

## *The Formal Structure of Viennese Classic Instrumental Themes*

This monograph treats in detail the formal structure of instrumental melody in the Viennese High-Classic style, as exemplified in 1450 themes drawn from the mature works of F.J. Haydn and W.A. Mozart.

Writers on music from H.C. Koch forward have attempted to explicate the audible sense of orderliness, even of grammaticalness, in the construction of this music. The idea here is to try to sharpen and enlarge the definitions and concepts of these theorists, and to test the principles so developed against a substantial homogeneous corpus of music, in such a way that we can give a rational answer to the question, "How many types of Classic instrumental theme are there?" One of the critical claims is that we can achieve some taxonomic clarity by dividing a theme's construction into two aspects, the cadential and the motivic.

Part One discusses Classic instrumental melody in general, Part Two deals with two-part themes in more detail, and Part Three treats three-part themes in more detail. Chapter 21 presents some final conclusions and conjectures.

This study was written in the later 1980's, which will account for the out-of-date references; I have not updated it, except for a few minor changes in wording. **The internal hyperlinks to the musical examples will not function in a web browser, so the pdf is best downloaded before reading.**

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## 1. Introductory

The study of Viennese classic melody seems to sort itself naturally into what might be called the “atomic” and the “molecular” levels. At the atomic level are to be found the mysteries of the relations between individual notes, and the central melodic problem of the coherence of the motive. This is the domain in which we must confront the fact that in a well-constructed melody, and especially in its incipit, its first motive or two, any change we might suggest is for the worse. It is this irreplaceability of notes – of the composed pitches and rhythms – that in fact constitutes melodic coherence, and it is the single fact about melody most urgently calling out for explanation.

The present work<sup>1</sup>, in contrast, deals with the “molecular” aspects of melody, in which we consider the grouping of motives and phrases into larger melodic wholes. This is the more conventional, formal, even superficial and stereotyped aspect of Classic thematic construction, and includes topics such as cadential structure, repetition schemes, the interrelations of non-adjacent motives, etc. Part One deals synoptically with a large corpus of Classic instrumental melody as a whole; Part Two treats in more detail the family of two-part themes, often known collectively as “antecedent-consequent” melodies. Part Three discusses in similar detail the three-part scheme often referred to as “bar-form” melody. This monograph is thus not what I would consider part of “the theory of melody”, but rather a description of the principles of thematic construction in the pre-Beethoven high-classic style.

There is of course a tradition of discussing melodic period structure in Classic music nearly as old as the style itself: the most notable writers on the topic are H.C. Koch, Antonin Reicha, and Hugo Riemann<sup>2</sup>, with signal contributions as well by J. Riepel, C. Czerny, J.-J. de Momigny, A.B. Marx, J.B. Logier, and others<sup>3</sup>, especially Arnold Schoenberg<sup>4</sup>.

It is important to realize that, with the exception at times of Hugo Riemann, these are all essentially authors of composition treatises, who discuss melody in order to facilitate the first efforts of the student. It is for this reason, among others, that these works uniformly begin their discussions with the musical “motive”, the smallest, and usually the most characteristic, part of the music it makes sense to discuss; the aspect most likely to be inspired, and so with which to begin. The interpretation of the melody then proceeds from small units to large; motives (*Einschnitte*, *dessins*, etc.) are combined into phrases (*Sätze*, *rhythmes*) which are in turn linked to form whole melodies, usually in two parts termed “periods.”

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<sup>1</sup>Portions of this study are included in Solie, Roger W. “On the structure of classic melody”. PhD. diss., University of Chicago, 1983

<sup>2</sup>H.C. Koch, *Versuch einer Anleitung zur composition*, Vols I-III (Leipzig and Rudolfstadt, 1782-93; reprint Hildesheim; 1969); A. Reicha, *Traité de mélodie* (Paris 1814); Hugo Riemann, *System der musikalischen Rhythmik und Metrik* (Leipzig 1903; reprint Niederwalluf b/W, 1971).

<sup>3</sup>Excellent introductions to this literature are to be found in Leonard Ratner, "Eighteenth-Century Theories of Musical Period Structure", *Musical Quarterly*, 1956, pp. 439-454; Nancy Baker, "Heinrich Koch and the Theory of Melody", *Journal of Music Theory*, 1976, pp. 1-48; George Buelow, "The Concept of 'Melodielehre': A Key to Classic Style", *Mozart-Jahrbuch* 1978/79, pp. 182-195; Ian Bent, article "Analysis" in *The New Grove*, Stanley Sadie editor (London, 1980); L. Ratner, *Classic Music: Expression, Form, Style* (New York, 1980); and Elaine R. Sisman, "Small and Expanded Forms: Koch's Model and Haydn's Music," *Musical Quarterly*, 1982, pp. 444 -475.

<sup>4</sup>*Fundamentals of Musical Composition* (New York, 1967).

This approach makes sense as a kind of recipe, or formula, for “how to invent a melody”. But as a guide to analysis – when one wants to know how to think of a melody already invented – certain difficulties recur. One of these is how to fulfill the obligation to define the smallest unit. Koch, for example, defines his basic unit, articulated by pauses, as an *Einschnitt* if it “includes an incomplete thought”; if the thought is complete then the unit is either an *Absatz* or a *Schlußsatz*, depending on whether it can close a period – i.e., on its termination<sup>5</sup>. One may sympathize completely with this intuition, while noting that what constitutes a complete thought in music is not an easy thing upon which to agree. Later writers have not, however, been able to sharpen Koch’s formulation very much. Reicha’s *dessin*<sup>6</sup> is a short musical “idea” articulated by a pause of some kind. Riemann also refers to a “motive” – his smallest unit – as the “smallest unit of significant content and expressive value”<sup>7</sup>, and as the “smallest unit of independent expressive significance”<sup>8</sup>. Schoenberg begins with the “phrase”, which may or may not be subdivided into repeated motives; it is “a unit approximating to what one could sing in a single breath.”<sup>9</sup>

Once again, in a composition manual there is no reason to insist upon anything but a suggestive definition for such a musical primitive. But considered as an empirical claim about melody, or Classic melody, the view that all, or most, or some, or the best melodies are built up by specifiable manipulations of small units is difficult to evaluate when the identification of these small units remains so completely intuitive.

As it stands, this kind of discussion of melody amounts to a statement that melodies are articulated into smaller units by cadences of varying strength, and that these smaller units are hierarchically organized. Any specific recommendation about the character of a *motive*, *Einschnitt*, *dessin*, etc., or how often it must be reduplicated to make a melody, is sure to be contradicted in any systematic survey of Classic melody. The fact is that the melodic hierarchy is itself indefinite at the lowest levels; at what point analytical subdivision of a whole melody reaches the level of something plausibly termed a fundamental unit or “motive” or “complete thought” is not only different for different melodies, but likely to change within the course of even a single melody.

Furthermore, if melodies are viewed as constructed from the reduplication of small units, the result will necessarily have a metric structure expressible in its length as a power of two – Koch’s “*Vierer*”, Riemann’s “normal eight-bar period”, etc.; what one might call a “2<sup>n</sup> structure”. The theorist is then obligated to account for deviations from this norm; thus the elaborate apparatus of suffixes, prefixes, internal expansions, elisions, etc.<sup>10</sup> It is, however, by no means obvious, when one examines real themes, why any such deviation from *Vierhebigkeit* need be interpreted as some kind of distortion, any more than triple meter on the measure level need be. It is of course true that in a statistical sense Classic melody does indeed show a preference for “2<sup>n</sup>” metric structures; this is

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<sup>5</sup>Koch, *Versuch* II, p.346

<sup>6</sup>*Traité*, p.31

<sup>7</sup>*System*, viii

<sup>8</sup>*Ibid.*, p.14

<sup>9</sup>*Fundamentals*, p.3.

<sup>10</sup>Most notably in Koch *Versuch* III, 153-230.

what makes the attempt to constitute it from small redoubled units plausible in the first instance.<sup>11</sup> But this is a fact comparable to the preference in the Classic period for the major mode; one does not wish to consider the use of the minor mode in Classic music somehow derivative. Ultimately, one may suppose, whatever makes a three- or five-bar phrase internally coherent will be just that which (more frequently) makes a four-bar phrase so, though these principles are at present quite obscure.

It is to circumvent some of these problems that I have approached the description of Classic melody not so much left-to-right, as from the top downward. Rather than try to locate the primitive building-block, the “motive” or *Einschnitte*, I have first tried to locate the outer bounds of the melody, especially the end-point; only then have I turned to inspect its internal organization. In particular, I have when possible considered a Classic melody to end upon the arrival of a full and strong tonic cadence in its home key, which is followed by music bearing no obvious motivic resemblance to the music before the cadence. This cadence, which I will designate “I<sub>k</sub>”, is one in which the melody descends to the tonic pitch, and in which the bass-line simultaneously moves 4°-(#4°)-5°-1°, thus producing harmony conventionally designated IV-V-I, ii-V<sup>7</sup>-I, IV-<sup>V</sup>/<sub>V</sub>-I<sup>6</sup><sub>4</sub>-V-I, etc., usually moving more quickly than the prevailing harmonic rhythm.<sup>12</sup> There are many circumstances in which precisely such a cadence does not occur, of course: cf. sections 5, 7, and 8 below. But it is sufficient to define the end of a great many melodies, and it is enough with which to begin. It is the obligatory nature of this cadence, or something like it, which no doubt does much to inspire the customary analogies with the phrases and clauses of natural language: just as in a sentence a predicate constitutes a kind of obligation which can be postponed indefinitely, but must finally be discharged, so a full cadence, in some key, however delayed by a melodic structure however intricate, must at last, like a finite verb, arrive.

This study parts company with the traditional analysis of Classic melody in another way as well: it is a *repertorial* study; it deals with characteristics of the music ascribable to a whole corpus of melody, or subgroups within that corpus. This method would of course be quite irrelevant to the purposes for which an eighteenth- or nineteenth-century composition treatise was written, and indeed for many of the authors it would have been a practical impossibility. But in our own day the method of dealing with this music is still predominantly the detailed scrutiny of a few individual works, or fragments of them. However valuable and necessary this kind of study is, its limitations have, I feel, retarded the development of a truly rational and empirical music theory. In particular, it has not been the habit of musicians writing about music of the “common-practice period” to test their statements against sizable bodies of evidence, nor, therefore, to formulate their ideas about music in readily testable ways. The novelty of the present study can be said to lie *only* in its application of a repertorial perspective – inspired by the works of scholars such as Peter Wagner, Willi Apel, and Knud Jeppesen – to late eighteenth-century music. Many of the descriptive categories I propose are, emphatically, not at all new; I am hardly the first to notice antecedent-consequent phrases or bar-

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<sup>11</sup>As illustrated below by §§14.2, 14.3, 14.41, 14.5, 14.7, and 14.816 as compared to §§14.42, 14.6, 14.809-815, and 14.818-844; and by §§18.21, 18.3, 18.5, and 18.7 as compared to §§18.4, 18.6, and 18.8.

<sup>12</sup>The importance of the subdominant in this cadential formula, as a sign of a truly conclusive cadence, and especially the bass motion from the fourth degree through the fifth to the tonic, has rarely been sufficiently emphasized by the authors either of text books or of more speculative works; see, however, Percy Goetschius, *The Homophonic Forms of Musical Composition* (New York, 1898; 2nd ed. 1926), pp. 10-12. See also Hugo Riemann, “Musikalische Logik”, in *Präludien und Studien* (Leipzig 1901, reprint Hildesheim 1967) Vol. III, p.7: “Besonders häufig in der angewandten Komposition ist die Manier, die These (I) auf alle mögliche Art zu erweitern und dann durch die einfach Kadenz I-IV-V-I die Periode fest abzuschliessen.”

form melodies. But one can uncover hitherto unnoticed aspects of these conventional forms by looking at large numbers of them, and I take it as obvious that part of understanding melody, or understanding a particular melody, is understanding the background stylistic norms from which it emerges. The novel and unique qualities we so much admire in our favorite works can hardly be so except against the complementary ground of the conventional and formulaic.

In particular, what we must deal with in this repertory is our strong sense of family resemblance among melodies, the impression of melody-type, of species and genera, even, metaphorically, of grammaticalness. We are seeking a coherent and compact description of a large number of themes and theme-like passages; a statement of their regularities, an account of the range of variation and of their distribution within that range. What I aim for is a kind of topological survey that says, this is the landscape over which these objects are found; here are most of them, over there a few others; this type is well-defined, while this other slides off into ambiguous subcategories. It tries to make sense of the question, how many kinds of Classic melody are there?

Such an enterprise should, I think be judged on at least three criteria. The first is accuracy, and its prerequisite precision. It will become clear, however, that this kind of work is essentially and highly *interpretive*, to about the same degree that, say, traditional harmonic analysis is. That is, obvious means to resolve disagreements about the interpretation of a given melody are only rarely to be found, and considerable sympathy and sensitivity to context will be asked of the reader. The goal is, however, to try to reduce this interpretive aspect to a minimum; to provide clear definitions and obvious means of distinguishing instance from counter-instance.

The second criterion is scope. Ideally, what we want is a scheme that identifies nearly every melody in the repertory as a representative of one of a few formal types; exceptions and sports ought to *sound* exceptional. We want to be able to open the Mozart string quartets at random, pick out a theme, and recognize it as, for example, a “reflex”, in the same way that we now recognize the movement in which it is embedded as a rondo or a sonata. The closely-connected third criterion is intuitive plausibility. Any way of looking at these melodies is surely doomed to be discarded if it is inaudible, or “unmusical”, no matter how explicit, rational, or even elegant it is in construction.

