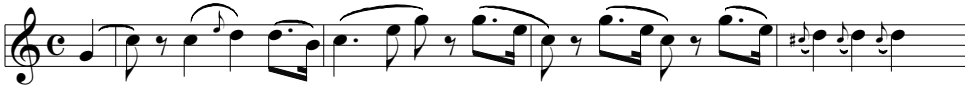
La vera costanza, H.8/#36



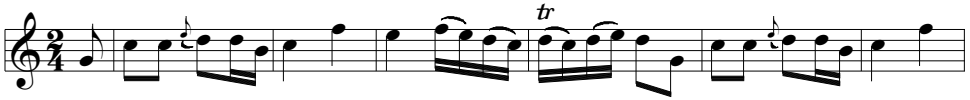
Lira Notturno H.26/iii



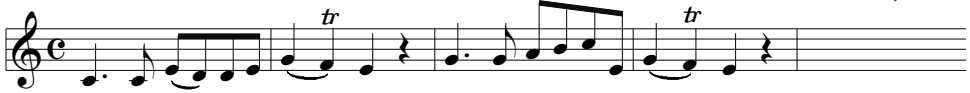
Vn Son K.376/iii



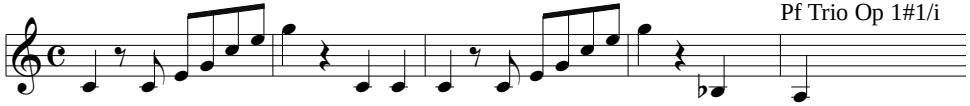
Orch Ser K.204/vii



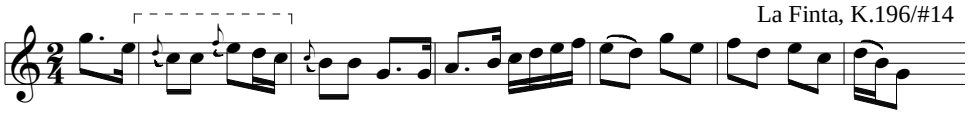
Alma Dei creatoris, K.277



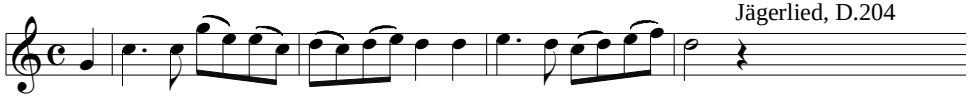
Pf Trio Op 1#1/i



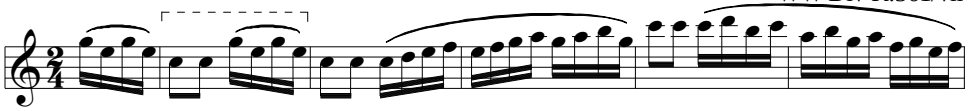
La Finta, K.196/#14



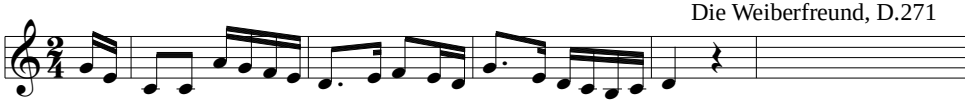
Jägerlied, D.204

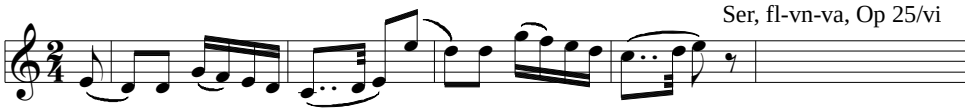


WW Div K.361/vii

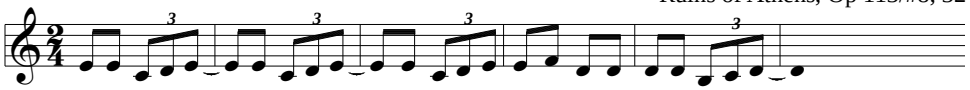


Die Weiberfreund, D.271

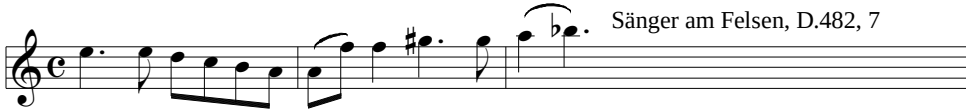




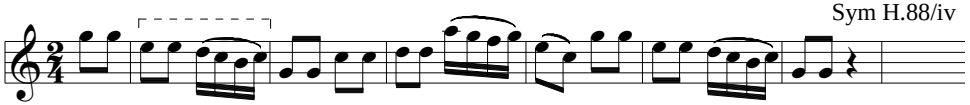
Ser, fl-vn-va, Op 25/vi



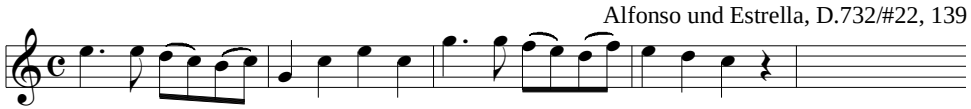
Ruins of Athens, Op 113/#8, 32



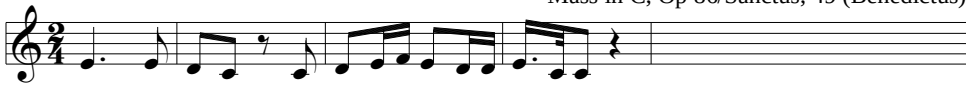
Sänger am Felsen, D.482, 7



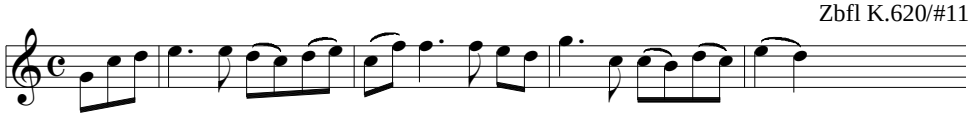
Sym H.88/iv



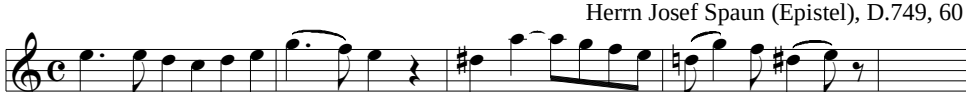
Alfonso und Estrella, D.732/#22, 139



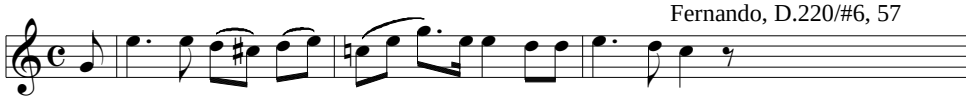
Mass in C, Op 86/Sanctus, 49 (Benedictus)



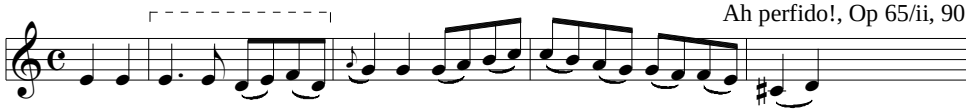
Zbfl K.620/#11



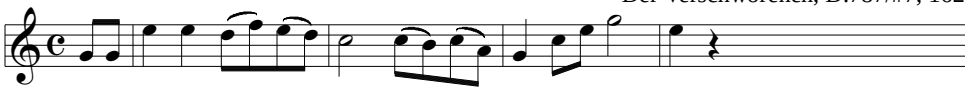
Herrn Josef Spaun (Epistel), D.749, 60



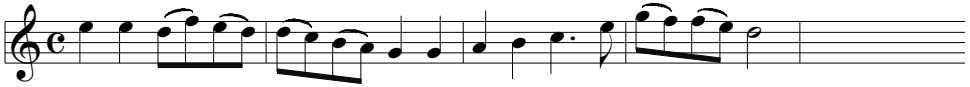
Fernando, D.220/#6, 57



Ah perfido!, Op 65/ii, 90

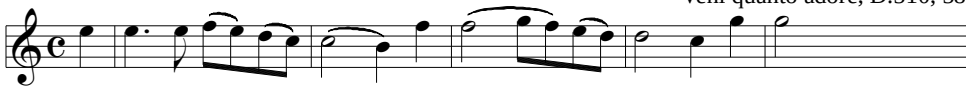


Der Verschworenen, D.787/#7, 162

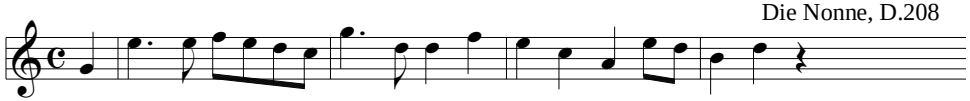


Freude der Kinderjahre, D.455

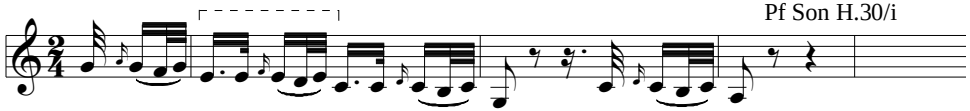
Veni quanto adore, D.510, 58



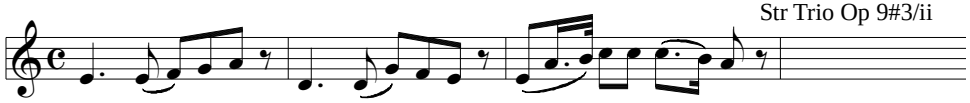
Die Nonne, D.208



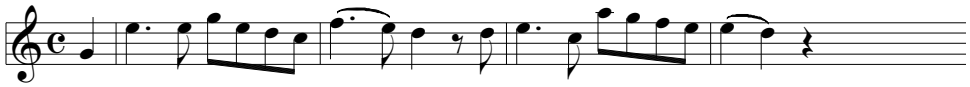
Pf Son H.30/i



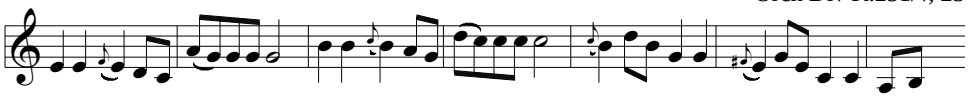
Str Trio Op 9#3/ii



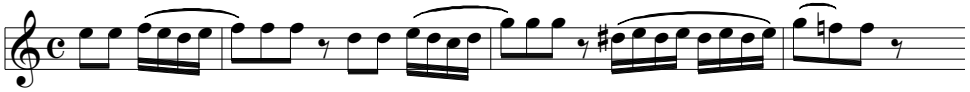
Der Graf von Gleichen, D.918/#2, 50



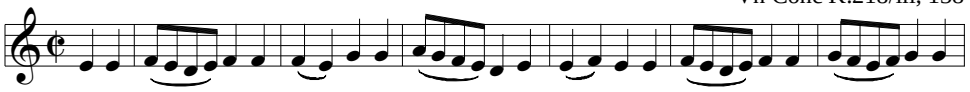
Orch Div K.251/v, 25



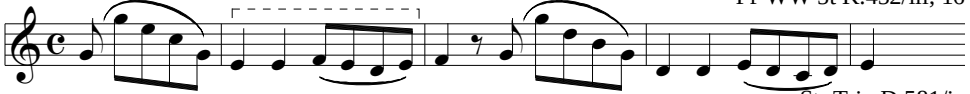
Pf Trio H.5/ii, 29



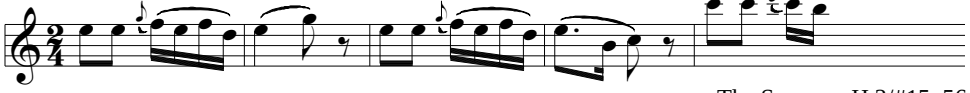
Vn Conc K.218/iii, 138



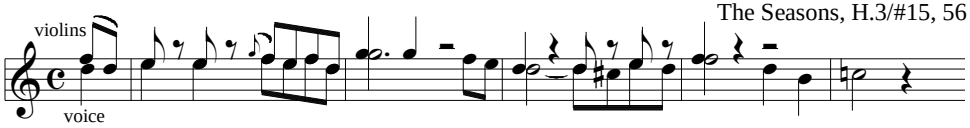
Pf-WW 5t K.452/iii, 16



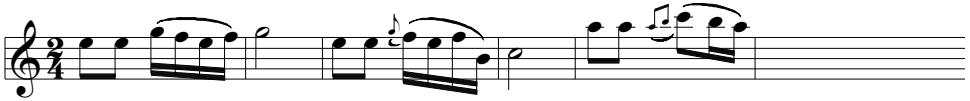
Str Trio D.581/iv



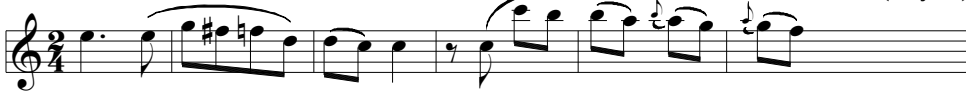
The Seasons, H.3/#15, 56



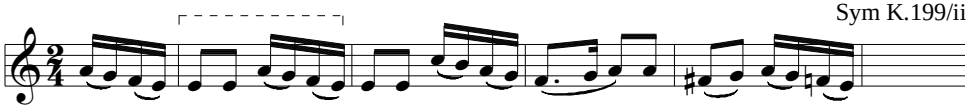
Rosamunde D.797/Ballet I, 139



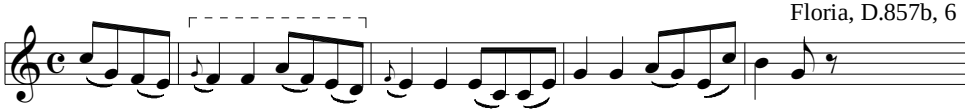
Pf Trio H.4/iii (Pleyel?)