The repertory under discussion, comprising the “mature instrumental works” of Haydn and Mozart, includes in Mozart’s case most of the major completed solo, chamber, and orchestral works, apart from divertimenti, dances, and the like, from roughly 1777, reaching back further for works prominent in the current concert repertoire (*viz.*, the three violin concerti), or in order to complete categories (*viz.*, the earlier piano sonatas). In Haydn’s case I have restricted myself to the piano sonatas from 1778, the piano trios from 1784, the string quartets from 1781, the symphonies from 1786, and four prominent concerti, one of which (the C-major cello concerto) is the earliest Haydn work considered. This list of works is in several ways arbitrary, and it is easy to suggest more music to consider: the Mozart symphonies from K.201 forward, for example, or Haydn’s work from the 1770’s. It is my hope, however, that with 1450 melodies already under consideration, a repertory has been assembled which is sufficiently representative of what we refer to as the “High-Classic instrumental style” that the addition of a small number of further examples would not substantially alter the results here set out. An important exception to this, though, is represented by the decision to investigate only *instrumental* melodies, based on the supposition that the presence of a text in vocal music is a complicating factor, and also that operatic writing in particular has its own melodic forms and conventions, best dealt with separately.

The full list of works and melodies considered will be found in the [Appendix](#), labeled according to “cadential type”. The process of assembling the repertory in the first place, of extracting themes from larger works, was carried out as far as possible without preconceptions, that is, on an entirely intuitive sense of what a melody or a theme is. This intuition is, in a way, what a theory of melody is intended to explicate.

I have used the terms “theme”, “tune”, and “melody” interchangeably; each here refers to the entire vertical fabric of the music, rather than just a single line.<sup>13</sup> When it is necessary to discuss the latter, I have used “soprano” (or “bass”, “inner voice”, etc.), and sometimes “leading voice”, for the single line, usually the uppermost, embodying that special linear coherence within and between motives which we spoke of at the beginning of this introduction.

Works are identified by the traditional (pre-Einstein) Köchel numbers or by Hoboken numbers, in the latter case without the Roman numerals of the larger subdivisions; thus String Quartet H.III/70 is referred to simply as “SQ H.70”.<sup>14</sup> Where not otherwise specified, the melody in question is that at the beginning of the movement; otherwise it is identified by the measure number in which it begins. The signs % and \* appear in the text before they are explained, so I will mention here that % denotes a repeated melody, and \* one which is “deflected”, i.e., ends with something other than its own tonic triad.

### Abbreviations

Fl	Flute	5t	Quintet
Ob	Oboe	Ser	Serenade
Cl	Clarinet	Sym	Symphony
Hn	Horn	Conc	Concerto
WW	Woodwind	Sinf Conc	Sinfonia Concertante
Trp	Trumpet	Ov	Overture
Hp	Harp	Men	Menuetto, Minuet
Pf	Piano	Fant	Fantasy
Vln	Violin	Var	Variation
Vla	Viola	Entf	<i>Die Entführung aus dem Serail</i>
Vcl	Cello	Schspl	<i>Der Schauspieldirektor</i>
Str	String	Fig	<i>Le Nozze di Figaro</i>
Son	Sonata	Don G.	<i>Don Giovanni</i>
4t	Quartet	Cosi	<i>Così fan tutte</i>
SQ	String Quartet	Zbfl	<i>Die Zauberflöte</i>
		Tito	<i>La Clemenza di Tito</i>

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<sup>13</sup> But see Schoenberg, *Fundamentals*, pp.101-104, for a stimulating attempt to differentiate “theme” from “melody”.

<sup>14</sup> The three Haydn solo concerti discussed are referred to as “Vcl Conc H.I” and “H.2” for the C-major and D-major concerti, respectively, and as “Trp Conc H.I”.

## 2.0 Cadential schemes

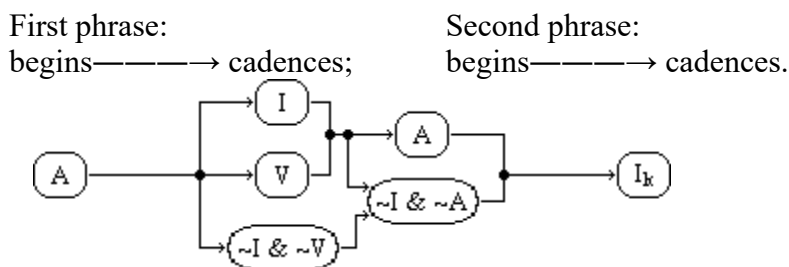
The phrase “cadential scheme” will refer not only to the articulation of the melody into parts by pauses and by cadential formulae, but also the harmony at those articulation points: both the harmony of the cadence, and the harmony with which the ensuing phrase begins<sup>1</sup>. Rhythmic articulation is frequently less than complete, of course; the soprano may pause while the accompaniment continues, for example. Thus in this, as well as in other aspects of melody, one must consider the total fabric of the music, not just the leading voice. I will discuss the common cadential patterns in order of their relative frequency in the repertory.

### 2.1 Two-part cadential schemes

It will be convenient to subdivide two-part melodies according to their harmonic plan. The total field of cadential possibilities for paired phrases appears to be restricted in this repertory by just three principles, the third of which is, moreover, a modification of the second:

- 1) The second phrase begins with tonic harmony only if the first does;
- 2) If the first half ends with harmony *other than* tonic or dominant, the second must begin with harmony different from that with which the theme began; it must be “antiparallel”;
- 3) The second principle, however, does not apply in the rare case of the “deceptive antecedent-consequent”, whose pair of phrases has the harmonic plan I-vi, I-I<sub>k</sub>.

2.11 Setting aside temporarily the case of the “deceptive ac”, and assuming that the melodies are “undeflected” – that is, that they conclude with a full tonic cadence in the home key – we can represent the possibilities permitted by these rules in a diagram, in which “I” and “V” are of course tonic and dominant, “A” is any specific harmony at all, and “~I & ~V” means “neither tonic nor dominant”:



There are five distinct paths through this diagram, but we shall combine two of them into one type to yield a four-fold division of the repertory of two-part themes, reflecting two cross-cutting divisions of the total corpus: first, between two-part melodies whose first phrase ends on the tonic and those whose first phrase does not; and second, between those with harmonically parallel beginnings to the two phrases, giving a feeling of starting over, of *reçulant pour mieux sauter*; and those with harmonically anti-parallel beginnings, whose second part represents more a continuation after a pause, rather than a return to the opening. One of these latter types, the “reflex”, is the one that conflates first phrase

<sup>1</sup> Although most authors discuss the harmony of the various melodic phrases exclusively at their end-points, see J. B. Logier, *System der Musikwissenschaft und der praktischen Komposition* (Berlin, 1827) translated by C. Stein as *Logier's Comprehensive Course in Music, Harmony, and Practical Composition* (Boston, 1888), pp 225-229, for an attempt to specify in some detail the harmonic possibilities of the two-part scheme.

cadences on “ $\sim I$  &  $\sim V$ ” with those on  $V$  (i.e., to those simply on “ $\sim I$ ”), because there seems to be little difference in effect between a melody that proceeds, for example,  $I-V$ ,  $V-I_k$ ; and one runs  $I-IV$ ,  $V-I_k$ .

Our four main two-part melody types, then, are:

	initial harmony parallel:	initial harmony antiparallel:
first half ends non-tonic:	the <i>antecedent-consequent</i> , or “ac”: $A \rightarrow V, A \rightarrow I_k$	the <i>reflex</i> , or “rx”: $A \rightarrow \sim I, [\sim I \ \& \ \sim A] \rightarrow I_k$
first half ends tonic:	the <i>tonic antecedent-consequent</i> , or “tc”: $A \rightarrow I, A \rightarrow I_k$	the <i>duplex</i> , or “dx”: $A \rightarrow I, [\sim I \ \& \ \sim A] \rightarrow I_k$

2.12 The harmonic principles *within* phrases, in a two-part or any other cadential scheme in this repertory, are of course those of eighteenth-century harmony in general, including specifically:

1) The  $V^3 - IV^3$  retrogression is virtually forbidden (although one can find a few examples). This applies only to progressions *within* phrases; that is, cases in which the dominant and subdominant rhythmically group together<sup>2</sup>. Such a “retrogression” is quite common *across* an articulation. The dominant-subdominant progression is also unrestricted when either or both chords are inverted.

2) Syncopated harmony is articulated in the middle; a harmonic rhythm such as

$| \text{c} \overset{I}{\text{♩}} \overset{IV}{\text{♩}} \overset{IV}{\text{♩}} \overset{I}{\text{♩}} |$  may occur, but not  $| \text{c} \overset{I}{\text{♩}} \overset{IV}{\text{♩}} \overset{I}{\text{♩}} |$ . Such articulation may be, however, subtle; in

ex 2.12a      Vn Son K.454/i, 14      ac\*<sup>3</sup>

it is a mere change of direction. See also Pf 4t K.478/ii ac mm 2-3

3) “Reverse-dotted” harmony – that is, harmony metrically equivalent to  $| \text{c} \overset{I}{\text{♩}} \overset{\cdot}{\text{♩}} |$  – is virtually forbidden. For two isolated examples, see

ex 10.412g      Pf Conc K.453/ii      pv+ac (mm 8-9)  
ex 12.31c      SQ H.72/i, 31      ac (mm 38-39)

Principles (2) and (3) both depend upon the presence of some identifiable high-level metric structure, so that “strong-beat” and “weak-beat” harmony can be felt; where this begins to break down, these principles cannot apply:

ex 2.12b      Cl 5t K.581/iii, trio II      dec ac (mm 5-12)

4) The harmony *within* phrases only rarely anticipates the final  $I_k$  *except* at the very beginning of a melody, where the context and (usually) the slower harmonic rhythm seem to permit a use of  $IV^3 - V^3 - I^3$  that takes nothing away from the force of the final cadence:

ex 2.12c      Cl Trio K.498/ii      ct\*%  
ex 2.12d      Str 5t K.515/iii      dx

In the tc cadential scheme, of course, and in tc components of larger melodies, the final  $I_k$  is anticipated by a weaker medial tonic cadence. The foregoing principle refers not to cadential harmony, but harmony

<sup>2</sup> Cf. Riemann, “Musikalische Logik”, p.16

<sup>3</sup> The signs \* and % following the structural description of a melody mean “deflected” and “repeated” respectively; cf. §5-6.

internal to the phrase.

### 2.13 Recadencing

It is not uncommon for a theme to echo or expand upon the final  $I_k$  after once having achieved it, as a kind of epilog:

ex 2.13a	Sym H.88/iii ct*%
ex 2.13b	Pf Trio H.26/i, 22 ct
ex 2.13c	SQ K.589/i ac
ex 2.13d	SQ K.575/iii ac*

Even though these “recadences” can be long and interesting, occasionally developing into a transition to new material, I have not usually considered them in the structural description of the melody to which they are appended. However, to the extent that the recadence is well-formed, motivically independent, and cadentially separated from the preceding music, it can assume the status of an independent tune, butted up against its predecessor, as in mm 15 ff of

ex 10.42a	Str 5t K.515/ii, trio	upac*
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thus forming a situation one might call a “conjunction” – two themes joined by proximity but little else. §6.3 discusses “conjunctions” in slightly more detail, and §§8.3-8.4 discuss material occurring after the  $I_k$ .

### 2.14 The ac cadential scheme ( $A \rightarrow V$ , $A \rightarrow I_k$ )

The ac, along with the tc, is marked by the harmonic recovery at the beginning of the second half; the melody begins over again harmonically at the midpoint. This is usually accompanied by a corresponding motivic parallelism, but so as not to complicate matters at the moment with motivic considerations, here are some sufficiently typical examples of the ac cadential plan with 'replicate' (cf. §3.3) motivics:

ex 2.14a	SQ K.421/iii, trio	ac%
ex 2.14b	Sym K.385/iv	ac*

### 2.15 The tc ( $A \rightarrow I$ , $A \rightarrow I_k$ )

These are quite similar to the (dominant) ac, except that the internal cadence is on the tonic. This internal cadence is normally weakened in some way – by rhythmic or harmonic mobility, a soprano that ends on the 3rd degree instead of the tonic, etc. – so that the concluding  $I_k$  has much the same force of closure as it does in the ac. Some non-replicate examples:

ex 2.15a	SQ H.64/i, 24	tc
ex 2.15b	Hn Conc K.417/i, 25	tc

Especially in the case of tc's, what is to be interpreted as a repeated melody, and what as a single melody in two parts, often depends very much on the internal cadences, and gives rise to a sort of ambiguity discussed in §8.3.

The subtype of tc represented by ex 2.15b, in which the second half begins on  $I^6$  in contrast to the  $I_3^5$  of the opening, is transitional in feeling to the dx, to be taken up shortly – the harmonic recovery of the second half is less than complete.



## 2.16 The deceptive ac

The “dec ac”, in which the harmonic pattern is I-vi, I- I<sub>k</sub>, is rare as a self-sufficient melody, but fairly common as a component of a larger melody (cf §15.1 and §19.41). Among the few examples of independent and complete melodies structured this way are the non- replicate

ex 2.16a Cl Conc K.622/iii, 35 dec ac

and the replicate

ex 2.12b Cl 5t K.581/iii, trio II dec ac

As one can see from Appendix, ac’s and tc’s are by far the preponderant types of two-part cadential schemes in the repertory. Of the remaining types, the reflex is more common than the duplex; both are marked by non-parallel medial initial harmony.