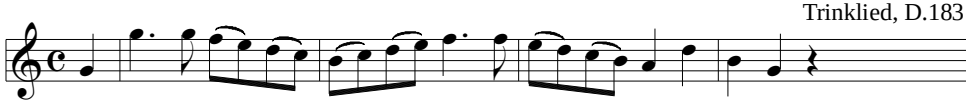
Sym K.199/ii



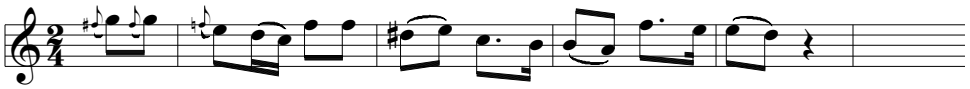
Floria, D.857b, 6



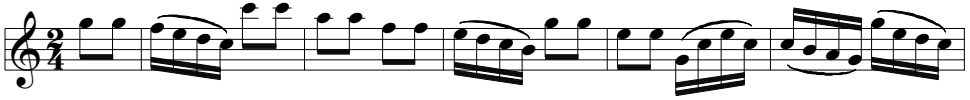
Trinklied, D.183



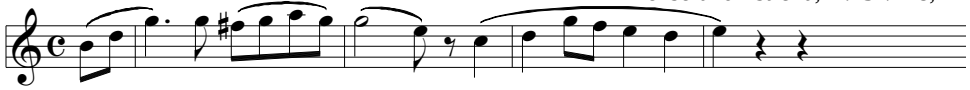
Orch Ser K.239/iii



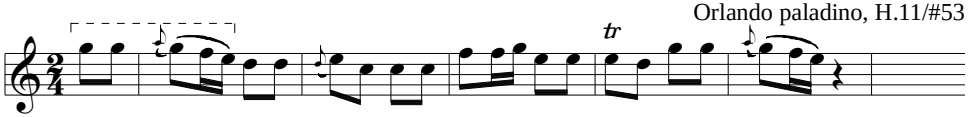
Pf Trio H.7/iii



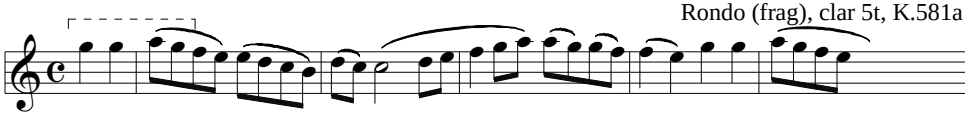
Alfonso und Estrella, D.732/#18, 17



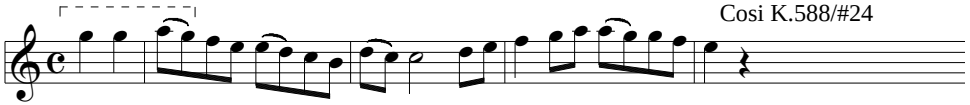
Orlando paladino, H.11/#53



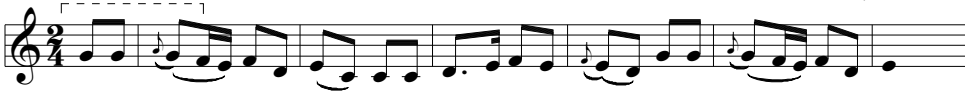
Rondo (frag), clar 5t, K.581a



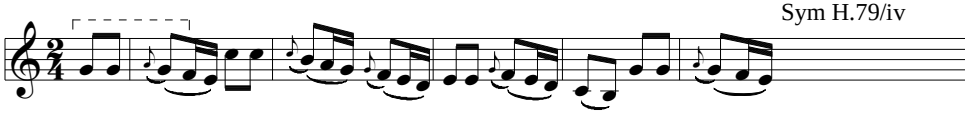
Cosi K.588/#24



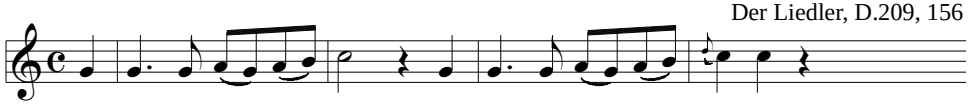
L'anima del filosofo, H.13/#12



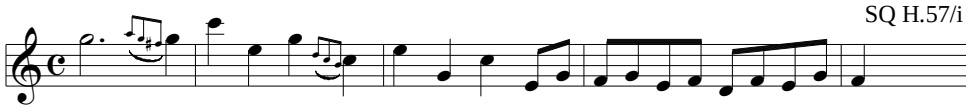
Sym H.79/iv



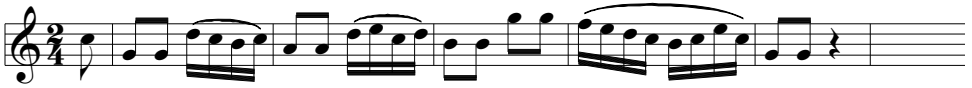
Der Liedler, D.209, 156



SQ H.57/i



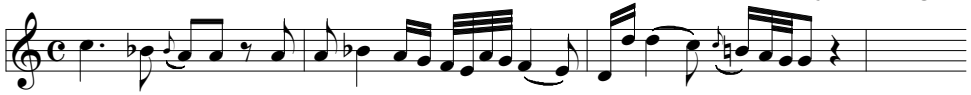
Allegro, clock, WoO 33#3



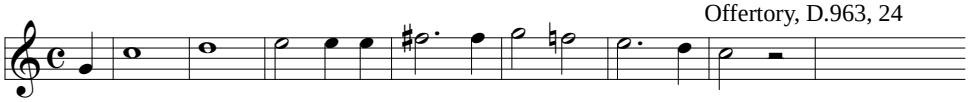
EX 52.1:
Z5^A3, {--'RR}

Z5^A2, 3L+{--'RR}

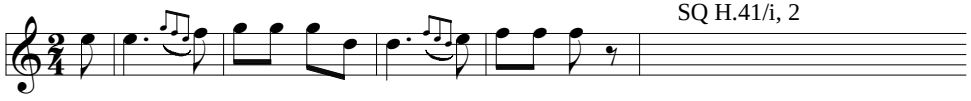
Litany K.125/Agnus



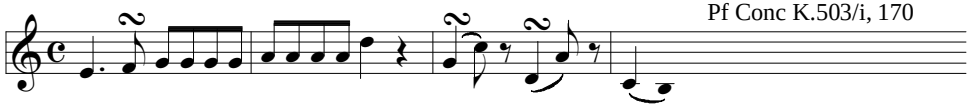
Offertory, D.963, 24



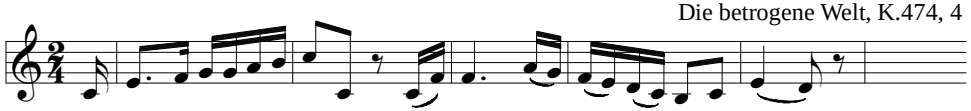
SQ H.41/i, 2



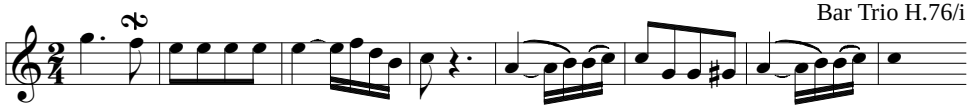
Pf Conc K.503/i, 170



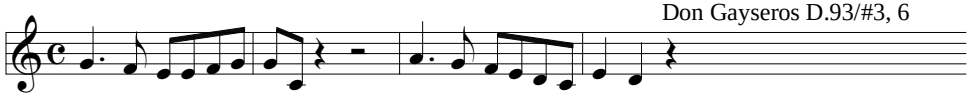
Die betrogene Welt, K.474, 4



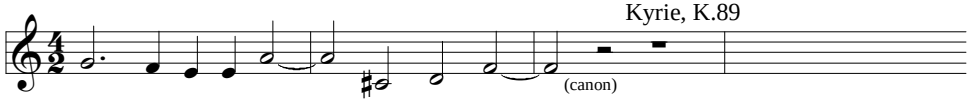
Bar Trio H.76/i



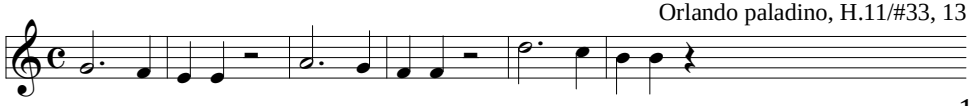
Don Gayseros D.93/#3, 6



Kyrie, K.89

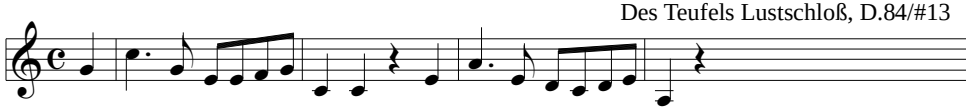


Orlando paladino, H.11/#33, 13

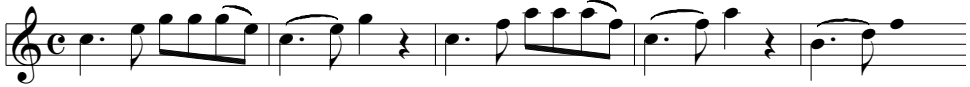


Z5^A2, ARP+{--'RR}

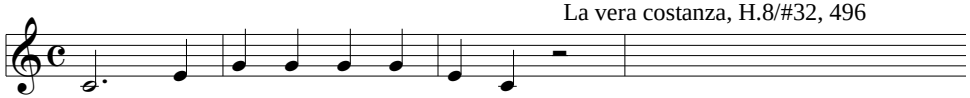
Des Teufels Lustschloß, D.84/#13



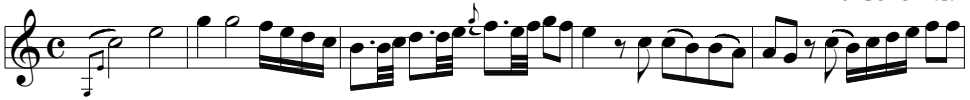
WW-str allegro frag, K.580b



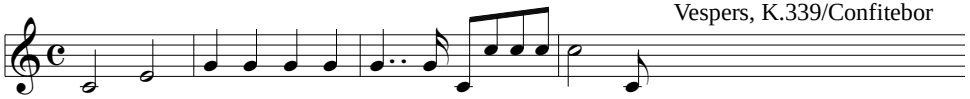
La vera costanza, H.8/#32, 496



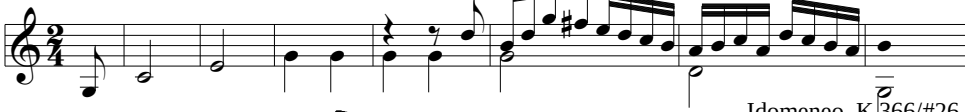
Lira Conc H.3/i



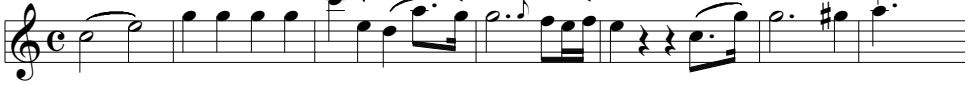
Vespers, K.339/Confitebor



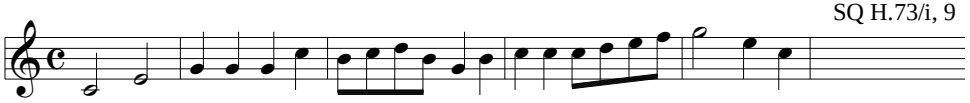
WW Ser K.375/v, 16



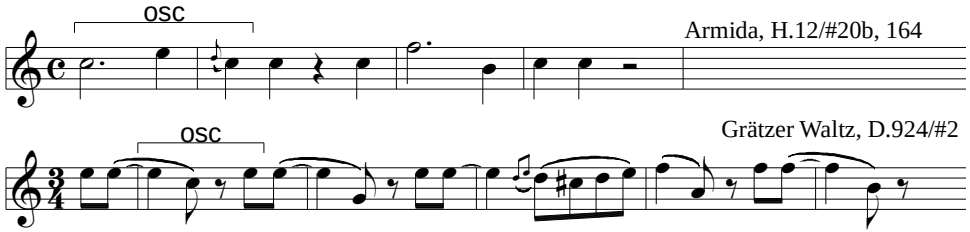
Idomeneo, K.366/#26

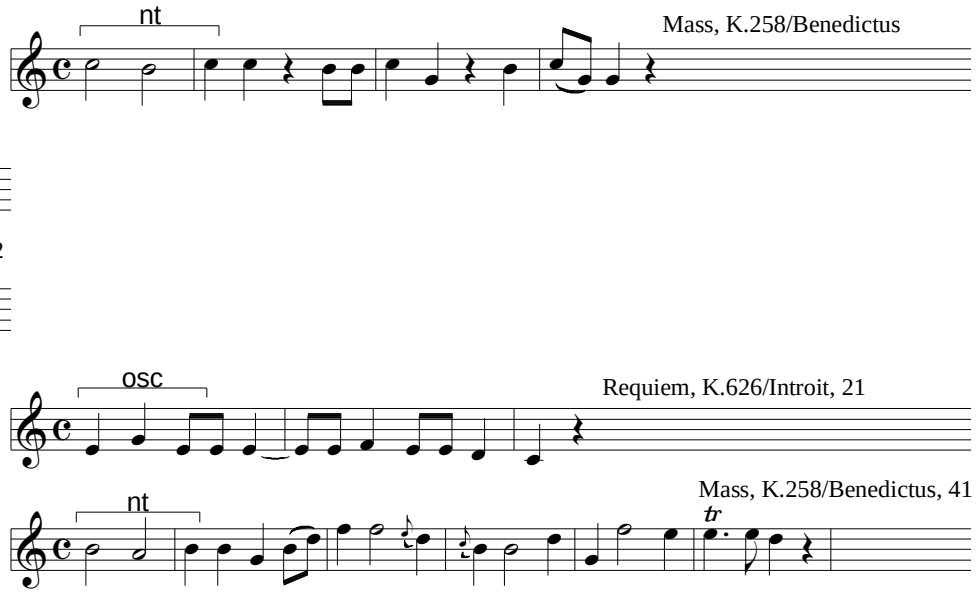


SQ H.73/i, 9



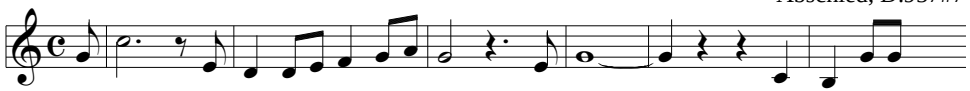
Z5^A2, OSC, NT +{--'RR}



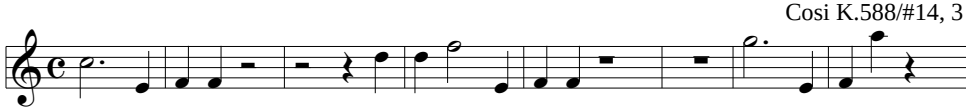


Z5^A2, miscellaneous+{--'RR}

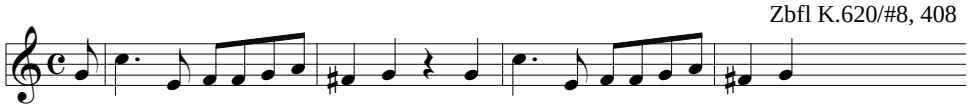
Abschied, D.957#7



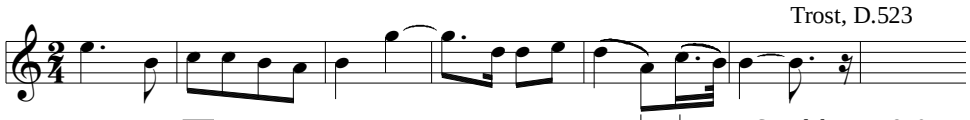
Cosi K.588/#14, 3



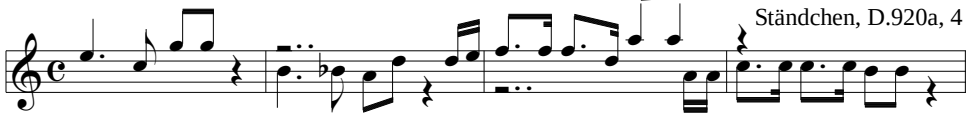
Zbfl K.620/#8, 408



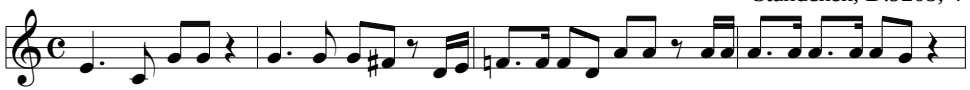
Trost, D.523



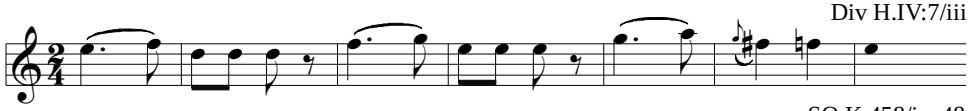
Ständchen, D.920a, 4



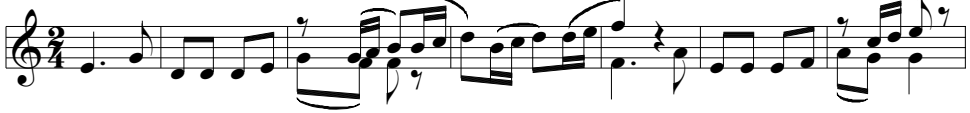
Ständchen, D.920b, 4



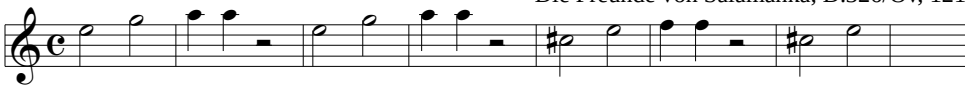
Div H.IV:7/iii



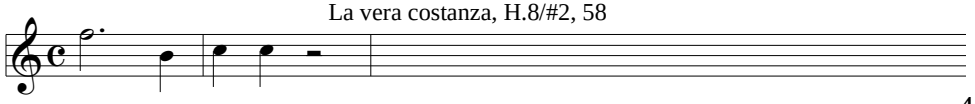
SQ K.458/iv, 48



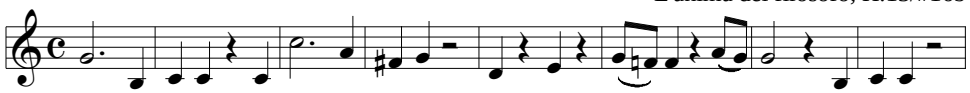
Die Freunde von Salamanka, D.326/Ov, 121



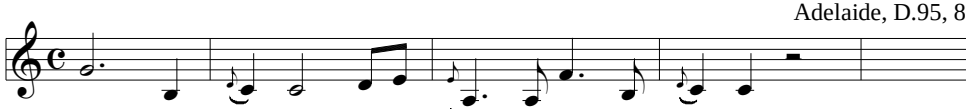
La vera costanza, H.8/#2, 58



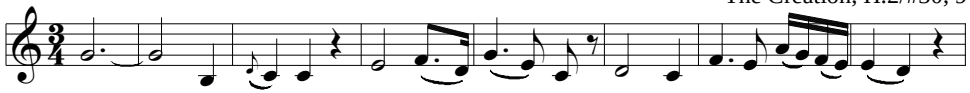
L'anima del filosofo, H.13/#16b



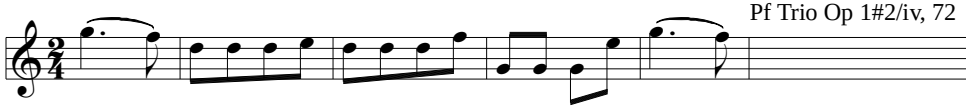
Adelaide, D.95, 8



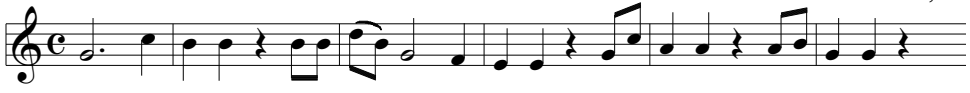
The Creation, H.2/#30, 9



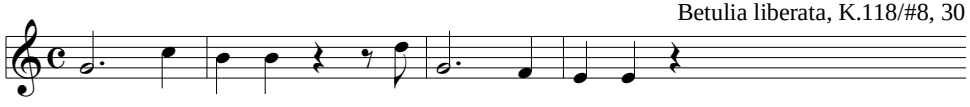
Pf Trio Op 1#2/iv, 72



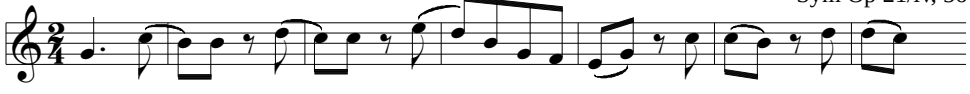
Lucio Silla K.135/#5, 26



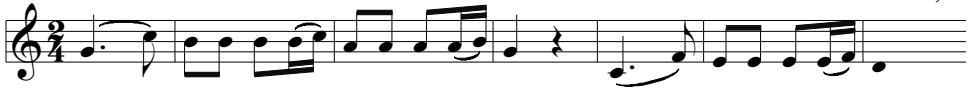
Betulia liberata, K.118/#8, 30



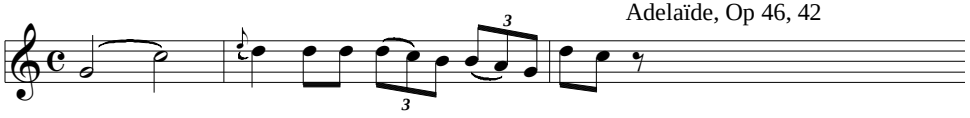
Sym Op 21/iv, 56



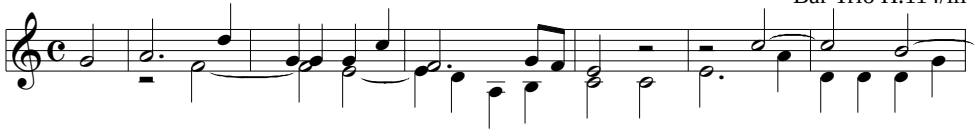
Pf Conc K.451/iii, 51



Adelaïde, Op 46, 42

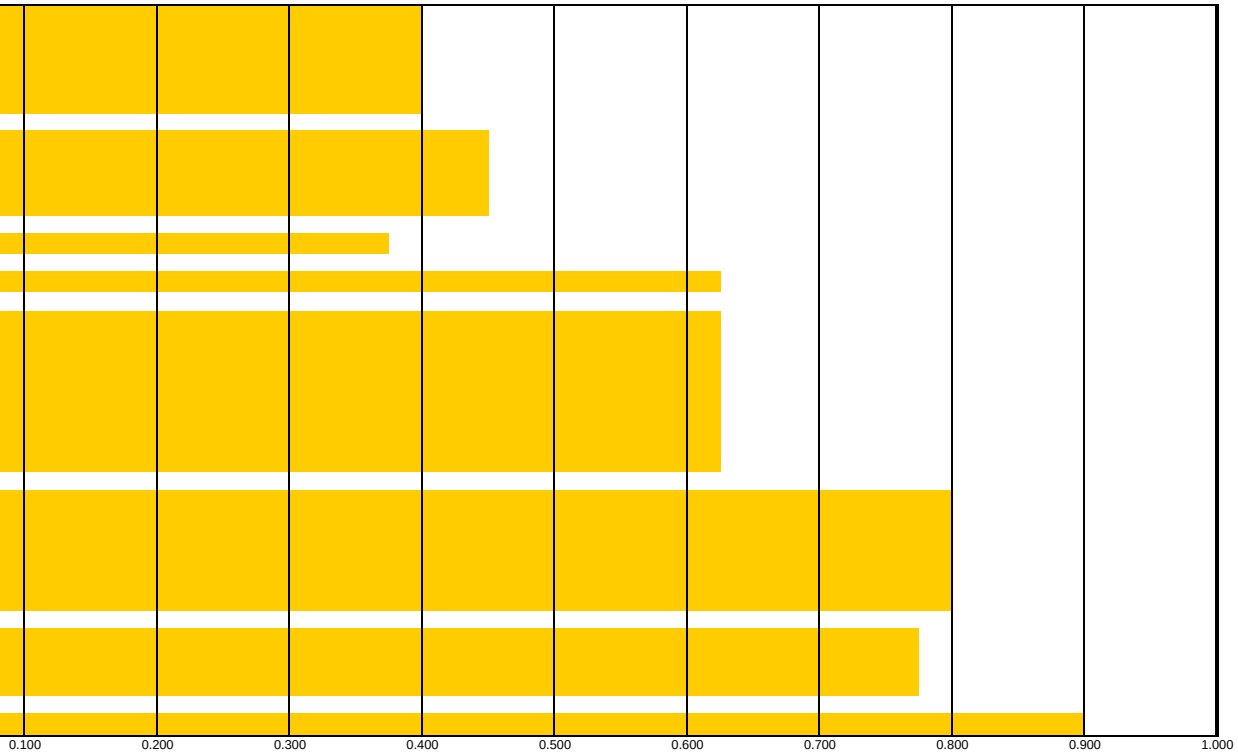


Bar Trio H.114/iii

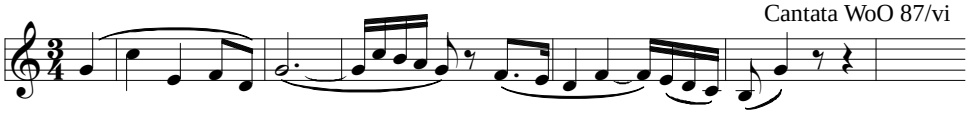


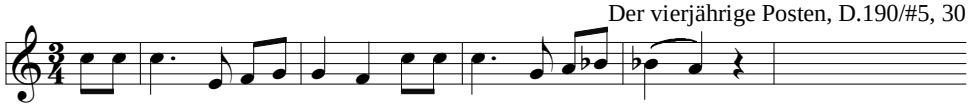
Z5^A3

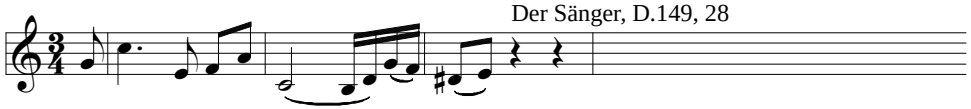
contour	population	dotted ratio	%	C-value (° from ambiguity)
3P+	43	17/43=	0.395	6
ARP+	34	15/34=	0.441	6
ARP+RR	8	3/8=	0.375	4
4P+	8	5/8=	0.625	4
L+	64	40/64=	0.625	4
-R'R+	62	49/62=	0.790	4
NT+	27	21/27=	0.778	3
3L+RR	9	8/9=	0.889	2

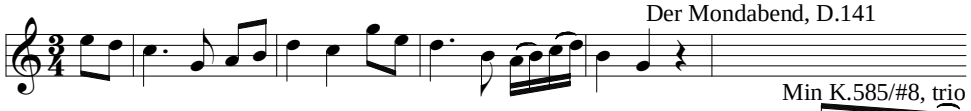


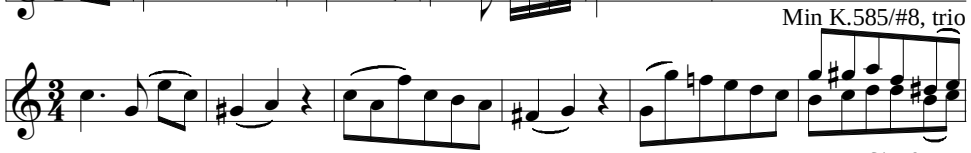
EX 53:
Δ4^B3, miscellaneous

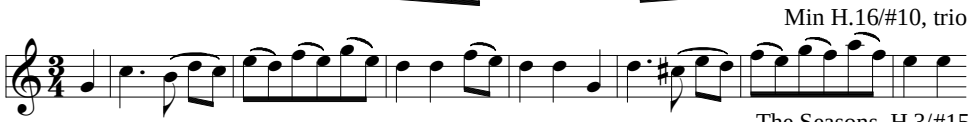


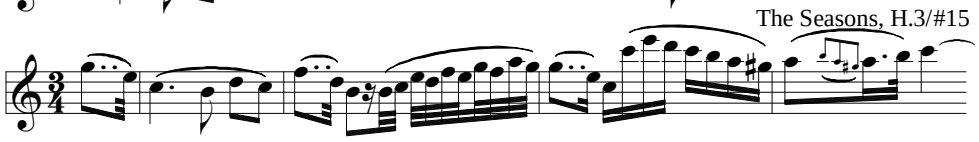


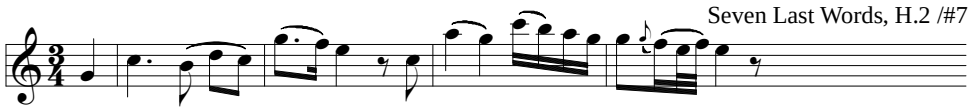


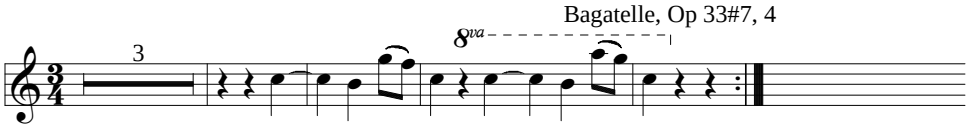


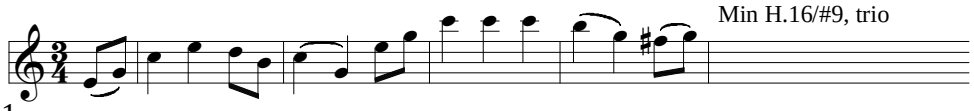




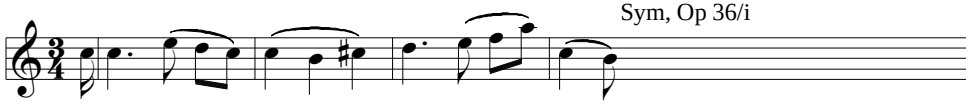




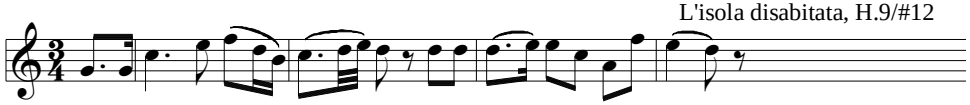




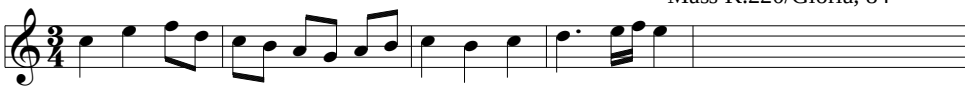
Sym, Op 36/i



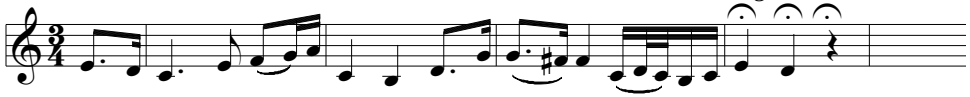
L'isola disabitata, H.9/#12



Mass K.220/Gloria, 84

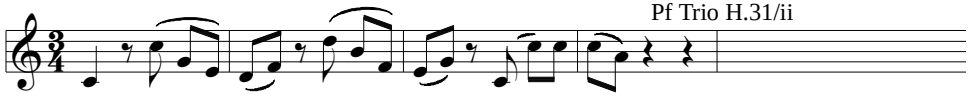


Vergißmeinnicht, H.46, 6

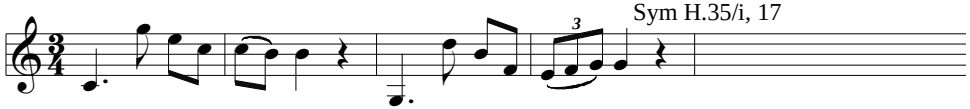


SQ Op 127/iv, 277

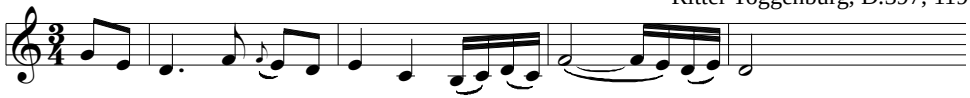
Pf Trio H.31/ii



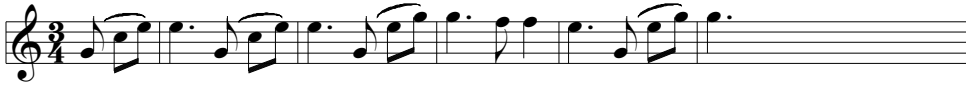
Sym H.35/i, 17



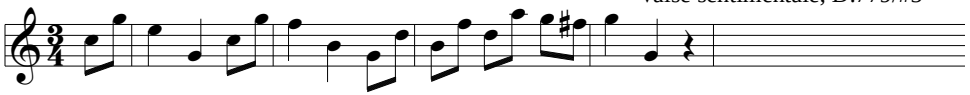
Ritter Toggenburg, D.397, 119



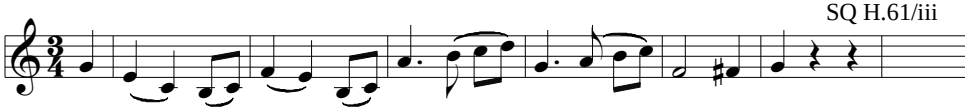
Waltz D.779/#32



Valse sentimentale, D.779/#5



SQ H.61/iii



SQ sketch, K.525a

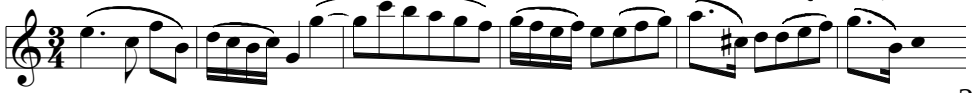
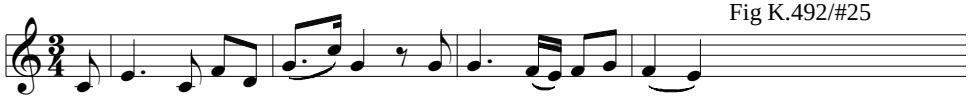
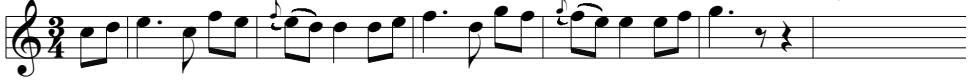