## 2.17 The rx (A → ~I, [~I & ~A] → I<sub>k</sub>)

The most common harmonic pattern for a reflex is I-V, V-I; but other harmonizations occur. Here are examples with none of the typical motivic schemes:

ex 2.17a Sym H.100/i, 94 rx

ex 2.17b Pf Son K.331/ii rx

ex 2.17c Cl 5t K.581/ii rx

This is the one common cadential scheme in which the medial cadence need not be tonic or dominant; a common pattern is [I → ii, V → I<sub>k</sub>], in which the articulation interrupts an expanded I-ii-V-I cadence:

ex 2.17d SQ H.44/ii, trio rx%

ex 2.17e SQ K.499/ii rx%

Less commonly, the medial cadence will be on IV, vi, or a secondary dominant:

ex 2.17f Sym H.102/i, 81 rx

ex 2.17g SQ H.65/ii rx%

ex 2.17h SQ K.589/iii rx%

## 2.18 The dx (A → I, [~I & ~A] → I<sub>k</sub>)

In the duplex, the medial tonic cadence is, as in the tc, inconclusive in some way. The second half typically begins with a subdominant of some kind, or, as it happens in all these nonreplicate examples, a dominant:

ex 2.18a SQ H.70/ii dx

ex 2.18b Vn Son K.303/i dx

ex 2.18c Vn Conc K.219/i, 40 dx

2.2 The two-part cadential schemes discussed so far all presuppose a roughly symmetrical division of the melody: the two halves are about the same length, and in other ways as well are parallel and corresponding. There is, however, a small population of two-part themes in this repertory in which the first part is much shorter than the continuation, and serves in some way as an introduction, or opening gesture, or generating impulse for the second half, from which it is almost always motivically distinct. I will call such non-symmetrical two-part melodies “P-types”, (after their preliminary, often proclamatory first part), and here are four examples:

ex 2.2a	2-Pf Conc K.365/i	pac
ex 2.2b	Pf Son H.38/i, 19	ptc
ex 2.2c	Pf Trio K.548/i	prx
ex 2.2d	Pf Trio H.15/i, 44	pdx

P-types<sup>4</sup> are discussed in some detail in §10.2, in connection with the beginnings of melodies; and also in §14.1. The harmony of their articulation follows the same principles as we have just outlined for two-part melodies, and so I have subdivided them accordingly: pac, ptc, prx, and pdx.

### 2.30 The three-part cadential scheme: ct

This familiar type is sometimes called a “bar-form” melody; the proportions of its three parts are typically 1+1+2. I will reserve the term “bar” for the motivic scheme most often associated with this cadential type, and label three-part cadential articulation as “ct”, to acknowledge the discussion by Cooper and Meyer<sup>5</sup> of the ubiquitous “closed trochee”. Here are several nonmotivic examples of the type:

ex 2.30a	Pf Son H.39/ii	ct <sup>0</sup> *
ex 2.30b	Pf Trio K.496/i	ct <sup>0</sup> *
ex 2.30c	Hn Conc K.447/i	ct*

We will refer to the first two sections as the “limbs” of the ct (limb 1 and limb 2, when required), and the concluding, usually longer section as the “tail” of the ct.

A way of putting a melody together that (in its medieval version) is the subject of a famous opera can hardly be said to have gone unnoticed. But the three-part scheme is also one of the principal ways a theme may be disposed in the Viennese High-Classic style, and this has only occasionally been remarked upon during two centuries of comment on that music<sup>6</sup>. There are of course intermediate and ambiguous examples, difficult to decide about. Nevertheless the three-part ct melody forms an instantly recognizable and distinct melody-type within this corpus, whose representatives nearly equal in number those of the traditional (dominant) “antecedent-consequent”, although they are considerably outnumbered by the population of two-part melodies as a whole.

2.31 One could go further, and subdivide the ct melodies according to the harmony or their first two limbs. The principles for the harmony of these limbs are identical to those for two-part melodies as described and tabulated above; except that, of course, the second limb does not end with I<sub>k</sub>, which is instead supplied by the tail. Furthermore, the population of “ac-analog”, “tc-analog”, etc. melodies among the ct's are found in proportions which approximately reproduce those of ac's, tc's, etc. within the two-part repertory (cf. §16.2). However, the limbs of a ct are of course often short, and harmonized

<sup>4</sup> Cf. Wilhelm Fischer, "Zur Entwicklungsgeschichte des Wiener klassischen Stils", *Wiener Studien zur Musikwissenschaft* IV, 1915, pp 24-84. P-types and many ct melodies (cf. §2.3 below) share the feeling of impulse + continuation with the common type of Baroque melody that Fischer identifies as "Fortspinnungstypus".

<sup>5</sup> Grosvenor Cooper and Leonard B. Meyer, *The Rhythmic Structure of Music* (Chicago, 1960), p.30

<sup>6</sup> Although mention of "bar-form" melodies in the Classic style is not completely rare - see, for example, Riemann *System*, 201-202, or Logier *Comprehensive Course*, p.217 (his example 326) - it has usually been greatly neglected in favor of the two-part "period". The only treatment that deals with two- and three-part themes on an equal basis is that of Arnold Schoenberg's *Fundamentals of Musical Composition*. His "sentence" (Chapters V and VIII) is equivalent to my three-part form; his "period" (Chapters VI and VII) conflates all my two-part types. See also his *Structural Functions of Harmony* (New York, 1954, rev. 1969), pp 114-118.

within a single harmony: viz., I, V, as in

ex 2.31a Vn Son K.402/i ct%

And there is in other ways as well a greater variety of harmony within the cadential schemes of ct limbs than within two-part melodies: a plan like I-V, I-IV, for example, as in

ex 2.31b SQ H.62/ii ct\*%

has no direct analog among the two-part types. Therefore three-part melodies will be treated as a single group, whereas information about two-part melodies will often be broken down into the categories of ac, tc, rx, and dx. It will only occasionally be necessary to remember that “ct” is a strictly articulatory designation, while “ac”, “tc”, “rx” and “dx” imply both an articulation and its associated harmony.

#### 2.4 One-part cadential schemes; odd shapes

Themes which have neither three- nor two-part cadential articulation form a small and quite heterogeneous collection of “one-part” melodies, those which do not readily subdivide at all. These include scales and sequences:

ex 2.4a SQ K.428/ii seq%\*

“oscillating” melodies or themes:

ex 2.4b Pf Conc K.488/iii, 176 osc %

and a few other melodies which simply seem unarticulated:

ex 2.4c Pf Conc K.488/i, 143 ?%

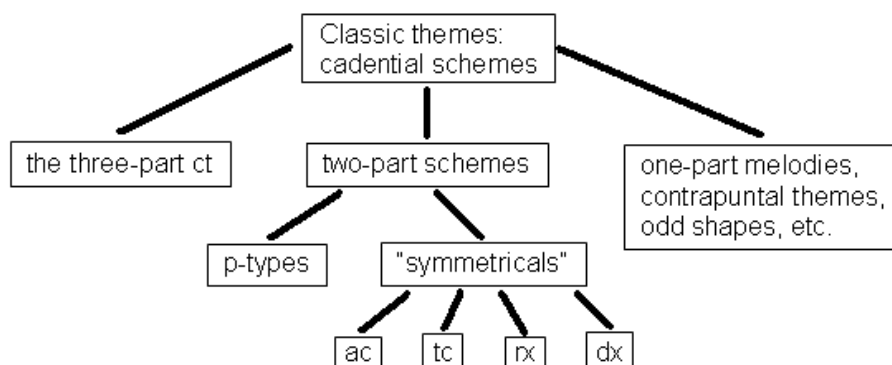
There is in addition a small group of melodies or themes which are thoroughly fugal or canonic in construction, including such famous instances as Sym K.551/iv, 36; Zbfl K.620/Ov, 16; and others, including one “ground bass” (SQ H.80/iii, 60).

Finally, there are a few exceptional melodies that, while articulated, are so in unusual and nonstandard ways:

ex 10.33a Pf Trio H.6/i v+?%\*

ex 11.2a SQ H.38/i ?

2.5 It may be helpful at this point to summarize the various cadential schemes and their relationships with a diagram:



### 3.0 Motivic schemes

In order to detect whatever regularity obtains in the motivic construction of these melodies, it is necessary to devise a means of describing that construction which is reasonably consistent, detachable from the melody described, and, one hopes, not too distorting, though it will inevitably be so to a considerable extent. The method I have used is essentially metric: a letter is assigned to each *repeated*<sup>1</sup> motive, and a dash (-) to each non-repeated one, such that each letter or dash includes exactly one beat – a single time-point – on or above a specific metric level. Thus in

ex 3.0a                  Sym H.87/ii                  ct%

the metric level of the analysis is that of the barline; each letter represents all the music – vertically and horizontally – adjacent to the downbeat of each measure, up to the ensuing motive (which begins on the following downbeat), and back to the previous one. A higher-resolution analysis could include such units at the quarter-note level, if the structure of the melody seemed to require it; a coarser analysis might represent, if it were possible to do so without losing significant details of the motivic structure, units each of which included two adjacent barlines.

This and many subsequent examples will demonstrate some important points about this kind of slice-and-dice analysis:

1) The motivic units so defined “tessellate” – one begins where the previous one stops; the analysis leaves no gaps.

2) This is not necessarily a rhythmic analysis; the groups of notes designated as motives need not be rhythmically grouped together, and at times it is more convenient that they are not. The most common instance of this is the upbeat pattern in the incipits of many classic themes, as in

ex 3.0b                  Pf Son K.332/i                  ac

in which the theme groups *rhythmically* as marked above the music, yielding units which one would have to label “a b b c”. But a grouping in terms of repeated *motivic* units is shown below the example, and it is the typical “anaphor” pattern, “b b b a” (cf. §3.3), which is, I believe, a more useful representation of the motivic life of this melody, partly because the anaphor pattern is common in this music, and a pattern like “abbc” is not. What is notable about many such examples is that these perceptions – the raw rhythmic grouping, and the recognition that the melody is built from three repeated motivic units, plus a contrasting fourth – are by no means mutually exclusive; one is able to recognize the anaphoric motivic pattern here simultaneously with the cross-cutting rhythmic groups.

3) Not all the motives need be of the same duration; so long as they each include (in the case of ex 3.0a and ex 3.0b) just one downbeat, they may vary considerably in length, if that is what the details of the melody seem to require.

4) Since, once again, motivic analysis deals with units which are *repeated*, either directly or at a remove, “motives” and groups that do not recur within the melody under analysis can be represented simply by the blank “metric place-holder” (-).

<sup>1</sup> Cf. Schoenberg, *Fundamentals*, p 8: “A motive appears constantly throughout a piece; *it is repeated*.” Also, p 9: “A motive is used by repetition.” (emphasis original)

It will be instantly obvious that this is a highly subjective enterprise, with many ambiguities and undecidables. In ex 3.0a above, for example (Sym H.87/ii), neither the second “b” nor the second “a” are exactly identical to their first instances. One can in such cases resort to the use of subscripts; and here the motivic representation for ex 3.0a might be more accurately written [b a<sub>2</sub> a<sub>2</sub> b a<sub>3</sub> - c]. The motivic principles below, however, are formulated almost completely without reference to this kind of nuance.

Notice also in ex 3.0a that the melody is accompanied by a flute obbligato upon its repeat, which joins the principal melody in m.13, adding a few more notes to it. This kind of surface variation and/or contrapuntal addition is a commonplace when melodies are directly repeated; it figures little in the following discussion of motivic structure, and I have usually ignored it in a melody's motivic description.

The metric level of the analysis is purely a matter of convenience, and is in many cases arbitrary. In general, the most useful level for an analysis is the highest one (that is, the coarsest, with most widely-spaced metric units) that shows all the repetition. However, for melodies with but one short redoubled motive, I find it convenient to use superscripts, as in

ex 3.0c      Pf Son H.37/i      ac

3.1 It is obvious that there are a variety of motivic situations which this kind of meter-bound analysis cannot really hope to deal with:

1) motives across the prevailing meter:

ex 3.1a      Vn Son K.305/i, 24      ct

and similar metric complications, such as barline shift, motives extended beyond their normal length or out of their normal metric position, etc.

2) canon, *Stimmtausch*, or other contrapuntal procedures in which two or more recurring motives are heard simultaneously:

	SQ H.42/iii	ct%
ex 3.1b	Sym H.103/iv	ac
	Pf Conc K.467/i, 28	ct
ex 3.1c	Sym K.551/i, 56	ac
	<i>Don G. K.527/Ov, 77</i>	ct

Some of this counterpoint can be displayed simply by using two or more simultaneous strings of letters, but, like the other circumstances mentioned in this section, it is not a systematic feature of the motivic construction of the melodies in this repertory.

3) continuous (adjacent) motivic transformation:

	Sym H.90/iii	ct*%
ex 8.23b	Pf Son K.311/ii, 16	ac (mm 17-21)
ex 5.1a	Pf Son K.333/iii, 76	ct* (mm 83-87)
ex 3.1d	Pf 4t K.493/i, 28	ct%

4) remote and subtle motivic relations:

ex 2.14b      Sym K.385/iv      ac\* (mm 9-10 vs. mm 1-2)

5) “supramotivic” relations, as in

ex 3.1e Pf Conc K.453/iii dx\*%  
 in which the first half of the melody ascends, and the second half descends.

In each of these cases, of course, the above features may be the most arresting and significant aspect of the individual melody. But the fact remains, these techniques do not have *repertorial* significance; if they did, they would of course attract less attention in the individual case.

Another example will show the relativity of motivic analysis: in a homogeneous context, small motivic variations assume an importance for the shape of the melody that they would hardly have in a more active environment:

ex 3.1f Pf Conc K.466/i ct%\*

3.2 Some further symbols that are occasionally useful in motivic analysis have already occurred in the foregoing examples:

+ for a motive that is repeated *only* in a “corresponding position” within the second half of a two-part melody, or in the second limb of a ct.

b for the initial motive of a melody and its recurrences.

a,c for the medial and terminal cadential motives, respectively, even when not occurring elsewhere.

o for a “motive” that is a single note; a frequent termination.

ø for a “motive” that is a rest, or a note tied back; one of the inevitable artifacts of a metric analysis of motives.

3.3 Obviously, for any given melody there will be a whole interrelated array, a family, of plausible motivic analyses, often on alternative metric levels. The end product of this kind of analysis of the repertory is thus a large number of “motivic strings”, sequences of letters and other symbols, which in a sense constitutes the subject matter of a theory of motivic construction. That theory seeks the order here, if any – what kinds of strings may occur, and how often do they do so? What strings are forbidden, and can one say why? Since it has been necessary in practice to deal with just one string per melody, our “motivic theory” will end up with the quite weak claim: that for each melody, at least one plausible motivic interpretation fits the principles to be set out below.

These principles are taken up more fully in §14 and §18. We can begin at once, however, by noting that there are just three motivic patterns occurring often enough to require names:

1) the familiar *bar*, [b b - c], or equivalently, [b b - -]; less often the triple-proportioned [b b -] or [b b c];

2) the *replica*, [b a b c] (or equivalently [b - b -]), the “open-closed ending” form; and

3) the *anaphor*, [b b b c] (or [b b b -]), whose name derives from the rhetorical term *anaphora*.

Thus, for example, such motivic patterns as “abbc”, while by no means forbidden, do not occur at all frequently or systematically. And more surprisingly, perhaps, virtually nowhere in this repertory at any level below that of the larger formal plans such as sonata, rounded binary, etc., does one find patterns such as abba, abca, and the like. In other words, and in contrast to such repertories as nineteenth-century Italian opera melody, or folksong from the British Isles, Viennese High-Classic instrumental themes and melodies almost never end as they begin. (The rare exceptions are discussed in §14.933; see also §20.6).

#### 4.0 The interaction of motivic and cadential schemes

Even though the motivic scheme and the cadential plan of a melody are here discussed separately, in most cases the two reinforce each other. That is, a ct cadential scheme is most often set with barform motivics. Ac and tc melodies are preponderantly supplied with replicate motivics, and thus combine a “second ending” harmonic scheme with an analogous motivic one. Reflexes and duplexes are often replicate, but are nearly as likely to be some much less common, and hence unnamed, motivic pattern. The anaphor is common in both two- and three-part cadential schemes, representing as it does a kind of summation of the bar and replica:

b b - - (bar)  
b - b - (replica)  
 b b b - (anaphor)

Once again, the whole point of resolving a melody into its cadential structure and its motivic shape is to help us deal intelligently with equivocal instances, something we are required to do once we have claimed that this entire repertory consists of a small number of “melodic types”. Even though most melodies are unambiguously two- part or three-part, there are a fair number of intermediate examples, and we can locate the source of this intermediacy by regarding these aspects of the melody separately.

As we shall see in [section 12](#), if a melody’s motivic structure is clearly bar-form, or clearly replicate, then the resulting summary rhythmic result is usually that of a three- or two-part tune, respectively, in spite of an ambiguous or even countervailing cadential scheme. That is, a ct cadential scheme set with replicate motivics will subdivide into two parts ultimately; and conversely, bar motivics tend to override a two-part cadential scheme to produce a three-part melody.

However, the practice of labelling each melody according to its ultimate rhythmic shape can lead to a confusion, which we here try to avoid. Properly speaking, these summary melodic *Gestalten* should be labelled simply “two-part” and “three-part”; the designations ac, ct, rx, and the rest ought to be reserved for a melody’s cadential structure alone, and the motivics ought to be designated only by bar, replica, and anaphor. But “two-part” and “three-part” convey little information about the harmony, and mask the fact that the two-part population of this repertory quite clearly divides into ac, tc, rx, and dx types. “Antecedent-consequent” is moreover a term with a long tradition, which it would be best to preserve. Therefore, two-part melodies are ultimately labelled ac, tc, rx, and dx, it being understood that “rx” (for example) is an abbreviation for “two-part melody with a nontonic medial cadence and a continuation beginning with nontonic harmony (even though the purely cadential structure may have a strong ct component, overridden by replicate motivics)”. Similarly, to designate a melody as “ct” means “three-part melody”, and in a few cases “...with ac (or tc, rx, or dx) cadential structure nevertheless supervened by bar-form motivics”. Thus as labels ct, ac, etc. are used in a somewhat double sense: it is possible, though unusual, to have a melody designated “ct” without a strong ct cadential structure (cf. [§12.21](#) and [§12.22](#) below).



## 5.0 Modulation, deflection

We have up to now been treating melodies as though they all ended in the tonic, but of course very often they do not: since they are all embedded in longer works, many melodies either

- 1) cadence on a strongly-tonicized dominant chord, that is, locally modulate to V; or,
- 2) cadence on some other local tonic (e.g., III in minor); or
- 3) cadence on the (untonicized) dominant of the home key, frequently prolonged into a “composed-out fermata” ( $\hat{V}$ ) to proceed thereafter either in the tonic or the dominant key; or
- 4) cadence on the dominant of some new key, usually V, to proceed thereafter in that new key.

Especially in the case of (1) or (3), it can be difficult to decide whether what comes after the cadence should be considered new material, or whether in fact what we have reached is better understood as the medial cadence of some quite long melodic structure. It usually decides for the latter case, of course, when the material after the cadence bears an obvious motivic relation to what goes before; or when it is short, well-structured, and supplies a strong  $I_k$  missing from the previous music. But the connection between two adjacent and semi-articulated melodic units can run through a whole range of relations, and it must be recognized that in the middle of this range one does not really know whether to speak of one theme or two. Decisions of this kind are discussed on detail in §8.

In any case, melodies which conclude (or stop, or are cut short) with harmony other than the tonic will be referred to as deflected, and designated as such with an asterisk (\*).

I have generally not considered a melody deflected when it changes key after a satisfactory, even if weak,  $I_k$ , as in (among many examples)

ex 5.0a	SQ H.46/i	ct
ex 5.0b	Pf Son K.330/i	ct

in which the modulation takes place during a recadence that becomes a transition to new music. There are, however, cases in which such a deflection is grouped quite strongly with the preceding melody, even though occurring after  $I_k$ , and in such exceptional cases I have considered the tune deflected:

ex 5.0c	Sym H.88/ii	ct*%
	(The modulating phrase is short, and is grouped with the preceding melody by the repetition of the whole.)	
ex 5.0d	SQ. K.499/iv, 14	ct*
	(The deflection occurs within the dec ac % structure that forms the tail of the ct.)	
see also	Sym H.86/ii	ct*

Here are two fairly ambiguous cases; the music after the  $I_k$  may or may not group back:

ex 5.0e	SQ H.58/i	pdx (or pdx*%?)
ex 7.3c	Vn Son K.305/i	rx% (or rx*%?)

And in the opposite sense,

ex 5.0f	Pf Son K.457/iii, 46	ct
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appears to end with V, but a “late”  $I_k$  phrase is superadded which clearly groups back.

5.1 A few other melodies which deflect in an odd way might here be mentioned:

ex 5.1a	Pf Son K.333/iii, 76	ct* (which is cut off just before the tonic of the I <sub>k</sub> )
	Pf Conc K.467/i, 222	ct%* (similar)
ex 5.1b	Pf Son K.533/i	dx%* (which does altogether without I <sub>k</sub> the first time, and just slides into the new key at the repetition)
	Sym H.98/iv, 118	ac* (similar)
ex 5.1c	Pf Son H.42/ii	rx%* (a very early deflection)

5.2 Nearly all the melodies in this repertory which modulate do so either to the dominant, or (in minor) to the relative major. This is a convenient place to list the few exceptions, many of which deflect in unusual directions for larger structural reasons: because they are melodies in a movement's development, or in some other transitional passage:

to  $\flat$ VII:

	Pf Son K.457/ii, 24	ct%* (then to V)
ex 12.4321b	Vn Son K.481/ii, 16	ct*
ex 10.1j	SQ K.428/iii, trio	ct%*
	Sym K.543/ii, 30	ct*

to vi, or  $\flat$ III→I:

	SQ H.37/i	ct
	SQ H.41/iv	rx%* (ends V/vi)
	SQ H.58/iii, trio	ac%* (ends V/vi)
	SQ H.79/i	ac%*
	Pf Conc K.466/i, 33	ct*
	Pf Conc K.467/ii, 73	ct*

to  $\flat$ VI, or iii→I:

ex 12.44c	Pf Trio H.16/iii, 64	ct%*
	Pf Trio H.29/i, 51	ct*
	Pf Son K.576/ii, 17	ac*
	Hn Conc K.495/iii, 84	ac*

to IV:

ex 11.3b	Vn Son K.376/i, 48	ac%* (then to ii)
	Pf Conc K.413/i, 24	rx*
	Sinf Conc K.364/i, 174	prx%*

to III, or  $\flat$ VI→I:

	Pf Trio H.24/i, 30	ct*
ex 12.4314c	SQ K.465/iv, 88	ct
	Vn Conc K.219/iii, 78	dx%*

to iii:

	SQ H.71/ii	tc*%
ex 12.4311a	Sym H.88/iv	tc*%

to bIII (in major):

	Pf Conc K.449/ii, 41	ct*
	Sym K.550/ii, 20	ct*

to II (or, IV→V):

ex 11.3a	Pf Son K.570/i, 23	ct*
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to ii:

	SQ H.76/ii, 16	ac* (ends V/ii)
ex 14.922a	SQ H.80/ii	ac%*

to bII:

	Vn Son K.402/i, 52	ct%* (ends V/Np)
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## 6.0 The repetition of melodies

What we are now discussing is the direct, adjacent repetition of melodies, as opposed to their recapitulation after intervening music.

It is a reasonable theoretical goal to specify the circumstances under which a melody requires repetition in order to conclude satisfactorily, those circumstances under which repetition is optional, and those under which it is undesirable. Such a goal is, however, highly elusive. Repetition seems to depend, but only partially, on the overall length and complexity of the original melody, attributes difficult to specify with any precision. The problem is complicated by the fact that one's intuition in this regard is frequently uncertain, and in some instances, I think, actually at odds with the music.

For example, in many repetitions specified by repeat signs, such as in

ex 6.0a      Cl 5t K.581/iii      ct%

one hesitates to say that any internal quality of the melody actually requires repetition; it repeats, one suspects, only for "formal" reasons, because it is the first strain of a minuet. And of course, such a melody will not be repeated upon the *da capo*. But also in written-out repeats, one can at times ask, is this repetition really necessary?

ex 6.0b      Pf Son K.309/ii      ac%

Similarly, one finds frequently enough non-repeated melodies which one can readily imagine directly restated without tedium, perhaps with a change of instrumentation or register:

ex 6.0c      Sym H.97/i, 76      rx  
 ex 6.0d      Pf Son K.311/i, 16      ac  
 ex 6.0d      Pf Son K.281/iii      ac

Clearly, if intuition fails in such cases, theory ought not to succeed.

On the other hand, it happens often enough that a melody's repeat really does seem necessary, and that without it the tune just seems "too short" or incomplete:

ex 6.0e      Pf Trio H.27/iii      ac%

But if this depends upon some straightforward measure of length or complexity, I have been unable to discover it.

6.1 One must also realize that there are situations intermediate between a full literal repeat and a mere single statement. Here are partial repeats that deflect:

ex 6.1a      Pf Son K.333/i      ct%\*  
 ex 3.1f      Pf Conc K.466/i      ct%\*

In contrast, the following melodies present situations in which the melody also begins anew, but proceeds only for a very short way, usually in counterpoint, forming a transition to new material:

ex 6.1b      Pf Son K.457/i      ct  
 ex 6.1c      SQ K.387/i      ct  
               SQ K.458/iii      ct  
               SQ K.464/i      ct  
               Str 5t K.614/i      ct

These I have not considered repeated, but obviously this is another situation where a firm boundary-line is impossible to draw, and I cannot claim to have been completely consistent.

Notice the notation: \*% designates a melody deflected, then repeated, almost always with the same deflection (as with a double bar); whereas %\* identifies a melody which ends in its own tonic the first time, and is deflected only at or during its repetition.

6.2 Listed below are the examples in our repertory of repeats with unusual or interesting features:

6.21 Melodies which change mode upon repetition (all from minor to major):

ex 3.1d	Pf 4t K.493/i, 28	ct% (% starts vi, to IV, to I)
	Cl 5t K.581/i, 42	ct%
ex 12.44h	Pf Conc K.503/i, 50	ct%
	Pf Conc K.537/iii, 89	ac%

In some two-part melodies the second half changes mode; cf. §13.34.