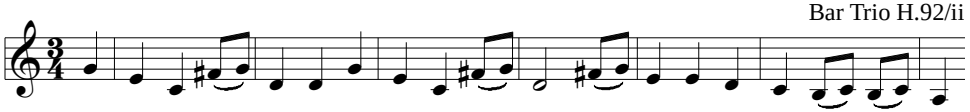
Fig K.492/#25



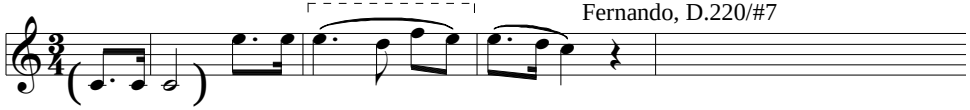
Il monda della luna, H.7/#18



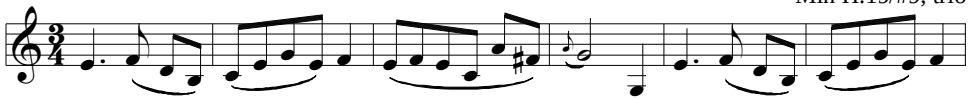
Bar Trio H.92/ii



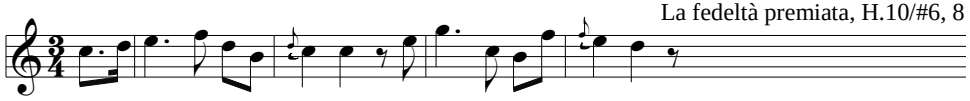
Fernando, D.220/#7



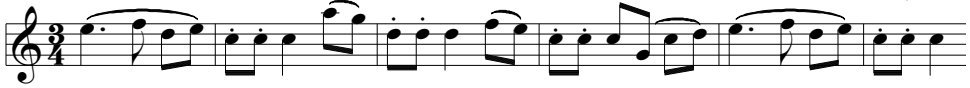
Min H.19/#9, trio



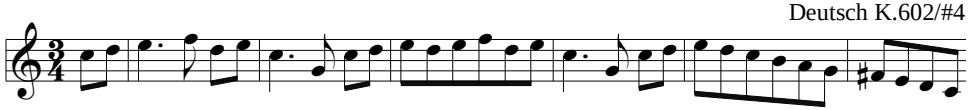
La fedeltà premiata, H.10/#6, 8



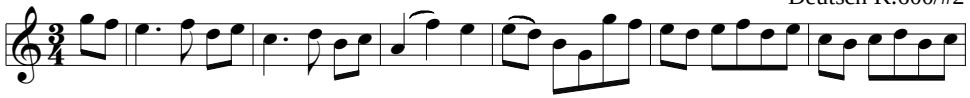
Deutsch D.90#2, trio 1



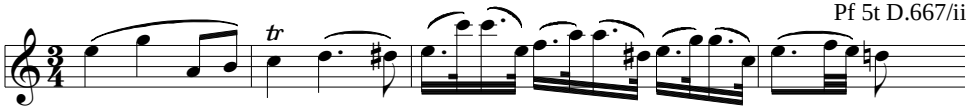
Deutsch K.602/#4



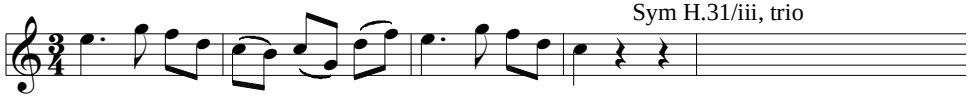
Deutsch K.600/#2



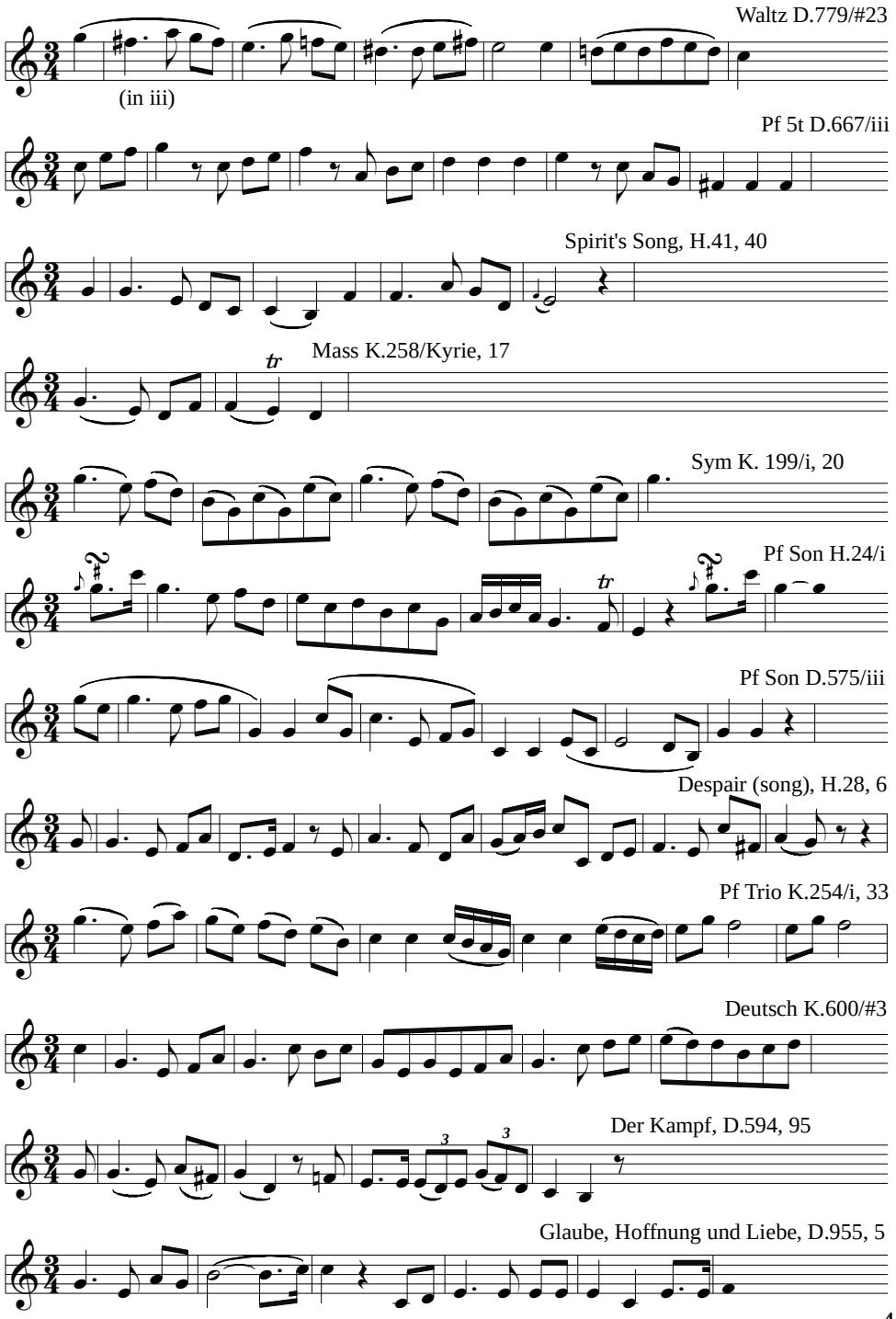
Pf 5t D.667/ii



Sym H.31/iii, trio



Min K.585/#1, trio


Waltz D.779/#23
(in iii)
Pf 5t D.667/iii
Spirit's Song, H.41, 40
Mass K.258/Kyrie, 17
Sym K. 199/i, 20
Pf Son H.24/i
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Despair (song), H.28, 6
Pf Trio K.254/i, 33
Deutsch K.600/#3
Der Kampf, D.594, 95
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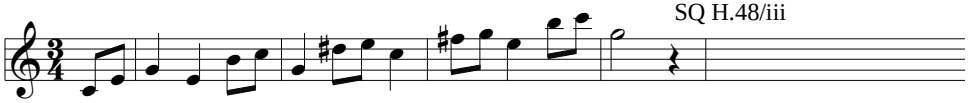
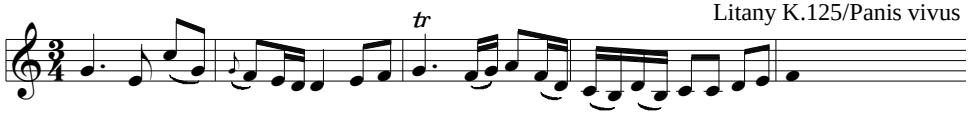
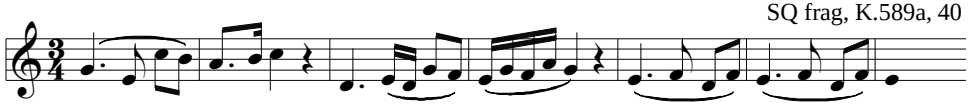


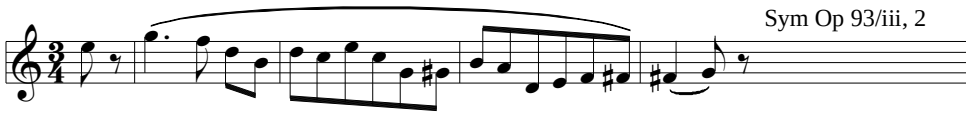
Litany K.125/Panis vivus



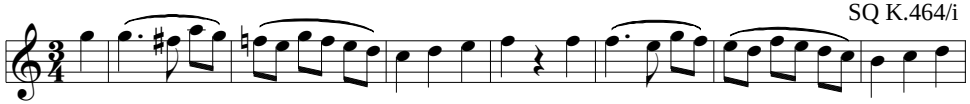
SQ frag, K.589a, 40



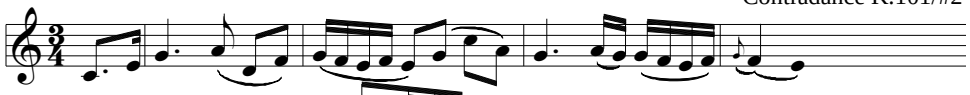
Sym Op 93/iii, 2



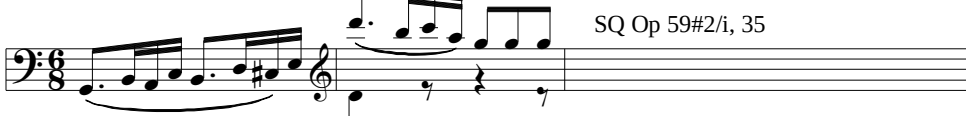
SQ K.464/i



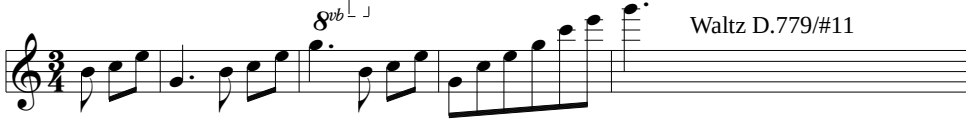
Contradance K.101/#2



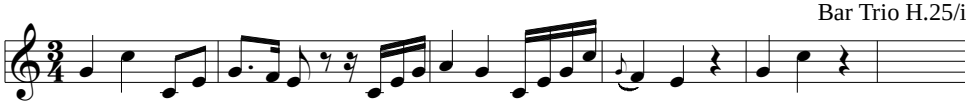
SQ Op 59#2/i, 35



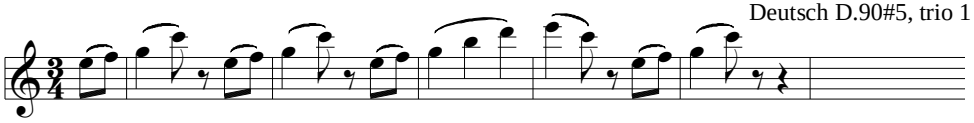
Waltz D.779/#11



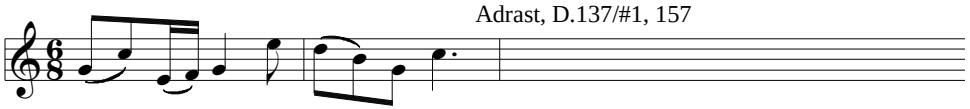
Bar Trio H.25/i



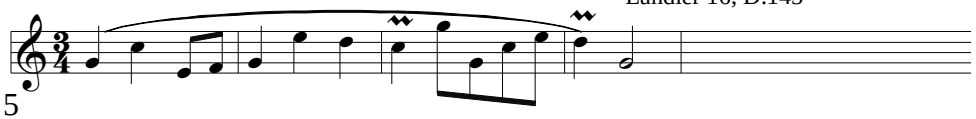
Deutsch D.90#5, trio 1



Adrast, D.137/#1, 157

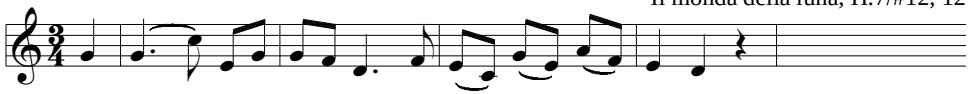


Ländler 16, D.145

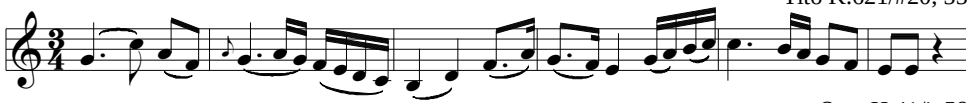


Pf Trio Op 1#1/ii, 20

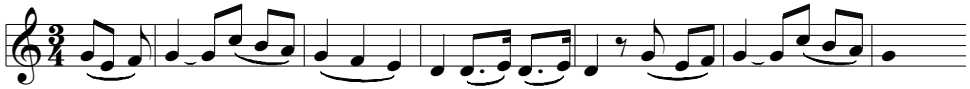
Il monda della luna, H.7/#12, 12



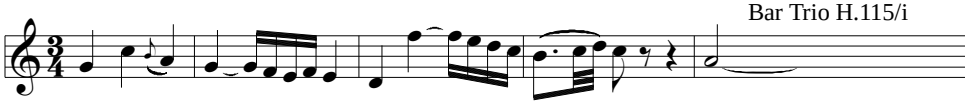
Tito K.621/#20, 55



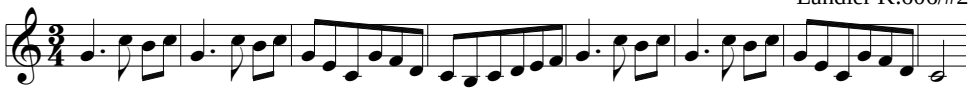
Sym H.41/i, 58



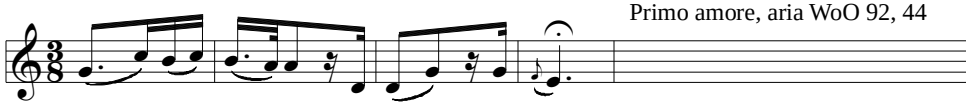
Bar Trio H.115/i



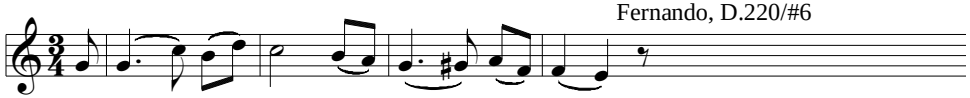
Ländler K.606/#2



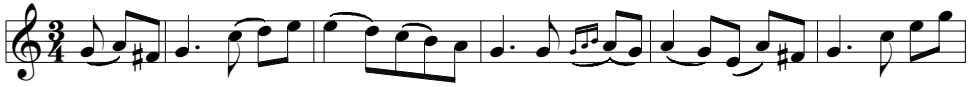
Primo amore, aria WoO 92, 44



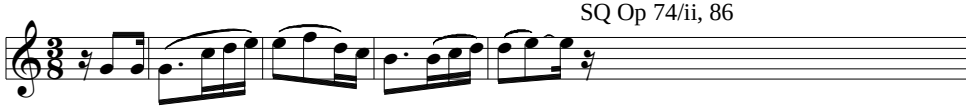
Fernando, D.220/#6



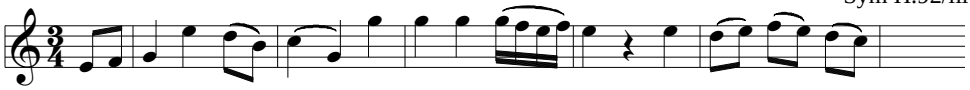
Pf Son D.850/ii



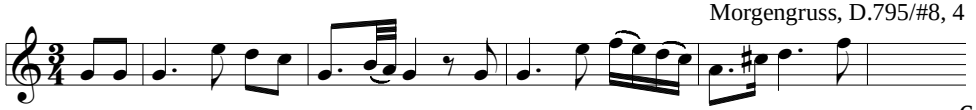
SQ Op 74/ii, 86



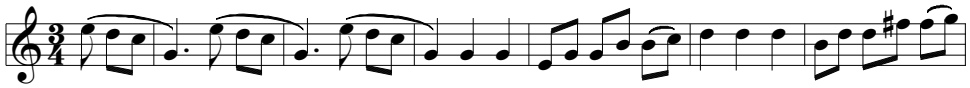
Sym H.92/iii



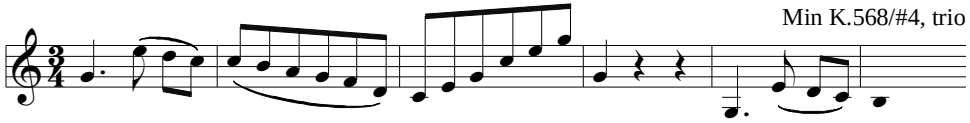
Morgengruss, D.795/#8, 4

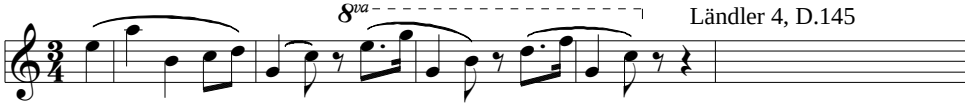


Pf Trio D.898/iii



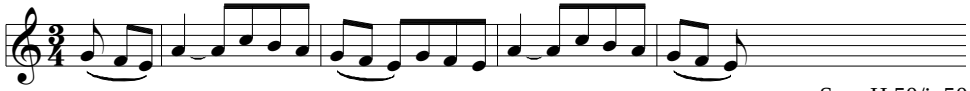
Min K.568/#4, trio



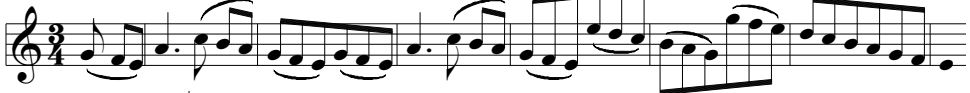


Ländler 4, D.145

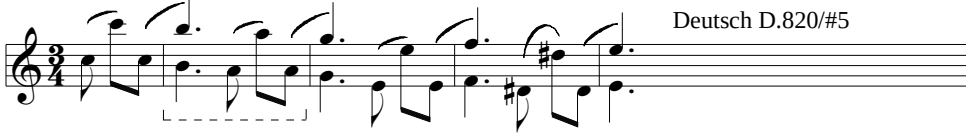
Der Götterrat, H.XXIXa:1a/Sinfonia/i, 13