6.22 Shortened repetitions:

ex 13.33b	Pf Son H.52/i	dx%*
	Sym H.98/i, 16	dx%
ex 18.42a	Pf Conc K.467/ii	ct%

For two-part melodies with shortened second halves, cf. §13.33.

6.23 Melodies which change form upon repetition:

	Pf Trio H.13/ii	ptc%; % as pdx
	SQ H.49/ii	rx%*; % as dx*
	SQ H.75/ii	ac%; % as rx
ex 13.224b	SQ H.77/iv	ac%*; % as rx*
	SQ H.81/ii	ac %; % as rx
	SQ H.81/iii, trio	ct%; % as dx; 3rd % becomes transition
	Sinf Conc K.364/ii	ac%; % as rx*

6.24 Melodies with more than one repetition:

ex 17.1a	Pf Son H.35/i, 45	ct%; the [single] repetition is internally doubled
	Pf Trio H.22/i, 16	ct%*; a triple statement (i.e., % twice)
	SQ H.44/iii	ct*%; a quadruple statement, articulated 2+2
	Sym H.89/ii	ac; a quadruple statement (via % sign)

6.3 A relatively short and uncomplicated melody which ends abruptly – i.e., with a brisk  $I_k$  in a weak measure (cf. the discussion of “morphological length”, §13.35) – and which therefore seems to urge repetition, will occasionally be followed instead by a quite similar melody, joined to it only by proximity, by “conjunction” (cf. §2.13):

ex 10.42a	Str St K.515/ii, trio	upac*
ex 6.3a	Pf Conc K.271/i, 26	rx

Here, it’s as though the second tune serves as the repetition, without being one; and the connection between the two melodies is the equivalent of the carpenter’s “butt joint”: they form a pair, but not a unit.

## 7.0 Nondeflecting melodies ending without I<sub>k</sub>.

We have discussed in section §1 the typical full I<sub>k</sub> cadence that is the most characteristic harmonic conclusion to a melody, and we considered in §5 the class of melodies which escape through deflection the obligation to end with I<sub>k</sub>. This section will examine all the non-deflecting melodies which nevertheless end without I<sub>k</sub>. These melodies represent, then, either modifications or outright violations of the principle proposed, that a melody either ends with I<sub>k</sub> or deflects. These exceptions notwithstanding, the strength of that principle is to be judged by the relatively small number of such contraventions: §7.1 – §7.4 will attempt to list them all.

First, however, we will examine, in §§7.01-7.03, some circumstances which do not sufficiently weaken a cadence to remove it from the I<sub>k</sub> category, and which therefore I have not systematically searched the corpus for, as I have for the melodies in §§7.01-7.04.

7.01 In the first place, it appears to be quite an adequate conclusion to a melody, to end with a cadence that is merely weakened by rhythmic de-emphasis, elision, or by avoiding the tonic pitch in the leading voice:

ex 7.01a	Pf Son K.283/iii	ct
ex 7.01b	Sym H.83/iv	rx%

7.02 Short interpolations in the essential 4°-5°-1° bassline motion are common; typical is 4°-#4°-5°-1°:

ex 7.02a	Pf 5on K.576/ii	ac
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Other interpolations are, however, quite possible:

	Ser K.525/iii, trio	ac%
ex 7.02b	Fl 4t K.298/ii	ac%
ex 7.02c	Pf Conc K.414/i	ac

7.03 In cases where a melody or the end of it repeats, it appears to fulfill the I<sub>k</sub> obligation if either time the I<sub>k</sub> is achieved, whether the first or the last. Thus,

7.031 Some melodies include the I<sub>k</sub> first, which is harmonically weakened or omitted upon repetition:

	SQ H.69/iv	ct
ex 7.031a	Pf Son K.333/i, 39	ct
ex 7.031b	Cl 5t K.581/i, 42	ct%
	Hn 5t K.407/i, 33	ct%
	Fl-Hp Conc K.299/iii, 112	ct%
ex 10.1m	Pf Conc K.491/i, 147	ct
	Pf Conc K.537/i	ct

7.032 Conversely, it can sometimes happen that only upon the repetition does a melody conclude with I<sub>k</sub>:

ex 7.032a	Sym H.93/i, 74	ac%
	Pf Trio K.542/ii	ac%
	Pf Conc K.415/iii	ac%

These melodies are nevertheless classified as shown, rather than as (in each case) a single long tc, because of the obvious open- closed endings of the replicate motivic structure, which is repeated.

Much more common is a melody which ends with a weak or non- existent cadence, which is then supplied by the recadence:

ex 7.032b Vn Son K.304/i ac

If, however, the recadence is sufficiently elaborate and motivically distinct, it begins to sound like the melody really did end without  $I_k$ , and I include it in the tabulations below, as with

ex 7.2b Pf Conc K.450/iii ac

In all the cases above, then, we can consider the  $I_k$  obligation to be somehow fulfilled. In the sections below, we discuss all those circumstances, and all the instances, in which a non-deflecting melody genuinely fails to supply a strong  $I_k$  at its conclusion.

7.1 In the following themes, the cadential subdominant is weakened in one of four ways: it is either inverted; or replaced by a chord on  $\sharp 4$ , or  $2^\circ$ , or  $\flat 6^\circ$ ; or occurs over a pedal-point, so that the strongest bassline  $4^\circ-5^\circ-1^\circ$  does not occur; or it is separated from the following V by a pause. (I have also included in this list the few examples with an inverted tonic or dominant.)

ex 8.23a	Pf Son H.52/i, 27	ac
	Pf Son H.52/i, 33	ct
ex 7.1a	SQ H.78/iv	ac%
	Sym H.88/i, 61	tc
	Pf Son K.280/ii	rx
ex 17.3b	Vn Son K.380/i	ct
	Pf Trio K.542/ii	ac%
ex 7.1b	Pf Trio K.548/i, 30	ct
	Pf 4t K.478/ii, 35	ac
ex 9.12a	Pf 4t K.493/i, 79	ac
	SQ K.499/ii, trio	ac%
	Str 5t K.515/iv, 102	ac
	Str 5t K.614/i, 38	ac
ex 18.35a	Cl 5t K.581/i	ct%
	Pf-WW 5t K.452/i, 21	ac
	Pf-WW 5t K.452/i, 43	ac
	Fl-Hp Conc K.299/iii, 207	tc%
	Pf Conc K.450/iii, 93	tc%
	Pf Conc K.459/i, 16	ct
	Pf Conc K.459/ii	ac
	Pf Conc K.466/iii, 139	ac%
	Pf Conc K.595/i, 16	ac
	Pf Conc K.595/iii, 65	ac
	Fig K.492/Ov, 59	ct%

7.2 Of melodies without any kind of  $I_k$ , weak or otherwise, many have a “neighborhood subdominant”, one that occurs prominently in the vicinity of the cadence, but fails to proceed in a direct linear way to the V:

ex 10.411a	Pf Trio H.8/i	pv+ct%
	Pf Trio H.9/ii	ct%
	Pf Trio H.14/iii	rx%
ex 7.2a	Pf Trio H.16/ii	ct%
	Pf Trio H.25/iii, 121	tc%
	SQ H.63/i, 8	ct
	Sym H.87/iii	rx
	Sym H.100/i, 24	ac
ex 5.0b	Pf Son K.330/i	ct
ex 10.231c	Pf Son K.570/i	dx
ex 18.34a	Vn Son K.378/i	ct%
ex 18.11a	Pf Trio K.496/i, 37	ct
	Fl 4t K.298/iii	rx
	Pf -WW 5t K.452/ii	ac
	Pf Conc K.414/iii, 21	ac
ex 7.2b	Pf Conc K.450/iii	ac
	Pf Conc K.466/ii, 40	ct
ex 7.2c	Pf Conc K.488/i, 30	ac
	Pf Conc K.537/i	ct
	Vn Conc K.219/i, 19	ct
	Vn Conc K.219/i, 74	ac
	Sym K.425/ii	rx
	Sym K.425/iii, trio	ct%
	Sym K.504/ii	tc

7.3 The two foregoing sections list melodies whose final cadence includes a subdominant which is neither prominent nor proximate. That leaves tonic cadences in which IV simply plays no role, which often conclude melodies of which, as a whole, the same can be said – that they do without the subdominant altogether. Many of these, about 3/5, are square-cut, *semplice*, deliberately folkish melodies, often the subject of a theme-and-variations movement, or of a rondo, or the first strain of a binary (cf. §11.10), or a short closing tune in a sonata exposition. Furthermore, to many of them is appended a recadencing epilog, which, although not really grouping strongly with the melody itself, provides a strong I<sub>k</sub>.

ex 7.3a	Pf Son H.37/iii, 60	ac%	binary
ex 7.3b	Pf Trio H.10/i	rx	
	Pf Trio H.25/iii, 34	tc%	rondo
	Pf Trio H.25/iii, 67	tc%	rondo
	Pf Trio H.25/iii, 83	ct%	rondo
	SQ H.38/ii, trio	rx%	binary
	SQ H.41/iii	rx%	binary
ex 5.0a	SQ H.46/i	ct	
	SQ H.46/iii, trio	dx%	binary
	SQ H.60/ii	ac%	
	SQ H.64/iii, trio	rx%	binary
ex 12.4322a	SQ H.75/i, 72	tc	closing
	SQ H.81/iv	tc%	
	Sym H.82/ii	ac%	binary



	Sym H.85/iii, trio	tc%	binary
	Sym H.87/iii, trio	tc%	binary
	Sym H.88/i, 16	ct%	
	Sym H.90/iv	ac%	
	Sym H.97/iii, trio	rx%	binary
	Sym H.104/iv	ac%	
	Pf Son K.332/iii, 15	tc	
ex 13.31e	Vn Son K.301/i	ac	
ex 7.3c	Vn Son K.305/i	rx%	
ex 7.3d	Vn Son K.376/iii	ac%	rondo
ex 8.3c	Vn Son K.454/iii, 16	tc%	
	Vn Son K.547/i, 40	ac	binary
	Pf Trio K.496/iii	ac%	binary, variation
	Pf Trio K.502/iii	ac	
	Pf 4t K.478/i, 57	ac	
	SQ K.387/iv, 92	tc%	<i>semplice</i>
ex 7.3e	SQ K.575/i	ct%	
ex 8.3a	SQ K.575/i, 87	tc	
	Str 5t K.516/iv, 138	ac	binary
ex 12.4311c	Str 5t K.614/iii, trio	tc%	binary
	Ob 4t K.370/iii,51	tc%	
	Clar Trio K.498/iii	ac%	rondo
ex 7.3f	Pf-WW 5t K.452/iii, 40	ac	epilog with I <sub>k</sub>
	WW Ser K.375/iv, trio	ac%	binary
	F1-Hp Conc K.299/iii	ac	rondo
	Hn Conc K.495/iii	ac%	rondo
	Pf Conc K.415/i, 60	ac	
	Pf Conc K.456/iii	ac	rondo
	Pf Conc K.466/ii	ac%	binary
	Pf Conc K.467/iii	tc%	binary
	Pf Conc K.482/iii	ct%	rondo, binary
ex 10.1n	Pf Conc K.482/iii, 51	ct	
	Pf Conc K.482/iii, 218	ac%	binary
	Pf Conc K.491/ii	ac%	binary
	Pf Conc K.537/ii	ac%	binary
	Pf Conc K.537/iii	ac%	rondo
	Pf Conc K.537/iii, 137	tc	
ex 12.222a	Pf Conc K.595/iii	ac%	binary, rondo
	Vn Conc K.219/iii, 164	tc%	binary
	Sinf Conc K.364/i, 72	ct	
	Sinf Conc K.364/iii, 16	ac%	rondo
	Sinf Conc K.364/iii, 80	ac%	rondo
	Sym K.543/iii, trio	rx%	binary
	Sym K.551/iii, trio	ac%	binary

7.4. Two interesting special cases:

A cadence weakened by smearing it into the next melody:

ex 7.4a Pf Conc K.453/i, 110 ac

A cadence across a meter and tempo change:

ex 7.4b Vn Conc K.218/iii ac

7.5 We have in the foregoing been restricting our attention to non-deflecting melodies. It can happen, of course, that a deflected melody too will make a tonic cadence in its new key that is weakened in a way corresponding to those mentioned above:

ex 7.5a SQ H.39/ii, 34 tc\*%

ex 7.5b Sym H.94/iii ct\*%

Sym H.96/iv ac\*%

ex 7.5c Pf Son K.331/iii dx\*%

SQ K.465/iii, trio ct\*%

ex 12.44a WW Ser K.375/ii, trio ct\*%

WW Ser K.388/iv ac\*%

Pf Conc K.482/ii, 124 ct\*

Two interesting examples of deflected melodies which just run off into the sand, rather than cadence:

ex 5.1b Sym H.93/iv, 118 ac\*  
Pf Son K.533/i dx%\*

7.6 To summarize: if one adopts the strong form of the principle, that a theme in this repertory either cadences with a strong  $I_k$  including a  $4^\circ$ - $5^\circ$ - $1^\circ$  bass clausula, or deflects, the corpus shows (by my count) 106 exceptions, as we listed them in §§7.1-7.3, out of a total of 904 non-deflecting melodies. If, however, one modifies the principle to allow for somewhat weaker cadences (as in §§7.1-7.2) and furthermore exempts rondo tunes, binary first-strains, and a few other situations (as noted in §7.3), that leaves us with only 20 of these more serious violations of the principle, as listed in §7.3.

7.7 We have been discussing melodies which appear to conclude satisfactorily without a full cadence. The reverse situation, melodies which appear to continue past such a cadence, is taken up in §8.3 and §8.4, in the context of melodies with problematic endings in general.

The following section continues our consideration of the way melodies end; sections 8, 9, and 10 together constitute a discussion of ambiguities and unusual situations at the boundaries – both beginnings and endings – of Classic instrumental themes.

## 8.0 Ambiguous or indecisive endings

There are two primary signs that a melody has ended: the  $I_k$  cadence and the onset of motivically unrelated material. When these two signs are in conflict, it can be difficult to decide where, or whether, the melody ends. We have already noted in §5 the possibility that a theme can close with a dominant cadence, provided that the music which follows bears no obvious direction motivic relation to what went before; but this kind of ending can be inconclusive. Similarly, a  $I_k$  cadence followed by motivically related material is potentially ambiguous – has the melody finished or not? In this section we will discuss the possibilities systematically, and discover that the way the music behaves just at the point of juncture can be decisive.

8.10 The combination of a dominant cadence with a motivically-related continuation represents the most conjunctive situation, and it seems unequivocally to join the two phrases into part of a larger structure. That is, I find virtually no examples in which a theme seems to conclude with V in spite of a motivically-related continuation. The nearest example is

ex 8.10a      Pf Trio H.20/i      ac\*

I have considered the fermata in bar 12 the midpoint of a long ac\* that ends (with a prolonged V/V) in bar 27; but the fairly distant motivic relationship of the material in mm 13 ff to that of the opening causes, perhaps, some doubt about whether the theme really continues past bar 12. [For the  $I_k$  in mm 4-5 cf. §9.22; for the construction of mm 1-12, cf. §10.233.] Conversely, the material in 28 ff is also (typically for Haydn) related to the opening motive, but since this is the obligatory “exposition second theme” in the dominant (cf. §8.24), I have chosen m 27 as the opening theme's endpoint.

8.11 However, circumstances in which a dominant cadence separates two phrases which are motivically identical or closely similar can present a problem of taxonomy, if the second phrase also ends non-tonically. Should we consider the whole complex a single ac\*, or the repetition of a smaller deflected melody?

I have decided to identify such constructions as a single larger ac\* only if the second (non-tonic, usually dominant) cadence is significantly stronger harmonically than the first. For example, in

ex 8.11a      Vn Son K.379/i ac\*  
ex 2.12a      Vn Son K.454/i, 14 ac\*

the medial cadence – m 8 in K.379, m 21 in K.454 – is definitely on the dominant, in the key still of the tonic, as we know from the pre-dominant  $I_4^6$  and IV, respectively. The answering cadence in K.454, m 29, is, in contrast, in the key of the dominant, highly tonicized with a full cadence – what we might call a  $V_k$ . And in the case of K.379, we pause in m 19 on a half-cadence in the new key. In both cases, and similarly in melodies where the deflection is to some other key (e.g., to  $b$ III as in ex 13.223c Sym. K.550/i ac\*) the change of key has produced the sort of harmonic progress from medial to final cadence characteristic of both ac and ac\*.

On the other hand, to the extent that the answering dominant cadences have the same harmonic value – if, for example, they're both simple dominants in the home key, or both full cadences in the new – we can consider the passage in question to be an example of a deflected melody repeated. This most frequently occurs with simple repeat-signs at the double bar, and in such a case I have invariably analyzed it as a repeated melody. But of course repeats may be written out:

ex 19.23a      Pf Son H.40/ii, 25      ct\*%  
ex 12.4311b      Sym H.94/ii      ac\*%

ex 12.44g Pf Conc K.450/ii ct\*%

This principle holds even when the second cadence is expanded, intensified, or elaborated: if the harmony remains basically unchanged from one (non-tonic) cadence to the next, and the motivics repeat, it should be considered a melody-type doubled:

ex 8.11b SQ H.37/iii ct\*%  
ex 11.10f Hn Conc K. 417/ii tc\*%

8.20 An emphatic dominant cadence separating two relatively long, complex, and motivically unrelated phrases can produce highly equivocal articulations, and the grouping at such junctures is strongly influenced by two principles:

- 1) A dominant cadence which is marked by a (literal) fermata, by a “composed-out” fermata (via oscillation or some other V-prolongation), or by some other extended emphasis on the dominant arrival (e.g., repeated chords) will tend to stop the phrase, to end the melody; and
- 2) a following phrase which begins squarely on a local tonic  $\frac{3}{2}$  will tend to sound like a new beginning, and will likewise be disjunctive.

8.21 Joints combining these features are therefore quite divisive, and nearly always mark the ends of deflected melodies:

ex 8.21a Pf Son H.43/i, 12 ac\*  
ex 16.11c Pf Trio H.5/ii ct\*  
ex 10. 31e Pf Trio H.16/i, 30 ct\*  
ex 2.30c Pf Son K.279/i, 48 ct\*  
Pf Son K.311/i v+ct\*  
SQ K.590/i ct\*  
Hn Conc K.447/i ct\*

Occasionally a special and sympathetic interpretation of V is required:

ex 8.21b Fl 4t K.285/i, 12 ct\*  
ex 8.21c Vln Conc K.218/i, 57 ct\*

And here is an example in which the V is composed out into its own little tune, and constitutes the entire second half of the rx-structure begun in m 8; the whole complex ends at m 47:

ex 8.21d Sinf Conc K.297b/i v+rx\*

8.22 The opposite situation, in which a “late V” – that is, one in which the onset of the dominant harmony is close to the cadence, and close therefore to the ensuing phrase; and in which the next phrase begins obliquely, with something other than a root-position tonic, marks an articulation much less divisive; here the two phrases usually group themselves into two halves of a single theme fairly unequivocally:

ex 8.22a SQ H.76/i, 13 rx  
Sinf Conc H.105/i rx  
Pf Son K.284/i, 22 rx  
ex 8.22b Pf Son K.333/iii, 16 rx\*  
ex 8.3g Vn Son K.380/ii rx\*% (mm 14-15)  
Schspl K.486/Ov, 35 rx

A phrase is judged to have an oblique harmonic beginning according to its first downbeat, as at the  $V\frac{4}{3}$  in m 9 of

ex 8.22c Pf Son K.282/ii, Men II rx\*%

8.23 Continuing our consideration of the general case, in which a dominant cadence is followed by motivically unrelated material, we find that the most equivocal articulations arise when a “late V” combines with a strong tonic (in the old or new key) beginning to the next phrase; or, conversely, a  $\hat{V}$  ending is followed by a phrase which begins obliquely. In such cases the phrases still often seem to group together, but weakly, ambiguously, and they can sound quite independent from one another:

ex 8.23a	Pf Son H.52/i, 27	ac
	Pf Son H.52/iii, 65	rx
	Pf Trio H.6/i, 26	rx
ex 13.33c	Pf Trio H.19/ii	rx*
ex 12.31c	SQ H.72/i, 31	ac
	Vc Conc H.1/i	tc*
ex 8.4a	Pf Son K.279/iii, 22	ac
ex 8.23b	Pf Son K.311/ii, 16	ac
	Vn Son K.547/ii, 32	ac
ex 12.323a	Str 5t K.516/iii	ac
	Fl 4t K.285/iii, 33	rx*
	Fl Conc K. 313/i	rx
ex 10.42c	Cl Conc K.622/i, 100	upac
ex 8.21d	Sinf Conc K.297b/i	v+rx* (mm 25-32)
	Pf Conc K.414/ii	ac
	Pf Conc K.503/ii	ac
	Vn Conc K.219/i, 74	ac
	Sinf Conc K.364/i, 94	rx

If such a cadence is "smeared over" it can be even less incisive:

ex 8.23c	Pf Trio H.14/i, 40	ac
ex 8.23d	SQ H.76/iv, 179	ac
	Pf Conc K.595/i, 16	ac

In such circumstances the internal character of the phrases can become determining: in these examples the passagework of the second phrase sounds derivative, and therefore groups back:

ex 13.211f	Fl Conc K.313/iii, 46	ac
ex 8.23e	Vn Conc K.218/i, 66	ac
ex 13.225b	Vn Conc K.219/iii, 31	ac

Conversely, if the new phrase starts with enough “shock” – forte, squarely on the downbeat, a change of texture or mode, etc. – it can overcome the forward tendency of the late V, and thus be heard as the beginning, rather than the continuation, of a melody:

ex 8.23f	Str 5t K.593/ii	ct*
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8.24 Formal considerations, however, can play a large part in one’s judgment at such ambiguous or equivocal junctures: the following are instances in which the phrase after such an articulation (dominant cadence followed by unrelated continuation) is gradually revealed to be a transitional upbeat to another melody, and so in retrospect groups away:

ex 8.24a	Pf Trio H.30/i, 16	ct*
ex 8.24b	Pf 4t K.493/iii, 35	ct*
	SQ K.499/i, 23	ct*

And when we know from the larger form of a work that the first phrase is a “bridge”, and hence transitional, an upbeat to the ensuing “second theme group”, then clearly the melody following even a weak half-cadence is difficult to hear as the second half of something:

ex 8.24c	Pf Son H.41/i, 8	ct*
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Similarly, when the music before the articulation consists of a tune and its quite literal repetition, the tendency is to consider the unit completed – i.e., as a melody repeated, rather than the first part of something else – and so begin a new group with the next phrase:

	Pf Son H.33/ii	ct*%
ex 8.24d	Pf Son H.35/ii	ct*%
	Pf Son K.309/iii, 19	ct*%

This is, of course, the way many binary forms begin; cf. §11.1.

8.25 An overlapping cadence on the dominant as a rule tends to connect the phrases which it ends and begins into a single larger two-part whole, since the first half ends on an unprolonged dominant, and the second half begins obliquely, on something other than a tonic  $\frac{5}{3}$  – namely, on the same dominant. Thus:

ex 8.25a	Pf Son H.36/i, 12	rx
ex 8.25b	Pf Son H.37/i, 17	rx

(For phrases overlapping on the tonic, cf. §9.)

8.3 We now turn to the case in which a  $I_k$  cadence, presumptively the end of a theme, is followed by music strongly related, often identical, to what went before. The question that usually arises here is, should the  $I_k$  be considered to divide a melody from its repetition, or is it in fact the medial cadence in a single large (usually tc) melody?

What seems to matter most here is the nature of the  $I_k$  itself, and its strength relative to the next tonic cadence. In a convincing tc melody the medial cadence has something unfinished or incomplete about it, even if not the harmony, upon which the succeeding  $I_k$  improves. Two frequent methods of diminishing the force of the internal cadence are:

1) weakening it rhythmically –

ex 8.3a	SQ K.575/i, 87	tc
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2) letting the leading voice pause on the third degree, instead of the tonic –

ex 8.3b	Pf Son K.332/ii,8	tc
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As the corresponding tonic cadences become more nearly identical, the melody tends to split in two – into a small tune and its repetition:

ex 8.3c	Vn Son K.454/iii, 16	tc%
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In general, it seems a downbeat  $1^\circ I_k$  cadence is final enough to close a melody, and when it occurs in situations like this I have generally considered it the melody’s end, and thus the ensuing material the melody’s repetition, even though the cadence of the repetition is often made more emphatic, preserving the open/closed ending formula:

ex 8.3d	Pf Trio H.17/i, 26	rx%
	Pf 4t K.493/iii, 72	ac%

ex 8.3e          SQ K.464/i, 37          tc%

Similarly, should the second (motivically similar) phrase deflect, I have considered it a deflected repetition of the first part, rather than the second half of a single larger tc\*, if the earlier cadence is near enough to a full I<sub>k</sub> to have closed a melody:

ex 2.30a          Pf Son H.39/ii          ct%\*  
ex 5.1b          Pf Son K.533/i          dx%\*

If a I<sub>k</sub> is followed by material which repeats the motivics but not the harmony of the opening, the possibility of considering it a mere repetition is foreclosed. In such cases, all that can be said, is that although I<sub>k</sub>'s usually end a melody, here they do not:

ex 8.3f          Sym H.84/iv          dx  
ex 8.3g          Vn Son K.380/ii          rx%\*

And in the following example, the music repeats, not directly after the I<sub>k</sub> but at a remove; after the I<sub>k</sub> in m 9 comes a half-cadence (mm 18-19), turning the whole into a large ac\*:

ex 8.3h          SQ H.45/i          ac\*

A I<sub>k</sub> occurring past the earliest part of a melody is seldom simply “contradicted” like this, but there are a few similar examples:

ex 13.31d          Sym H.84/i, 21          ac  
Sym H.96/i, 18          ac\*  
ex 7.032b          Vn Son K.304/i          ac

See also §13.211 and §13.31; and §5.0.

8.4 The combination of a full I<sub>k</sub> with ensuing unrelated material is the most disjunctive of the four possibilities we have been considering, and it is almost inevitably divisive. Yet even here, a phrase which begins obliquely has a powerful tendency to back-associate; this is often the case with recadencing phrases (cf. §2.13), especially when they have been developed into their own little tune:

ex 8.4a          Pf Son K.279/iii, 22          ac

By convention, I have not included recadencing in the formal description of a melody's structure. The function of this kind of back-association is to connect the recadence not only with the melody whose cadence it re-emphasizes, but, in the example above, with the exposition as a whole, to which it forms the “closing theme”.