Sym H.50/i, 50

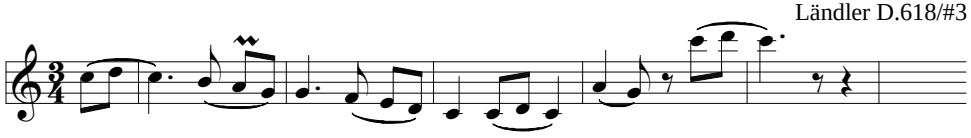


Deutsch D.820/#5

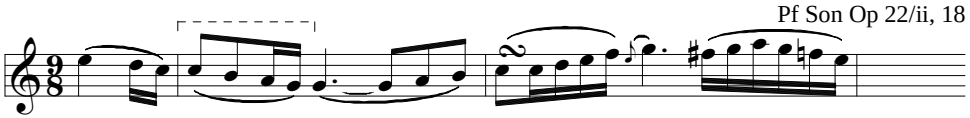


EX 54:
Δ4^B3, linear

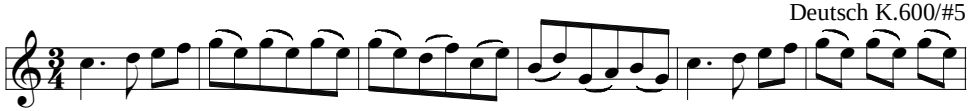
Ländler D.618/#3



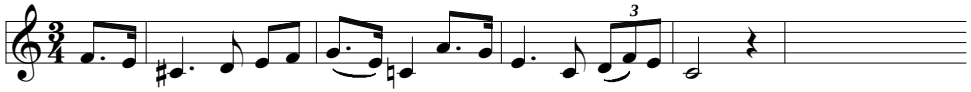
Pf Son Op 22/ii, 18



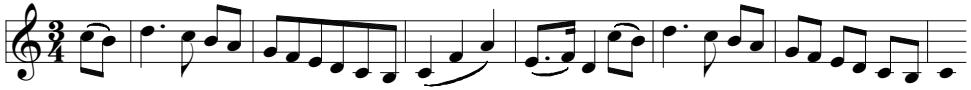
Deutsch K.600/#5



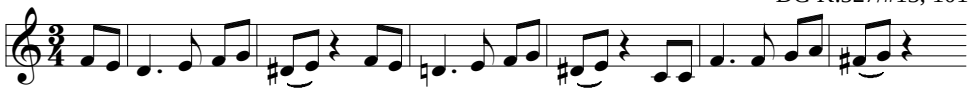
Alfonso und Estrella, D.732/#27, 6



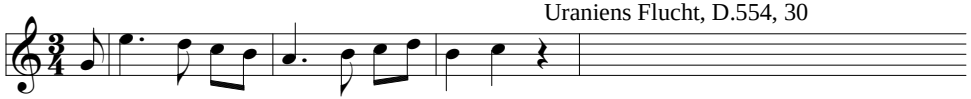
Min K.568/#10, trio



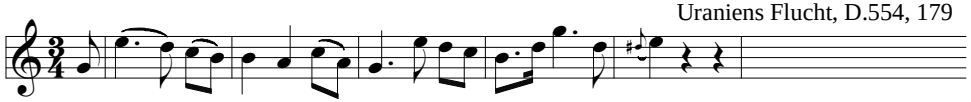
DG K.527/#13, 101



Uraniens Flucht, D.554, 30



Uraniens Flucht, D.554, 179



The Seasons, H.3/#8, 188

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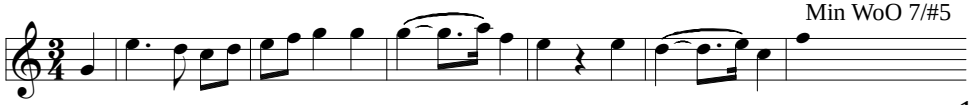

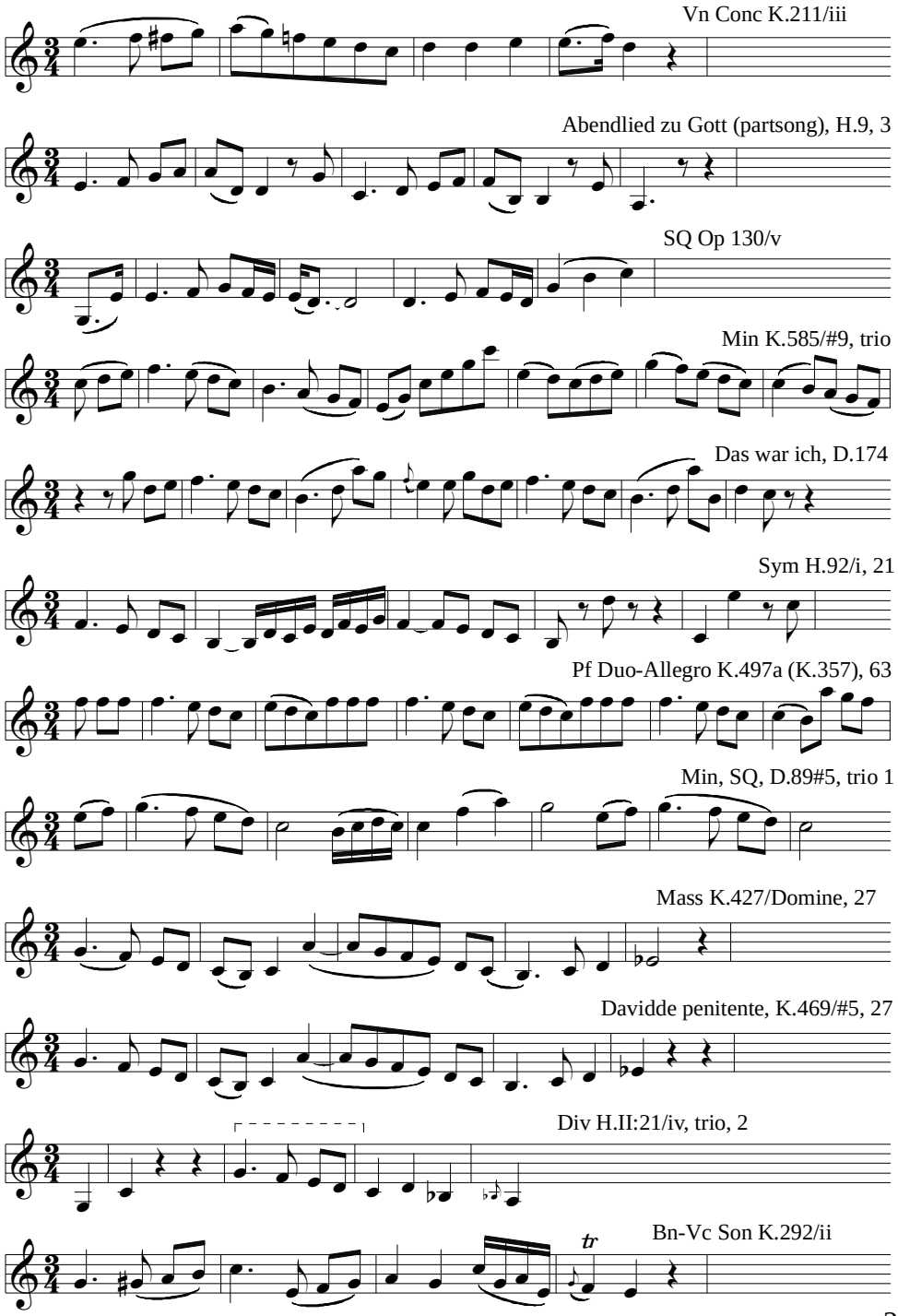
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Abendlied zu Gott (partsong), H.9, 3
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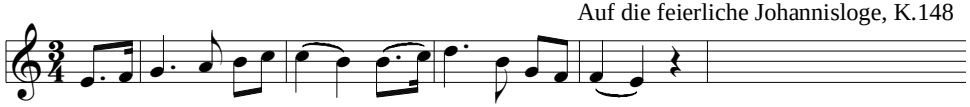
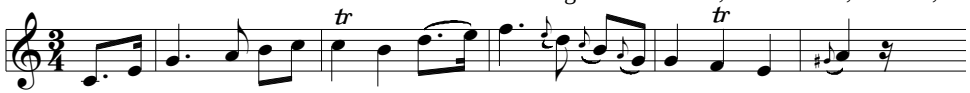
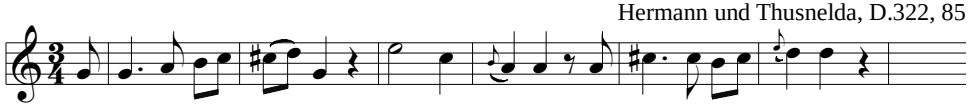


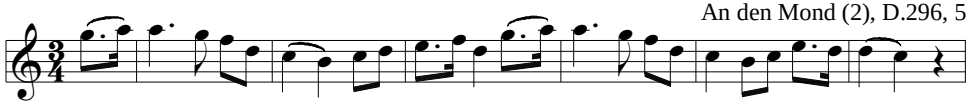
Adagio & Menuetto, 2 vn & bass, K.266/i, 35