There are a few other instances when special circumstances compel us to group a melodic whole across an articulation in spite of a I<sub>k</sub> cadence and a motivically unrelated continuation:

ex 8.4b          Pf Conc K.415/iii, 49          dx\*

Were the Adagio melody not an interpolation in a rondo finale, one could expect in m 64 the reprise of the initial theme of 49 ff, or at least a return to C minor, thus forming a small tonic binary construction in which the first strain, cadencing in m 55, went unrepeated. Usually in such cases just the first section of the binary is considered “the theme” for analysis (cf. §11.11), but in this case, the return of the Allegro orphans the binary's midsection (mm 56-64), and so I have grouped it with mm 49-55, back across the I<sub>k</sub>, into a larger dx\*.

ex 8.4c          Sym H.86/i, 54          dx

We have, in m 64, an articulation which is either the end or the midpoint of a melody, combining a I<sub>k</sub> cadence with an unrelated ensuing phrase which begins obliquely, on the tonic  $\frac{6}{4}$ . However, does the melody in m 64 cadence on the tonic degree, with the flute, or on the 3<sup>o</sup>, with the violins? Given this ambiguity, I combined all of mm 54-74 into a large dx.

ex 8.4d          Sym H.90/i, 17          pv+ct

The opening of the Allegro in fact supplies the  $I_k$  to the slow introductory music; what follows, in mm 21 ff, is, in its harmonic rhetoric (the oblique entry, the emphasis on the subdominant) recadencing. But it is also obvious that, because of the tempo change, the whole complex from m 17 forward is to be the principal allegro theme of the exposition. For purposes of labelling, I considered mm 17-21 to be a special case of the kind of preliminary gesture characteristic of p-type melodies (cf. §10.41); but of course Haydn's famous wit here consists precisely in using what ought to be the conclusion of something as the main subject for symphonic discussion.

It should be remembered that our judgments about what constitutes an ending, and what groups with what, are at all times summary, the result of weighing multiple factors at once, and not of simply relying on cadences, for example, as a kind of code. For example, in

ex 8.4e          Fl 4t K.298/iii, 13          tc

the first eight measures form such a tight little unit, with replicate motivics and open/closed melodic endings, that the tune nearly stops in m 20, even though the simple tonic cadence there is not a full  $I_k$ . The fact that the ensuing phrase begins obliquely, and a strong  $I_k$  is supplied in m 28, groups the whole into a (nonmotivic) tc, I think; but just barely.



## 9.0 Overlapping I<sub>k</sub> Cadences

A truly overlapping cadence may be defined as one in which a new melody begins, or the melody begins anew, just as the harmony of a full cadence concludes on the tonic. Factors that contribute to the sense of true overlap here – as opposed to simply an unemphatic half-cadence – include a “late V” (as discussed in §8.22) and melodic continuity down to the 1° at the tonic of the I<sub>k</sub> in the leading part. To the extent that the music rushes on to both the tonic harmony and the tonic pitch, and just at that point (not later) a new melodic motion begins, do we have an overlapped cadence.

We will discuss in turn cases in which the two phrases articulated by the overlap are motivically similar, and those in which they are not.

9.11 If the music after the cadence is a literal repetition of a melody with an easily-identifiable cadential structure, I have usually classed it as such, considering it simply to have an “overlapped repeat”:

ex 9.11a	Fl-Hp Conc K.299/ii, 32	ac%
ex 9.11b	SQ H.79/iv, 76	rx%

9.12 In the following themes, what is repeated after an overlapped I<sub>k</sub> is a phrase without an identifiable internal cadential scheme. I have classed them as ac’s only because the melodic appoggiaturas suggest the briefest possible half-cadences before the repetitions:

ex 9.12a	Pf 4t K.493/i, 79	ac
ex 9.12b	SQ K 421/i, 32	ac

9.13 One might call the above examples “near-overlaps”. There are other instances, however, in which a completely-overlapped cadence articulates a phrase and its repetition, and that phrase has, apart from the repeat, no (standard) cadential structure:

ex 9.13a	Schspl K.486/Ov	?%
ex 9.13b	Don G K.527/Ov, 99	?%

9.20 We now consider the situation when the two phrases meeting at the tonic overlap are unrelated. Unlike dominant overlaps (cf. §8.25), overlaps on the tonic rarely of themselves join motivically-unrelated phrases into a single entity; many melodies within a larger work conclude with just such a cadence.

9.21 Motivically unrelated phrases articulated by an overlapping I<sub>k</sub> seem to form a single unit only in exceptional cases, as in

ex 9.21a	Pf Trio H.11/i, 32	ac
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in which the weakened and mobile cadence of mm 44-45 might be felt to join the whole into a single long (nonreplicate) ac – but a strange and oddly-jointed one. And in

ex 9.21b	Pf Son K.282/i	tc*
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the melody continues past the downbeat of m 3 only because the I<sub>k</sub> is quite early, and arrives only at the 3° in the soprano.

9.22 Overlapping arrivals on and departures from the tonic do, however, frequently join the two parts of a special kind of melody, the “P- type”: the opening part is short, usually annunciatory in character, and is followed by contrasting but definitely connected music:

ex 10.24a Pf Son H.38/i, 13 ptc\*

This kind of theme will be taken up in the next section (§10).

9.23 We should also note that an almost-overlapping cadence can cloud the issue of deflection: for example, in

ex 11.12a SQ H. 74/ii, 23 rx\*

the question is, does the melody begun in m 23 conclude with the (major) tonic in m 38 – in which case we have a plain undeflected rx – or, as I think, with the half-cadence in m 37 (since the soprano seems to come to rest on the B $\flat$ ), so we have rx\*?

## 10.0 The beginnings of themes: upbeats, p-types, and v-types

It often happens that themes begin with an opening motive or phrase whose relation to the music that follows is in some way unusual, uncertain, remote, or otherwise calls for comment. We shall in this section consider in turn simple upbeats, melodies beginning with an annunciatory P-section, melodies beginning with a framing V-section, and a few intermediate types.

10.1 Upbeats are metrically weak, usually short, openings to a melody, recognized as upbeats most often by a solo or few-voiced setting in the upper parts, frequently harmonized with just unisons or octaves, adding the lower parts and full harmony at the tonic downbeat. The impression is most unequivocal when the upbeat implies dominant harmony:

ex 10.1a	Pf Son K.310/i, 22	tc
ex 10.1b	Pf 4t K.478/iii, 70	ct

In these, the upbeat, as so often with melodies internal to a movement, is a filling-out of the cadence bar, a way of avoiding an awkward pause between the cadential chord ending one idea and the downbeat beginning the next.

Given the same cues – solo- or upper-voiced setting, unison/octave harmony, followed by a strong fully-scored tonic downbeat – upbeats can be in the tonic harmony as well:

ex 10.1c	Pf 4t K.478/iii, 60	ct*
ex 10.1d	Pf Conc K.503/iii, 32	tc
ex 10.1e	Sym H.104/iii, trio	ct*%

Here, the emphatic  $\bar{1}$  downbeat is important; it casts the preceding music into the metrical background. If one imagines in H.104, for example, arriving in m 55 on dominant harmony, then the unaccompanied tonic start could easily be interpreted as the first downbeat of the theme.

Conversely, the arrival of the first downbeat can be masked if the music simply continues without accompaniment: in

ex 10.1f	Vn Son K.306/i, 25	ct
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one realizes that the accompaniment has begun “late” only from structural clues: the oblique harmony (V/ii) in m 27, and the repetition of m 26 in m 29 as the second limb of a ct. Given a different continuation, both m 25 and m 26 could be heard as a long upbeat.

The inclusion of a short, metrically weak beginning to a theme in the further structure of a melody is optional. In the examples so far, the upbeats have all been treated as simple and unrepeated prefixes; but upbeats may participate more intimately in the ensuing melody. In

ex 7.032a	Sym H.93/i, 74	ac%
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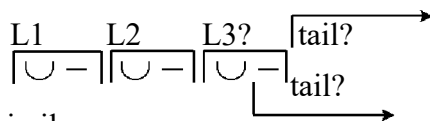
the repeat of the melody includes a repetition of the upbeat. The upbeat can also apply to both halves of a two-part melody, as in

ex 10.1g	Sym H.101/i, 23	tc
ex 10.1h	SQ K.575/iii, trio	ac%

In the following pair of examples, the upbeat is incorporated into the limbs of a ct, which thereby become end-accented:

ex 10.1j	SQ K.428/iii, trio	ct*%
ex 10.1k	Str 5t K.593/iv	ct*%

This leads to some indecision about where the tail begins – one’s assumption is, the tail starts on a strong measure, but in these cases that leads to odd “2½ limbed” ct’s; or does the tail perhaps begin on a weak measure? (Cf. “3-limbed ct’s, §17.1). We can illustrate this situation as:



In contrast, the quite similar

ex 10.1m Pf Conc K.491/i, 147 ct%

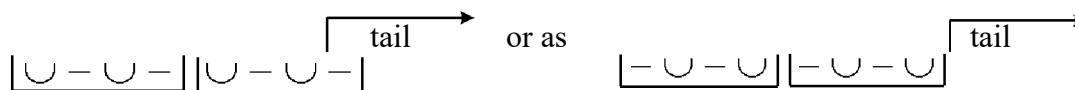
solves this problem for us by switching to contrasting motives in m 153; its pattern is definitely



And finally,

ex 10.1n Pf Conc K.482/iii, 51 ct

once again doubles the use of the upbeat, which occurs twice in each limb; depending on one’s interpretation of the metrical relation between m 51 and m 53, the pattern can be drawn either



Notice that in both these last two concerto examples it’s no longer the orchestration that tells us that the first melodic motive is a weak measure; it’s rather the way that the motive is set against the pre-established harmonic background motion. In both themes the accompaniment figuration begins first, and this kind of “vamp” is briefly taken up in §10.33.

## 10.20 P-types

In §2.2 above we have already briefly mentioned P-type melodies: asymmetrical two-part constructions, in which the first part is usually short and tends to be melodically inchoate: triadic or nearly so, very frequently harmonized in simple unison or octaves, and often explicitly a fanfare. This proclamatory or annunciatory opening is then followed by a more melodically coherent (and conjunct) continuation, usually organized in its own self-contained motivic and cadential shape, spun out to a length often greatly exceeding that of the first part, to which it only optionally bears an obvious motivic relation. If the medial articulation in a symmetrical two-part melody is analogous to the prose comma, that in the P-type melody is more of a colon: the opening explicitly draws attention to what follows, as the locus of the more truly “melodic” music.

10.21 Here are some typical examples of p-type themes:

ex 10.21a	Pf Son H.36/i	ptc%*
ex 2.2b	Pf Son H.38/i, 19	ptc
	Pf Trio H.13/ii	ptc%
ex 2.2d	Pf Trio H.15/i, 44	pdx
ex 10.21b	Sym H.95/i	prx%*
ex 10.21c	Pf Son K.309/i	ptc%
	Vn Son K.376/i	ptc
ex 2.2c	Pf Trio K.548/i	prx
	WW Ser K.375/v, 16	prx*

ex 10.21d      WW Ser K.388/i      prx%\*  
                  Pf Conc K.467/i, 109      pdx\*

These are named (as ptc, pac, etc.) according to the harmony at the medial junction. This, however, can be difficult to decide, since the opening P-section is so often in simple unison or octaves; “naming decisions” for this kind of situation are discussed in §13.226, but the basic principle is, unison 1° is taken for the tonic and 5° for the dominant.

The continuation, which I shall call the “R-section” (for response, or resultant, or remainder) begins on the tonic frequently enough, but almost never on a “hard  $I_3^5$ ” – that is, the tonic “edge” to an R-section is almost always softened in some way, by inversion, or a few-voiced setting, or upper-register orchestration, etc., that groups it back with the P-section, instead of splitting it off to become an independent entity. (For other means of attaching P to R across a downbeat  $I_3^5$ , cf. ex 10.232c and ex 10.233a). The R-section is also usually organized in motivic units short and active enough that it sounds like the interior of a melody – a continuation – rather than a new beginning.

10.22 P-type construction can be used, of course, as a component of a melody with another overall description:

ex 10.22a      Pf Son H.33/i, 24      rx; antecedent = pdx\*  
 ex 10.22b      Sym H.98/i, 59      rx; antecedent = pac\*  
 ex 10.22c      Pf Conc K.595/i      tc; consequent = tc, made of pdx % with  
    open and closed endings

10.230 The boundary between a P-type and a more ordinary two-part melody is not sharp, and P-types can approach the more symmetrical models in any of the respects in which they differ. For example:

10.231 The proportions can tend toward symmetry: P can approach the length of the R-section, or of R-components:

ex 10.231a      Pf Son K.284/i      ac\*; antecedent = rx\* or prx\*  
 ex 10.231b      Vn Son K.296/i      dx\* (or pdx%)  
 ex 10.231c      Pf Son K.570/i      dx; antecedent (mm 1-12) = prx (or rx)  
 ex 10.233d      SQ K.428/i      pdx%\* (or dx%\*)

10.232 There can exist a motivic connection between P and R:

ex 10.232a      Pf Son H.51/ii      pr\*%  
 ex 10.232b      SQ H.47/i      dx\*; ant = pdx  
 ex 10.232c      Sym H.97/i, 14      ptc (Notice here how a rhythmic crescendo  
    connects P to R across a hard  $I_3^5$ .)  
 ex 10.232d      SQ K.499/i      tc; ant = prx

10.233 There exist P-types – we have already seen some among the examples – in which the opening is not at all annunciatory, but in which the theme is still divided into two asymmetrical and quite independent parts: a shorter opening and a spun-out independently-organized continuation. These melodies bear the designation “P-” only to acknowledge the asymmetry:

ex 10.233a      Pf Trio H.11/ii      pt\*% (notice here the melodic arpeggio  
    makes a strong connection across a  $I_3^5$ )  
 ex 8.10a      Pf Trio H.20/i      ac\*; ant = ptc

ex 10.233b	SQ H.69/ii	ptc*%
ex 10.233c	Vn Son K.306/iii, 30	pdx
ex 10.233d	SQ K.428/i	pdx%*

10.24 The characteristic feeling of “announcement plus continuation” that is the hallmark of P-type melodies is also found to a certain extent in many ct themes<sup>1</sup>; and in the case of themes in which a short opening section is made from a shorter redoubled motive, it’s not always easy to decide whether to call it a two- or three-part melody. At issue is the grouping of the second unit of the P-section: if it groups back with the first, we should consider the whole theme in just two main parts, and hence a P-type. If, however, this second small unit “pivots” – if it seems to float between what precedes and what follows, attached equally strongly to both and so binding the whole into a three-part entity – then we should call it a ct melody.