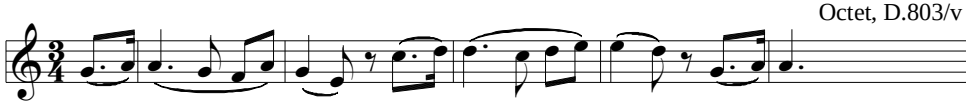
Hermann und Thusnelda, D.322, 85



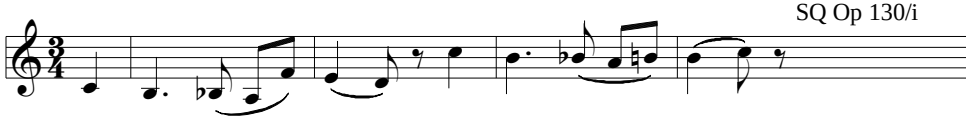
An den Mond (2), D.296, 5



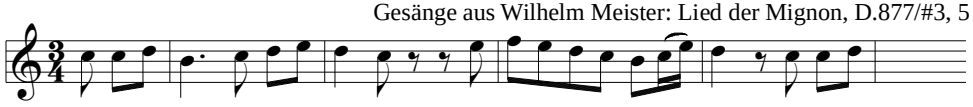
Octet, D.803/v



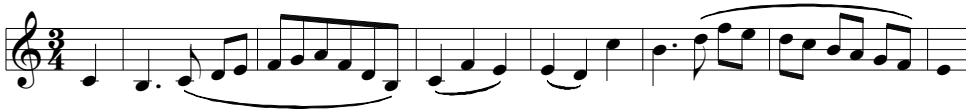
SQ Op 130/i



Gesänge aus Wilhelm Meister: Lied der Mignon, D.877/#3, 5

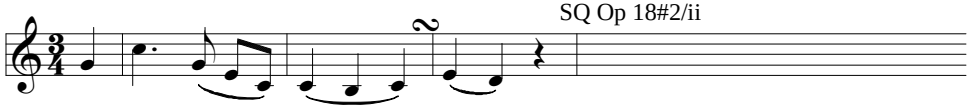


Min K.585/#4, trio

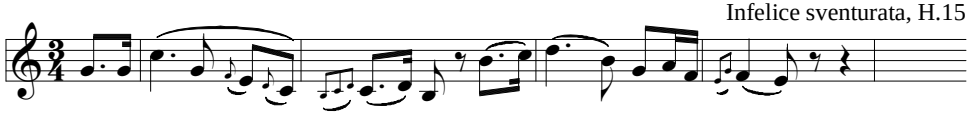


EX 55:
Δ4^B3, ARP

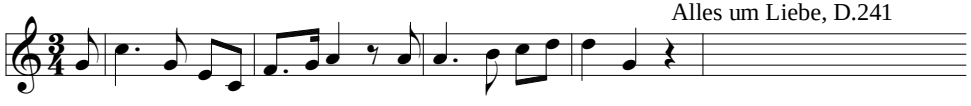
SQ Op 18#2/ii



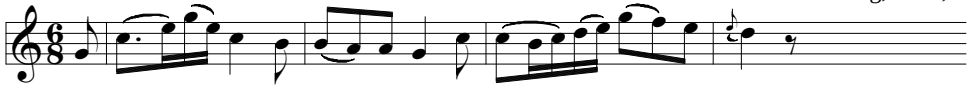
Infelice sventurata, H.15



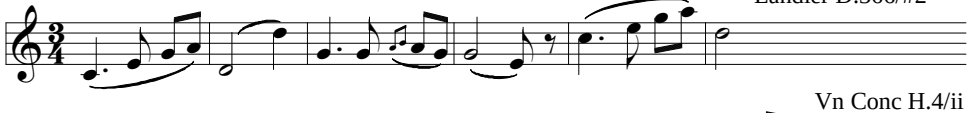
Alles um Liebe, D.241



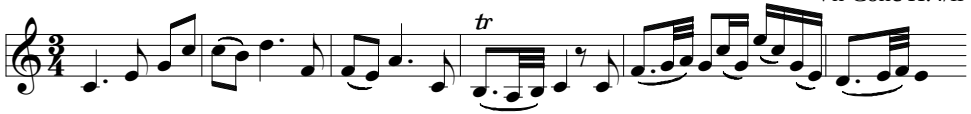
A Pastoral Song, H.27, 8



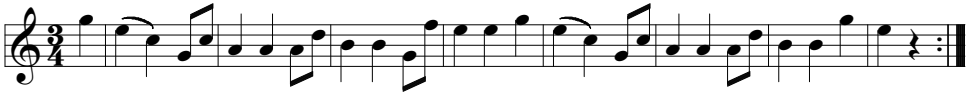
Ländler D.366/#2



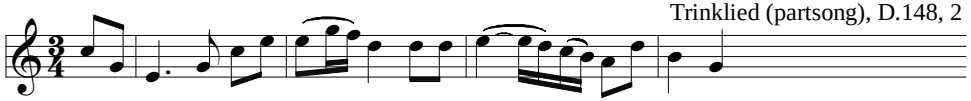
Vn Conc H.4/ii



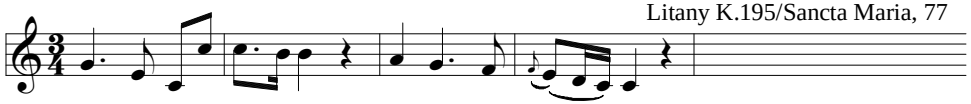
Deutsch H.12/#12



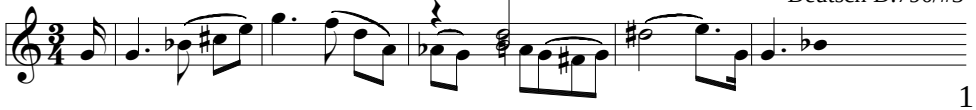
Trinklied (partsong), D.148, 2



Litany K.195/Sancta Maria, 77

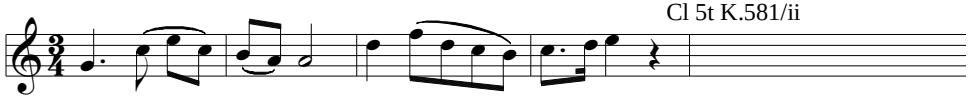


Deutsch D.790/#3

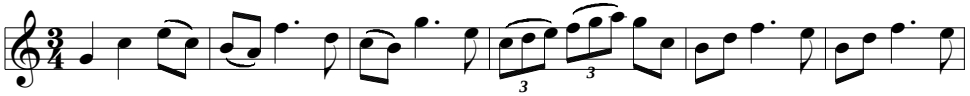


Sym H.91/iii, trio

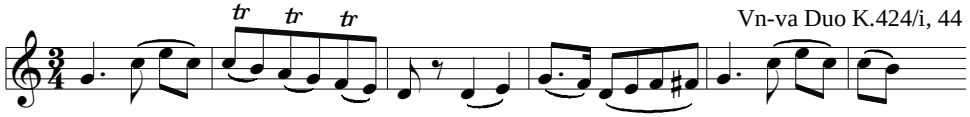
Cl 5t K.581/ii



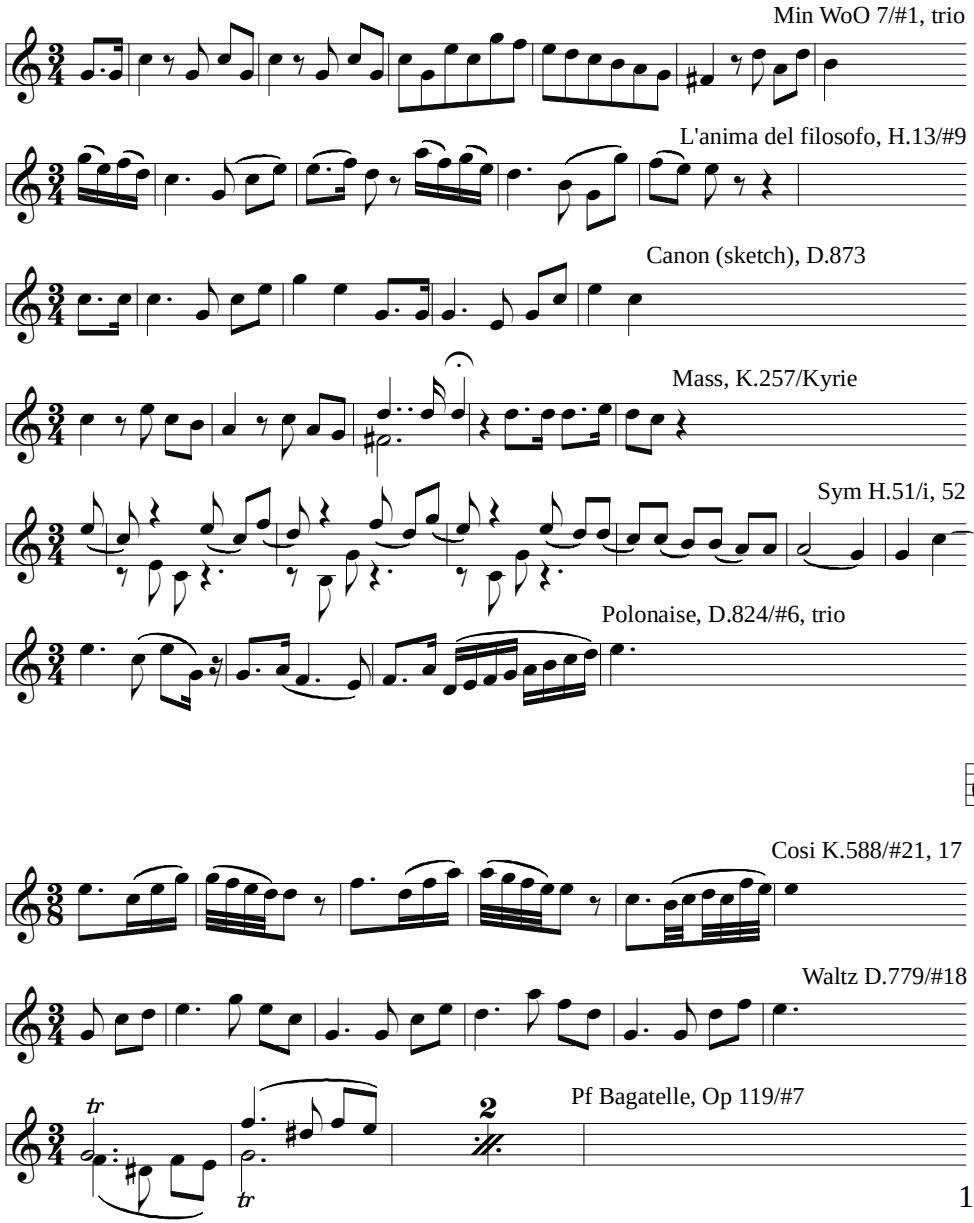
Bar Trio H.10/iii



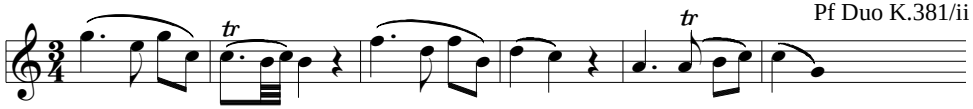
Vn-va Duo K.424/i, 44



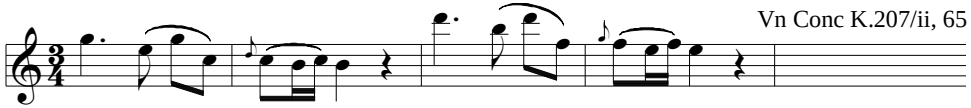
EX 56:
Δ4^B3, OSC



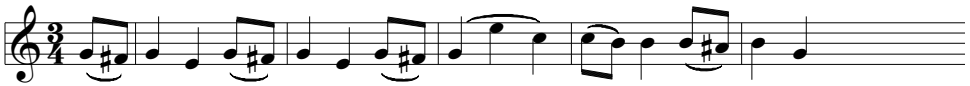
Pf Duo K.381/ii



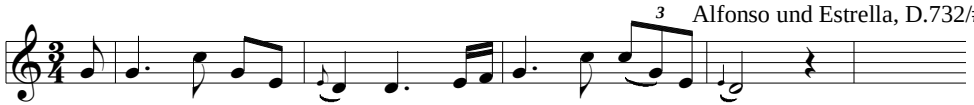
Vn Conc K.207/ii, 65



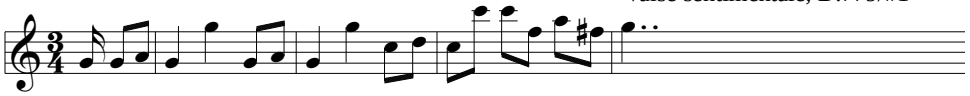
Mödlinger Dance, WoO 17/#3



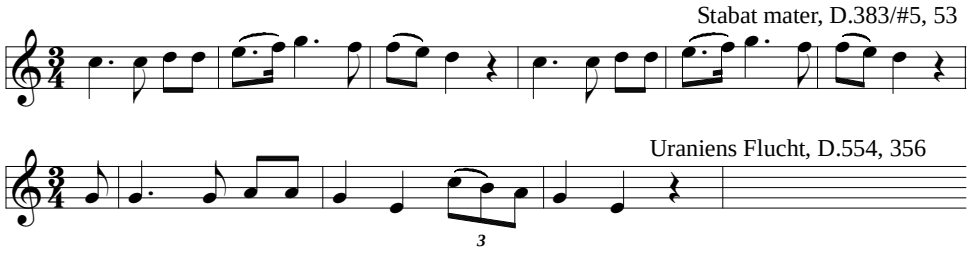
Alfonso und Estrella, D.732/#9, 4



Valse sentimentale, D.779/#1

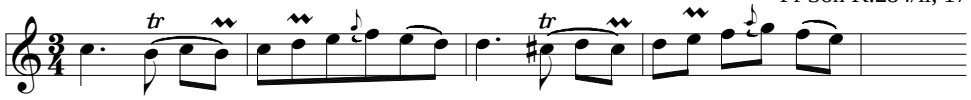


EX 57:
Δ4^B3, {RR'SS}

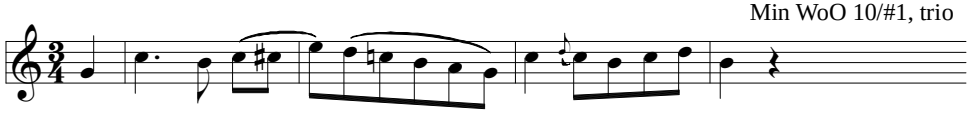


EX 58:
Δ4^B3, NT

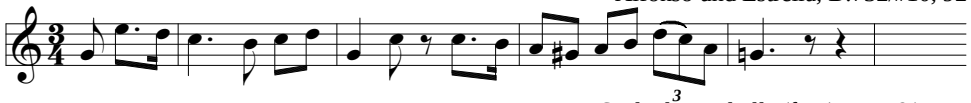
Pf Son K.284/ii, 17



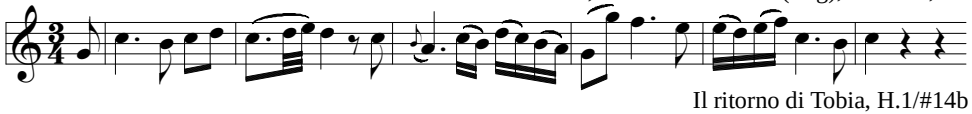
Min WoO 10/#1, trio



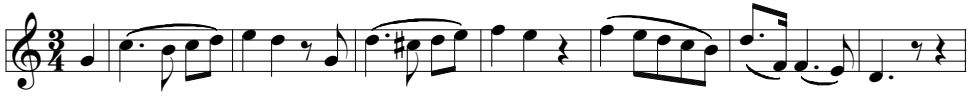
Alfonso und Estrella, D.732/#10, 92



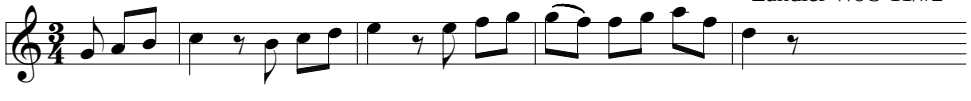
Dir, Seele des Weltalls (frag), K.429/ii, 12



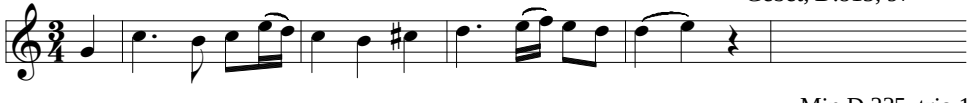
Il ritorno di Tobia, H.1/#14b



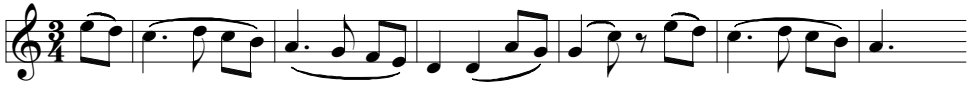
Ländler WoO 11/#2



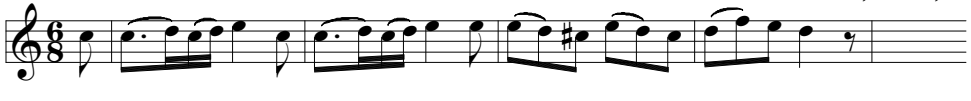
Gebet, D.815, 97



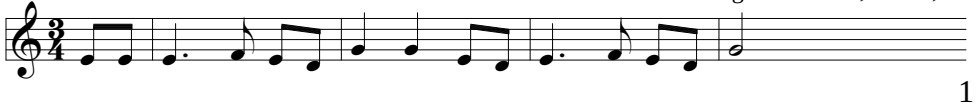
Min D.335, trio 1

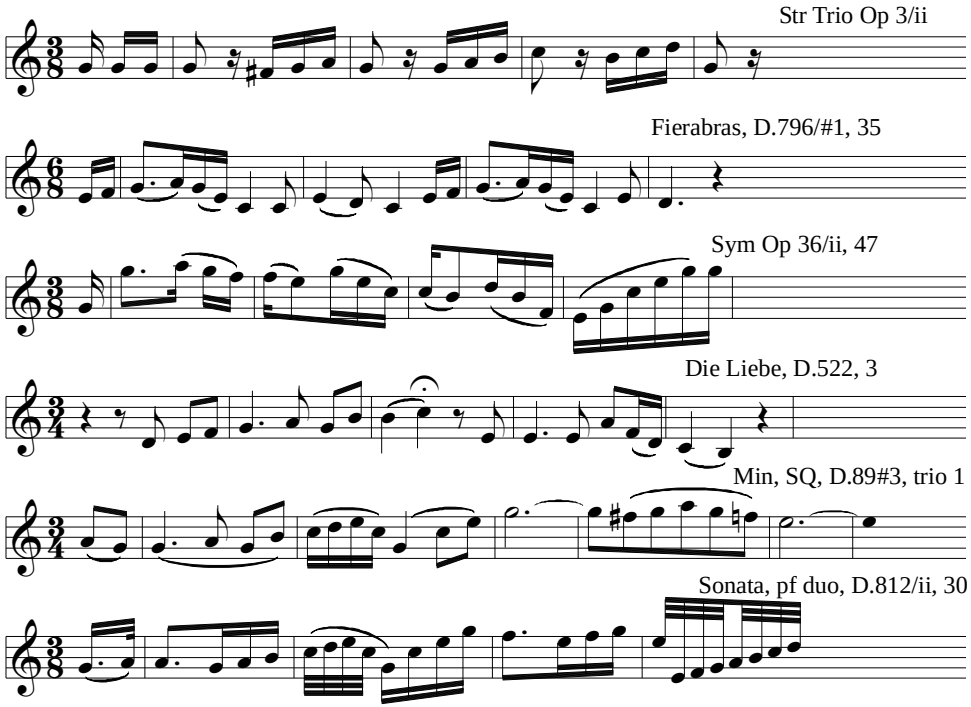


Mondenschein, D.875, 41



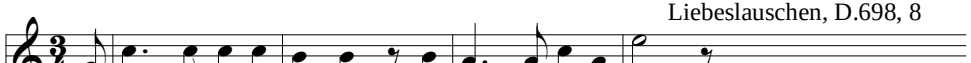
Vergißmeinnicht, D.792, 36



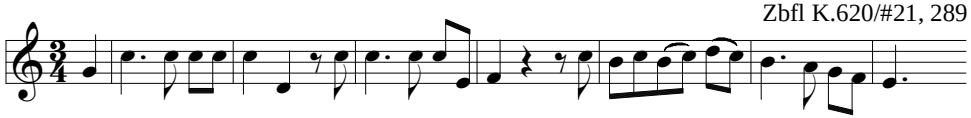

Str Trio Op 3/ii
Fierabras, D.796/#1, 35
Sym Op 36/ii, 47
Die Liebe, D.522, 3
Min, SQ, D.89#3, trio 1
Sonata, pf duo, D.812/ii, 30

EX 59:
Δ4^B3, (RR'RR)

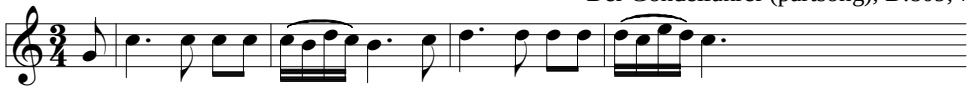
Liebeslauschen, D.698, 8



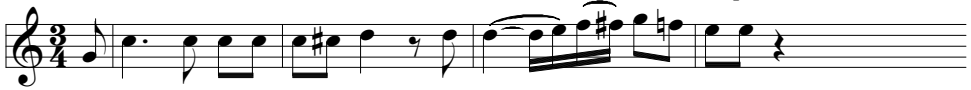
Zbfl K.620/#21, 289



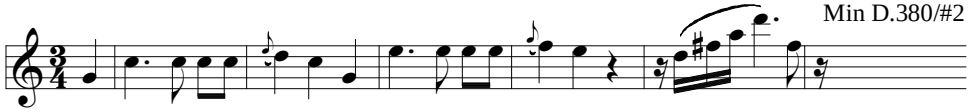
Der Gondelfahrer (partsong), D.809, 7



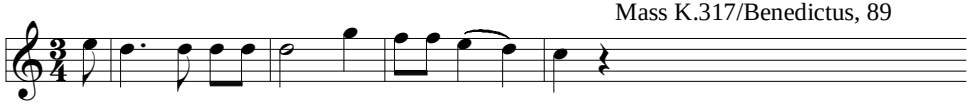
Davidde penitente, K.469/#6, 15



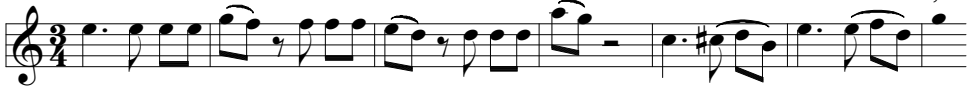
Min D.380/#2



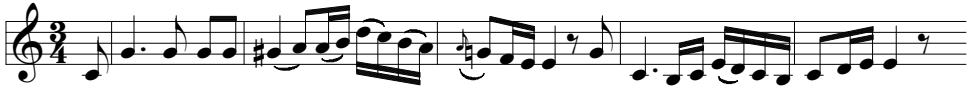
Mass K.317/Benedictus, 89



Vn Son K.481/i, 37

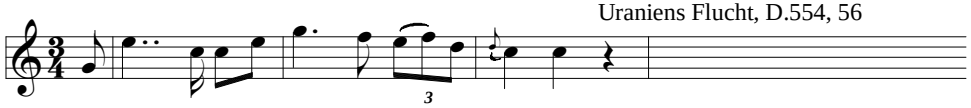


Orch Ser K.185/ii

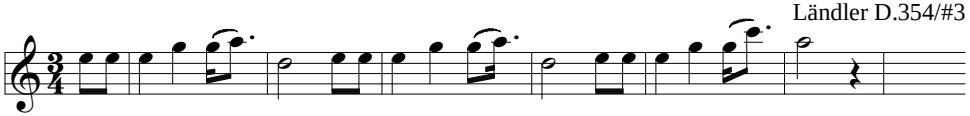


EX 60:
Δ4^B3, {-R'R-}

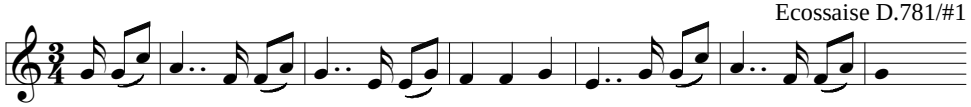
Uraniens Flucht, D.554, 56



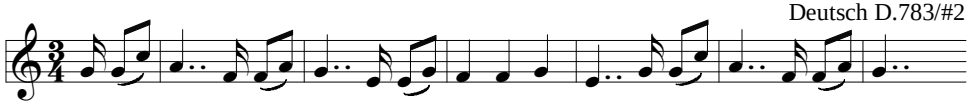
Ländler D.354/#3



Ecossaise D.781/#1

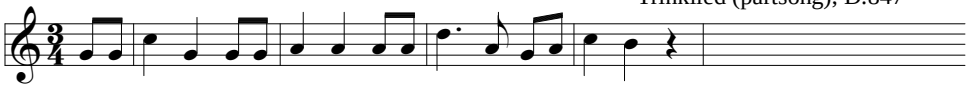


Deutsch D.783/#2

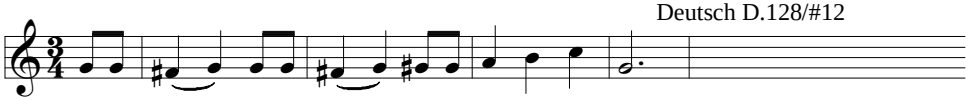


EX 61:
Δ4^B3, ARP {-R'RR}

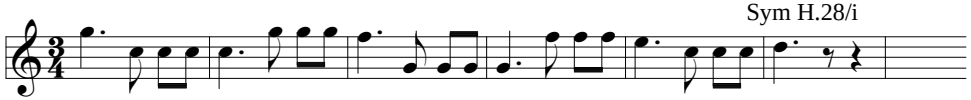
Trinklied (partsong), D.847



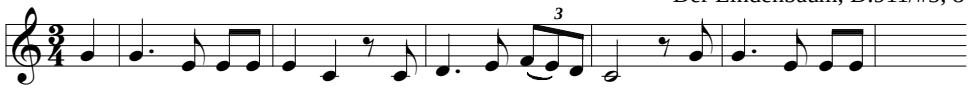
Deutsch D.128/#12



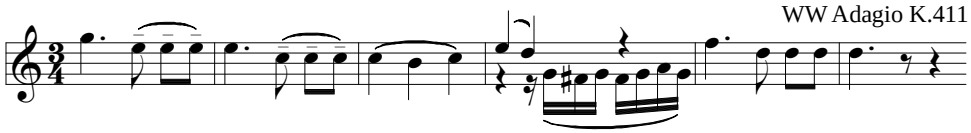
Sym H.28/i



Der Lindenbaum, D.911/#5, 8

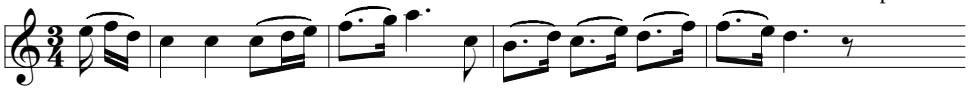


WW Adagio K.411

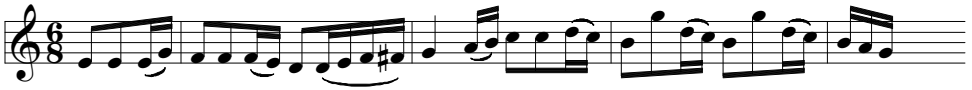


EX 62:
Δ4^B3, {RR'R-}

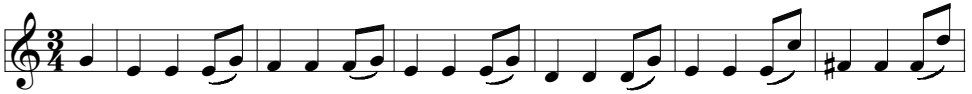
Pf Trio Op 1#1/ii



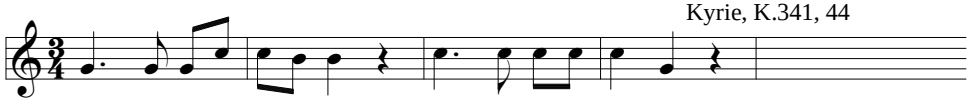
Rondo, Pf-vn, WoO 41



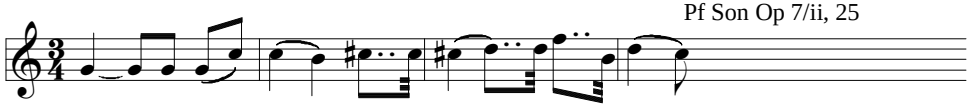
Deutsch WoO 13/#7, trio



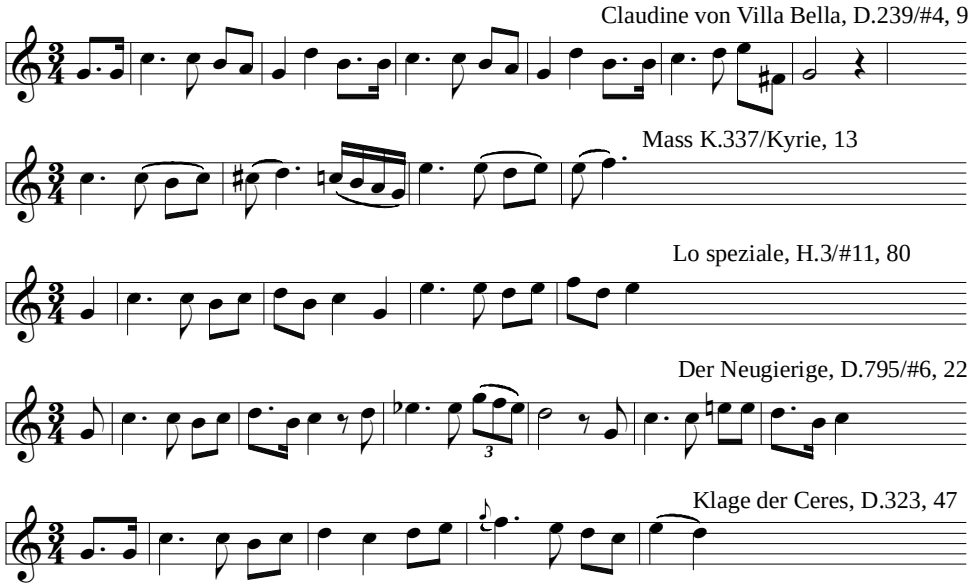
Kyrie, K.341, 44

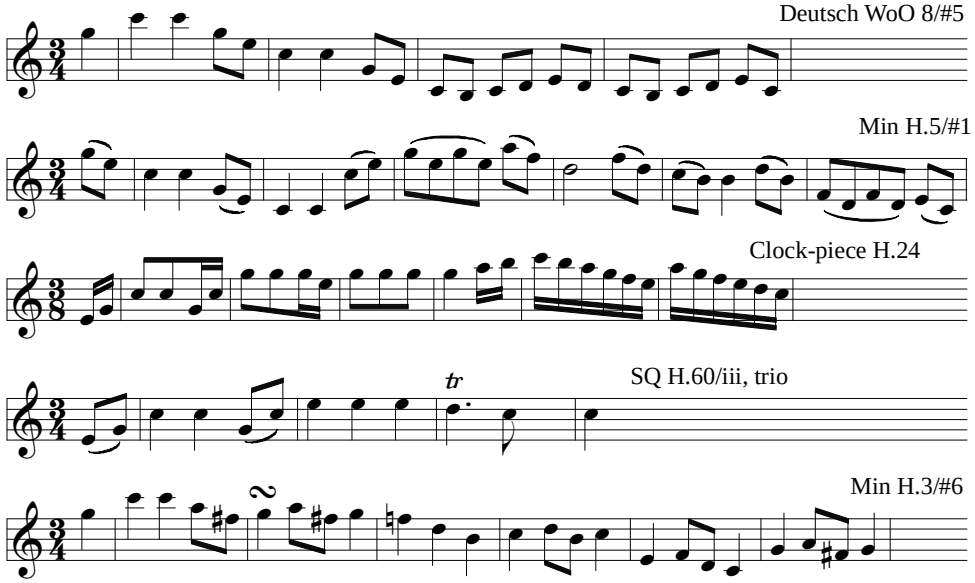


Pf Son Op 7/ii, 25

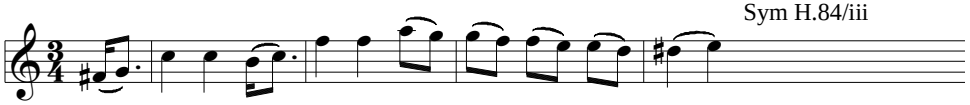


EX 63:
Δ4^B3, {RR'--}

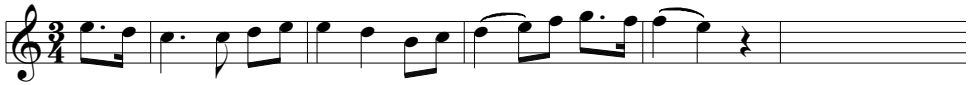

Claudine von Villa Bella, D.239/#4, 9
Mass K.337/Kyrie, 13
Lo speziale, H.3/#11, 80
Der Neugierige, D.795/#6, 22
Klage der Ceres, D.323, 47


Deutsch WoO 8/#5
Min H.5/#1
Clock-piece H.24
SQ H.60/iii, trio
Min H.3/#6

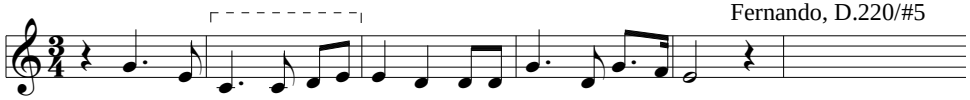
Sym H.84/iii



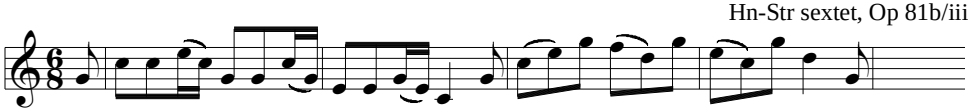
Die Freunde von Salamanka, D.326/#5, 2



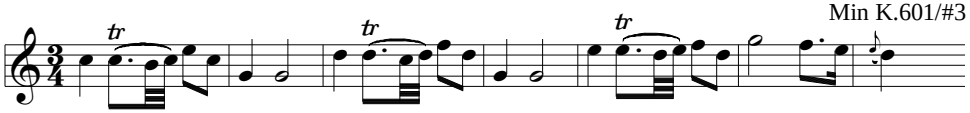
Fernando, D.220/#5



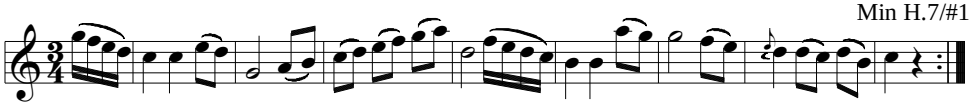
Hn-Str sextet, Op 81b/iii



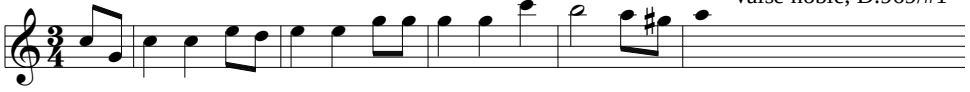
Min K.601/#3



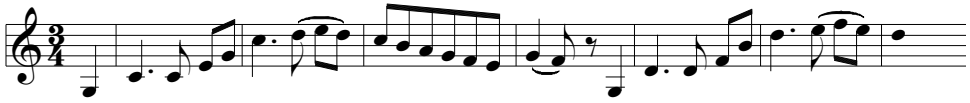
Min H.7/#1



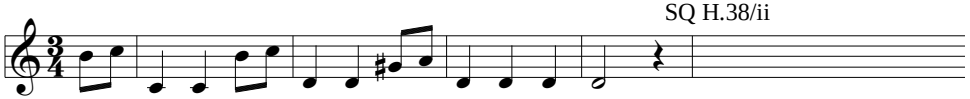
Valse noble, D.969/#1



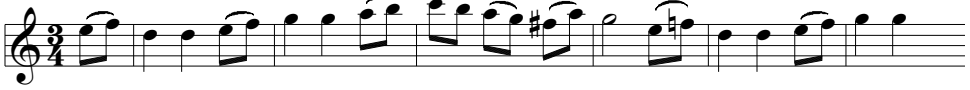
London Trio H.3/iii



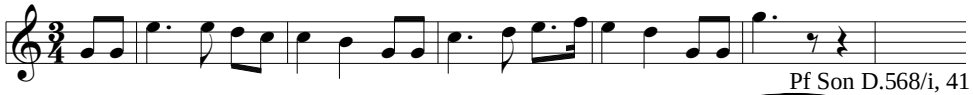
SQ H.38/ii



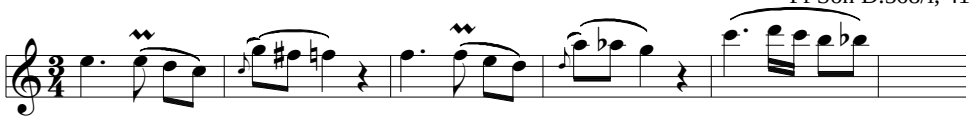
Sym H.77/iii, trio



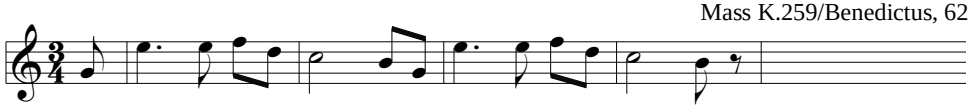
Die Freunde von Salamanka, D.326/#18, 207



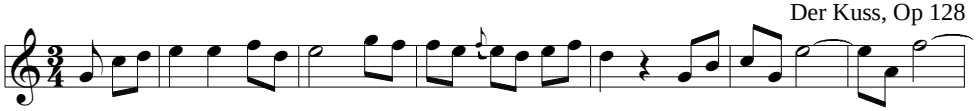
Pf Son D.568/i, 41



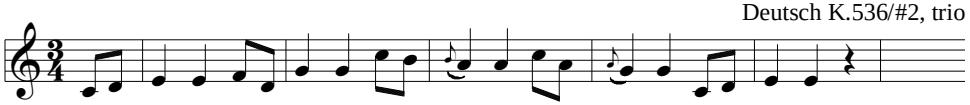
Mass K.259/Benedictus, 62



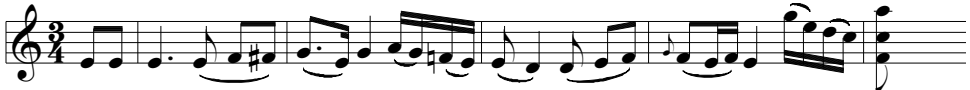
Der Kuss, Op 128



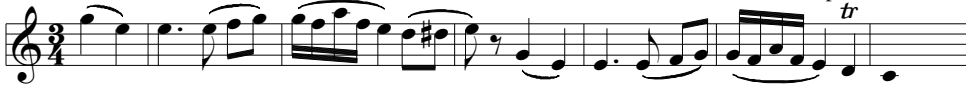
Deutsch K.536/#2, trio



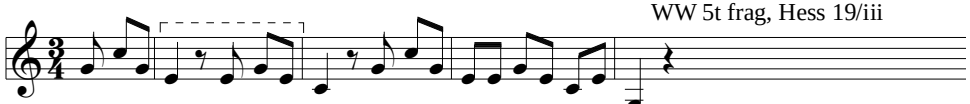
Idom Ballet, K.367/i, 153



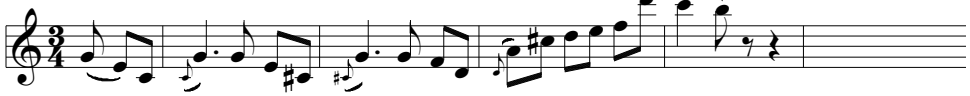
Moderato, pf, D.613/i, 78



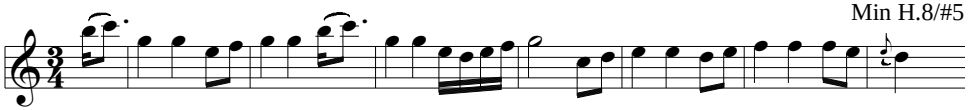
WW 5t frag, Hess 19/iii



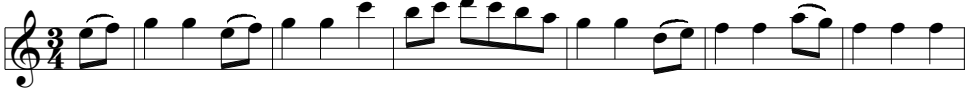
Pf Son D.850/ii, 14



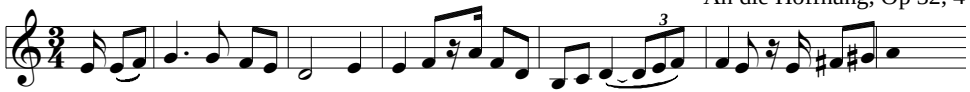
Min H.8/#5



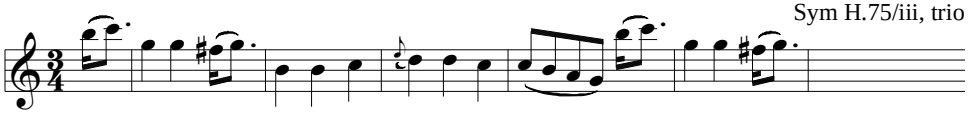
Deutsch H.12/#4



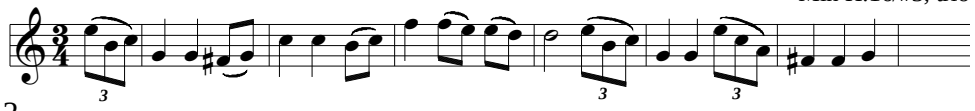
An die Hoffnung, Op 32, 4



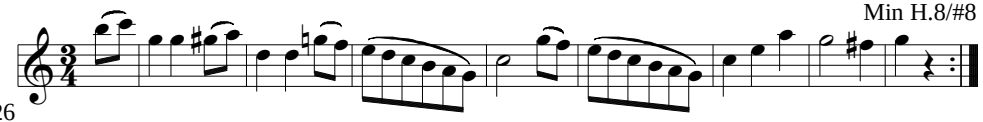
Sym H.75/iii, trio



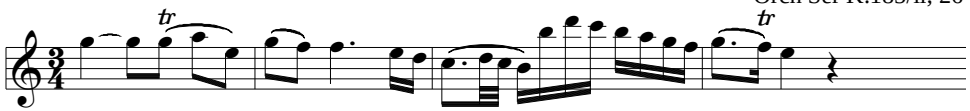
Min H.16/#3, trio



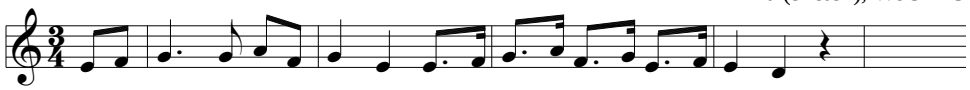
Min H.8/#8



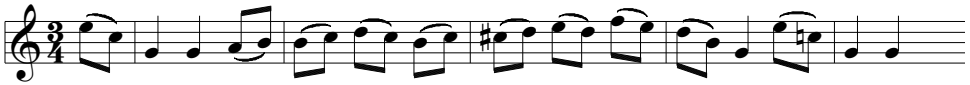
Orch Ser K.185/ii, 26



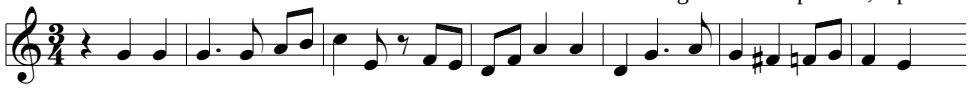
An Minna (sketch), WoO 115



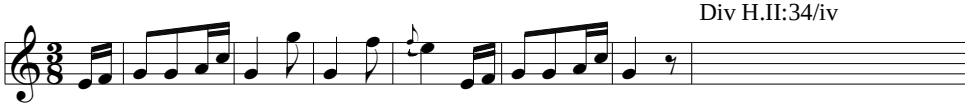
Min H.7/#8, trio



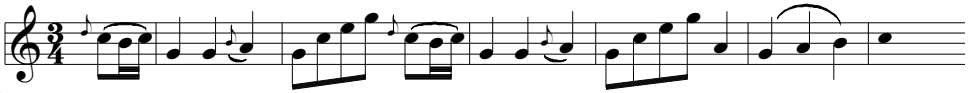
Auf dem Hügel sitz ich spähend, Op 98/#1



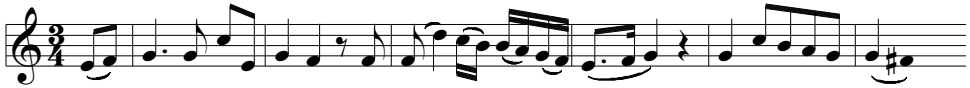
Div H.II:34/iv



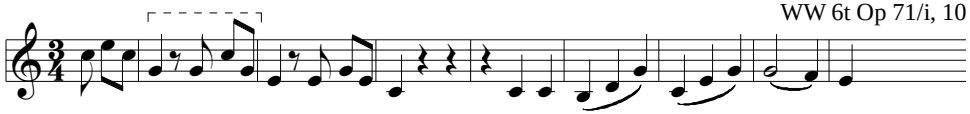
Min H.11/#5, trio



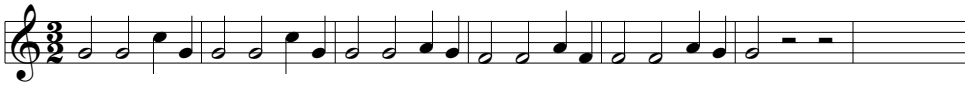
Tremate, empi tremate, Op 116, 69



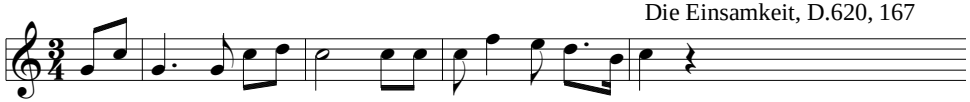
WW 6t Op 71/i, 10



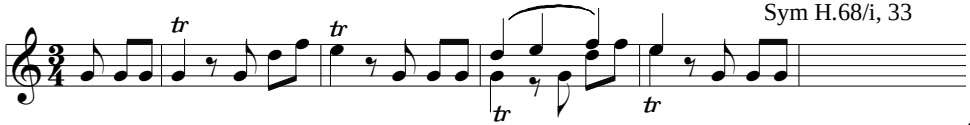
Pf Piece D.946/#3, 74

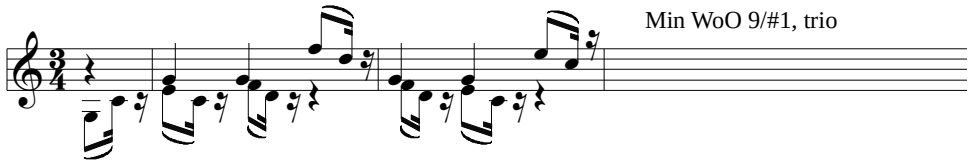


Die Einsamkeit, D.620, 167



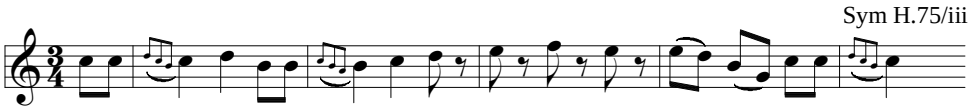
Sym H.68/i, 33




Min WoO 9/#1, trio

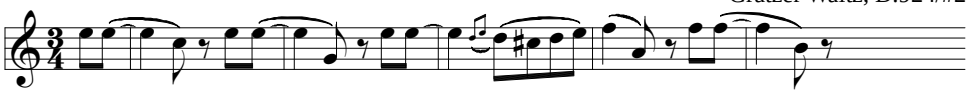
EX 64:
Δ4^B3, {--'RR}

Sym H.75/iii

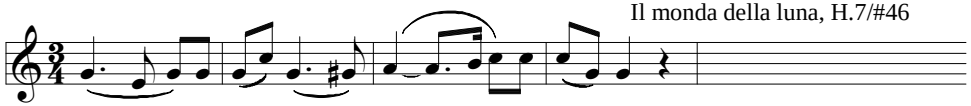


Pf-WW 5t, K.452/ii, 32

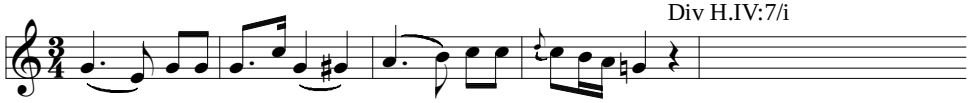
Grätzer Waltz, D.924/#2

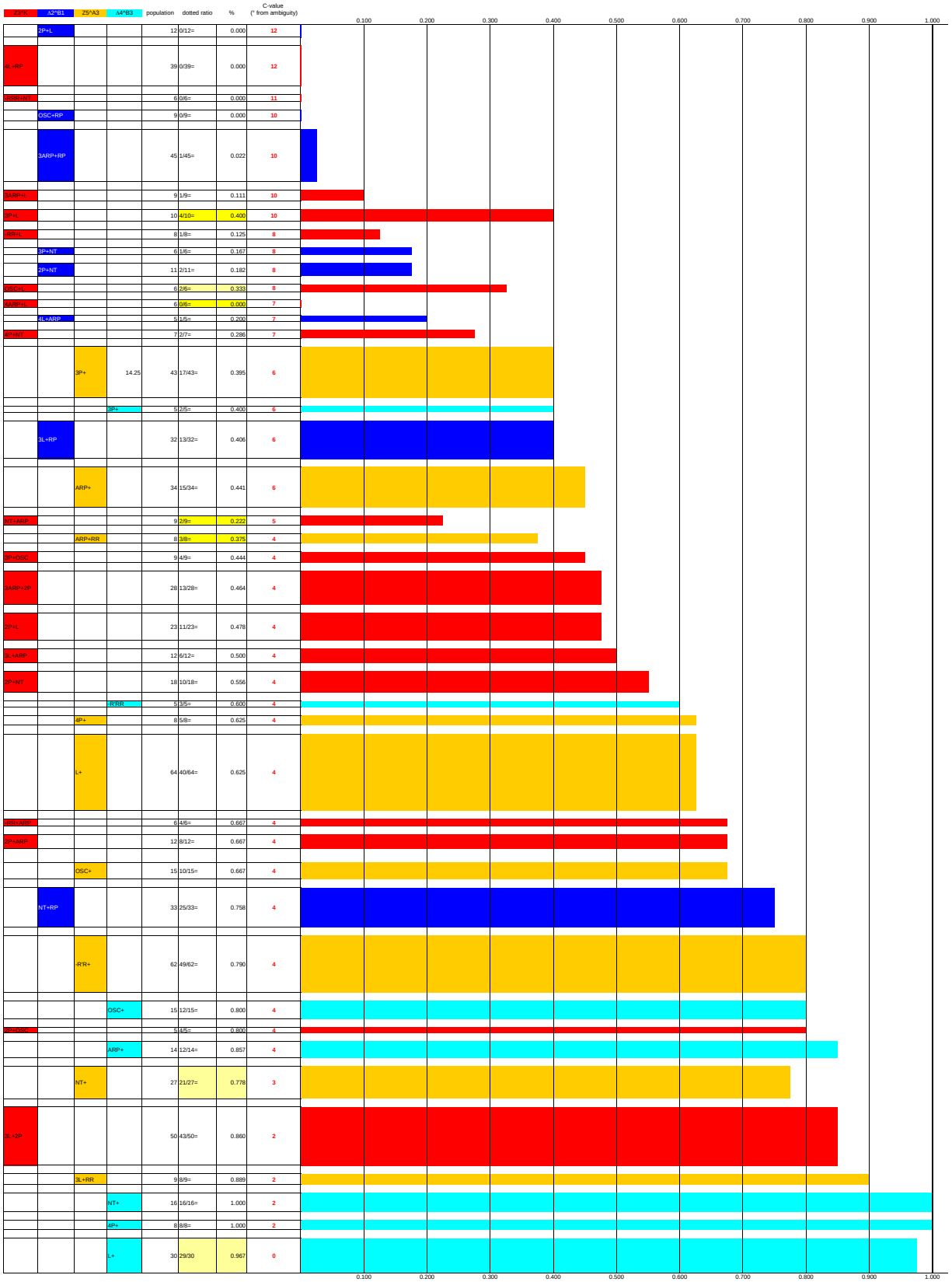


Il monda della luna, H.7/#46



Div H.IV:7/i




Z3^K
Δ2^B1
Z5^A3
Δ4^B3
population
dotted ratio
%
C-value
(* from ambiguity)
0.100
0.200
0.300
0.400
0.500
0.600
0.700
0.800
0.900
1.000
2P+L 12 0/12= 0.000 12
4L+RP 39 0/39= 0.000 12
4RR+NT 6 0/6= 0.000 11
OSC+RP 9 0/9= 0.000 10
3ARP+RP 45 1/45= 0.022 10
3ARP+L 9 1/9= 0.111 10
3P+L 10 4/10= 0.400 10
2RR+L 8 1/8= 0.125 8
3P+NT 6 1/6= 0.167 8
2P+NT 11 2/11= 0.182 8
OSCH 6 2/6= 0.333 8
4ARP+L 6 0/6= 0.000 7
4L+ARP 5 1/5= 0.200 7
3P+NT 7 2/7= 0.286 7
3P+ 14.25 43 17/43= 0.395 6
4P+ 5 2/5= 0.400 6
3L+RP 32 13/32= 0.406 6
ARP+ 34 15/34= 0.441 6
NT+ARP 9 2/9= 0.222 5
ARP+RR 8 3/8= 0.375 4
3P+OSC 9 4/9= 0.444 4
3ARP+2P 28 13/28= 0.464 4
2P+L 23 11/23= 0.478 4
3L+ARP 12 6/12= 0.500 4
2P+NT 18 10/18= 0.556 4
R'RR 5 3/5= 0.600 4
4P+ 8 5/8= 0.625 4
L+ 64 40/64= 0.625 4
2RR+ARP 6 4/6= 0.667 4
2P+ARP 12 8/12= 0.667 4
OSC+ 15 10/15= 0.667 4
NT+RP 33 25/33= 0.758 4
R'R+ 62 49/62= 0.790 4
OSC+ 15 12/15= 0.800 4
2P+OSC 5 4/5= 0.800 4
ARP+ 14 12/14= 0.857 4
NT+ 27 21/27= 0.778 3
3L+2P 50 43/50= 0.860 2
3L+RR 9 8/9= 0.889 2
NT+ 16 16/16= 1.000 2
4P+ 8 8/8= 1.000 2
L+ 30 29/30 0.967 0