One way to close off a doublet P-section is to supply open and closed endings:

ex 5.0e	SQ H.58/i	pdx
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More frequently, the P-section is supplied with a third downbeat, which completes the rhythm in a way two downbeats do not, closing off the fanfare-section from the continuation:

ex 10.24a	Pf Son H.38/i, 13	ptc*
ex 10.24b	Pf Son H.39/iii	ptc*
ex 10.24c	Vn Son K.302/i	pac%
ex 10.24d	Vn Son K.454/iii, 30	pac*

In a further example,

ex 10.24e	Fl-Hp Conc K.299/i	ptc*
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the larger P-section, ending at m 7 (with an overlap into R) is itself built as a smaller p + r structure; and the smaller P-section has a three-downbeat construction similar to the examples above.

For comparative purposes, here are three fairly unambiguous ct’s whose openings could at first be taken for P-sections, except that they are not closed off, and so the second limb is free to pivot:

ex 10.24f	SQ H.57/iii	ct%
ex 10.24g	SQ K.387/ii	ac*; ant = ct
	Sym K.551/i	ac*; ant = ct

10.25 Themes with elaborate P-sections are a specialty of Mozart, especially in the concertos:

ex 10.42b	+Fl Conc K.313/ii	uptc%
ex 10.24e	+Fl-Hp Conc K.299/i	ptc*
ex 2.2a	2-Pf Conc K.365/i	pac
	Pf Conc K.451/i	ac*; ant = ptc*
ex 10.22c	Pf Conc K.595/i	tc
ex 10.25a	Vn Conc K.218/i	pdx*
	Sinf Conc K.364/i	pdx

Notice in the two examples marked (+) how the strong linear connection between P and R connects them in spite of a  $I_3^3$  beginning to R.

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<sup>1</sup> Cf. Fischer, *op. cit.*, p.54

10.31 V-types

Consider now

ex 8.21	Sinf Conc K.297b/i	v+rx*
ex 10.31a	WW Ser K.375/i	v+ct%
	Fig K.492/Ov	v+ct%
ex 10.31b	Tito K.621/Ov	v+ct*

These of course all resemble the P-types discussed directly above, in that they consist of a proclamatory opening followed by contrasting material. I think, however, there is a crucial difference between these themes and P-types: here, what would be the “R-section” feels not like a completion or a continuation, but instead like a new beginning; it groups away from the opening. This is for two reasons: first, because the opening tends in one or more ways toward completion: by ending with tonic harmony and on the tonic pitch on a downbeat, by implying or including full  $I_k$  harmony, by the completion of a tonic arpeggio, etc. And second, because the following music begins squarely on the downbeat with a “hard  $I_3^3$ ”, proceeding thereafter in a well-organized cadential pattern. (The fact that the opening “V-section” often ends on the same downbeat that the “R-section” begins on – that is, that they overlap on a tonic downbeat – does not in itself do anything to connect the two parts; cf. §9.2.) This state of affairs changes the rhythmic relation between the two units: rather than upbeat and downbeat (as discussed in §10.1), or downbeat and afterbeat (as with the P-types of §10.2), we seem to have something quite odd: two consecutive downbeats. Usually when this happens in music, it’s the end of one group butting up against the beginning of another:



It’s this sense of not really grouping together that marks what I will call “V-types”; and notice in the following examples how much the opening V-section sounds like the end of something – the closing theme of a sonata exposition, for example:

ex 10.31c	Pf Trio H.5/ii	v+ct*
ex 10.31d	Pf Son K.279/i	v+ct
ex 10.31e	Pf Son K.311/i	v+ct*

This is, I suppose, why this type of melody occurs almost always at the very beginning of a movement: the two parts are so disjunct, that the opening V-section would group back and away, if it had anywhere else to go.

I have named these melodies “V-types” partly to acknowledge Hugo Riemann’s discussion<sup>2</sup> of such opening gestures (especially of the type discussed next in §10.32), which he refers to as *Vorhänge* – curtains, in theatrical sense of curtain-raising, which does indeed capture the peculiar relationship, almost non-relationship, between the two events.

One final example again shows the complexity typical of a Mozart concerto opening:

ex 10.31f	Pf Conc K.482/i	v+ct%
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Here, the V-section, mm 1-13, overlapping into the R, is built as a pac%. What follows the V-section, mm 13-32, is a ct%; I have labelled V-types according to the organization of the R-section alone.

10.32 The idea of prefixing a theme with music that sounds like the end of something else can be reduced to just a few cadential-sounding chords, and this is a Haydn trademark. Notice again

<sup>2</sup> Riemann, *System der musikalische Rhythmik und Metrik*, §§21-22

that these (short!) V-sections end on the tonic:

ex 10.32a	SQ. H.79/iv Sym H.89/i	ct*; limbs 1 & 2 are v-types tc*; ant and conq are v-types
ex 10.32b	Pf Trio H.15/i	v+ct%
ex 13.0a	SQ H.69/i	v+ac
	SQ H.75/i	v+rx%
ex 10.32c	Pf Trio H.18/i	v+ac%
	SQ H.41/i	v+ac*
ex 10.32d	SQ H.72/i	v+tc
ex 10.32e	Pf Trio H.29/i	v+tc*%
	Pf Trio H.24/i	v+rx
ex 10.32f	SQ H.71/i	v+rx%

10.33 Similar in spirit, in that they create a “context”, a frame or ground in the Gestalt psychology sense, ahead of the melody, are themes which begin with just their accompaniment, with a “vamp”. These I have not used the “v+” labelling on, simply describing the organization of the melody when it finally does begin. Among many examples:

ex 3.1b	Sym H.103/iv	ac
ex 13.223c	Sym K.550/i	ac*

This can be combined with the kind of opening described in §10.32:

ex 10.33a	Pf Trio H.6/i	v+?%*
ex 10.33b	SQ H.58/ii	v+rx
ex 10.33c	SQ H.76/iii, trio	v+ct*%

And in a final special case,

ex 10.33d	Pf Trio H.28/ii	v+rx*
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the opening phrase, shaped and cadentially organized, is only later revealed to be the accompanying counterpoint to the “real melody” beginning in m 7.

10.40 We have so far discussed three different prefix- or preface-like openings to a theme: the upbeat, which leads into the melody’s true beginning; the P-section, which announces the theme’s completion; and the V-section, which announces the theme’s beginning. These types can, of course, and do flow into each other, so that one finds intermediate examples. We will begin with the most common:

10.410 PV-types. If the R-section in this kind of melody seems neither to be an obvious new beginning nor an obvious responding second part to a melody, we have a borderline case of the kind I have labelled pv-type melodies; a category for equivocal examples. This can happen in two basic ways:

10.411 The opening PV-section has a relatively complete tonic close, but the R-section groups backwards either because of oblique harmony, or because the shortened motivic stride sounds like a melodic interior, rather than a new start:

ex 10.411a	Pf Trio H.8/i	pv+ct%
	Pf Trio H.29/i, 51	pv+ct*
ex 10.411b	Pf Trio H.30/i, 42	pv+ct
ex 8.4d	Sym H.90/i, 17	pv+ct



ex 10.411c	SQ K.590/i	pv+?*
ex 10.411d	Sinf Conc K.297b/ii	pv+ct
ex 10.411e	Pf Conc K.271/i	pv+ct*

10.412 Or, the PV-section is relatively open harmonically, ending with V or  $\widehat{V}$ , but the R-section groups away because of a tonic  $\frac{3}{2}$  beginning and the onset of a semi-independent, well-structured tune:

ex 10.412a	Pf Son H.41/i, 20	pv+ct
ex 10.412b	SQ H.70/i	pv+ac
ex 10.412c	SQ H.73/i	pv+rx
ex 10.412d	SQ H.74/i	pv+?*
ex 10.412e	Ser K.525/i	pv+ct
ex 10.412f	Hn 5t K.407/i	pv+tc
ex 10.412g	Pf Conc K.453/ii	pv+ac
	Pf Conc K.453/ii, 30	pv+rx

As the “+” sign indicates, these themes are named according to the cadential shape that follows the “pv” section. The Haydn SQ examples show that this type of melodic construction eventually shades into the Adagio introduction to an allegro movement. And in K.453/ii, the “pv”- section is almost a motto, or epigraph, to the movement.

10.42 UP-types. In these, an upbeat lasts so long that it amounts to roughly half the tune. It is primarily the delay of root-position tonic harmony that creates the opening upbeat; but the R-section is now definitely the completion of a (metrically weak) opening, rather than the “real beginning”. These melodies I have labelled by including the “up”-section:

ex 10.42a	Str 5t K.515/ii, trio	upac*
ex 10.42b	Fl Conc K.313/ii	uptc%*
ex 10.42c	Clar Conc K.622/i, 100	upac

10.43 UV- types. Here, the opening section on dominant or otherwise incomplete harmony is clearly an upbeat, but the R-section groups strongly away due mostly to an emphatic  $I\frac{5}{3}$  beginning:

ex 10.43a	SQ H.49/i	uv+ct
ex 10.43b	Sym H.86/i, 22	uv+ct*
ex 10.43c	Sym H.92/i, 21	ac*; ant & conq = uv+ct

These are named, again, according to the cadential shape after the opening section.

## 11.0 Larger formal schemes

The simplest formal scheme produced by the concatenation of melodies, or of melodies and non-melodic material, is that of simple repetition or conjunction, which we have already discussed in §6. We will here take up some of the familiar larger forms, insofar as they impinge on the description of the themes embedded in them.

11.10 The binary is defined in the traditional way, as the venerable dance-movement form in two sections, or “strains”, both repeated; typical examples in our repertory come of course from the minuet movements, but binaries are not at all confined to dances, nor are they always indicated by double bars and repeat signs. They most often cadence at the midpoint in the dominant (or, in minor, the relative major), but may also cadence in the home key – the “tonic binary”.

In general, I have taken only the first unit, the “first strain” (or even just a part of it, if it is complex and so structured) of a binary to be “the melody” for purposes of analysis, and have considered a double bar, when present, as one of the most definite signs that the theme has ended. This usually produces perfectly acceptable results:

ex 11.10a Pf Son K.545/ii ac%

However, there are frequent cases, especially in Haydn, where the first strain is so short, and the cadence ending it so weak, that the resulting “melody” seems far more unfinished than anything we usually call by that name:

	Pf Son H.41/ii	ct*%
	Pf Trio H.7/iii, 16	ct*%
	Pf Trio H.18/iii	ct*%
	SQ H.39/iv	ct*%
	SQ H.40/iv, 36	ct*%
	SQ H.42/iv, 16	rx*%
	SQ H.44/ii, 24	ct*%
	SQ H.45/iii, trio	ct*%
ex 11.10b	SQ H.61/iv	ct*%
ex 11.10c	SQ H.76/iv	ct*%
ex 11.10d	SQ H.77/ii	dx%
	SQ H.80/i	ct*%
	Sym H.89/iv, 24	ct*%
	Sym H.92/ii	ct*%
	Sym H.100/ii	ct*%
	Sym H.103/iii	ct*%
ex 11.10e	Pf Conc K.466/ii, 84	ct*%

These have all been labelled according to the cadential behavior of just their first strain, and it will surely seem peculiar to identify what most musicians would consider just the first half of “The Emperor’s Hymn” (ex 11.10d) as “the melody”, in this case a dx%. It is, however, the optional nature of the repetitions that forces such a procedure on us. In the case of a typical minuet movement, for example, the formal scheme is AABB the first time, and of course simply AB upon the *da capo*. To consider the form as a whole the melody would mean that it was some odd kind of ct the first time it was played, and perhaps a reflex or duplex the next time around, surely a strange result. An alternative

would be simply to add “binary” to our repertory of melody-types; but this would mean considering large complexes like

ex 10.42a Str 5t K.515/ii, trio upac\*

to be a single theme, or perhaps inventing ways to decide when a binary as a whole is a unified “melody” and when it is not, in practice entailing fairly arbitrary slices in a continuum that runs quite smoothly from ex 11.10d, through 11.10a +12.4313a, to ex 10.42a.

In other words, the binary is at times, like the sonata, a supra-melodic form, a scheme within which melodies occur; but at other times it shrinks to the point where its components are difficult to consider full melodies in themselves, and where the entire binary begins to sound like “the melody”. If, in cases like ex 11.10d, the reader would prefer to consider that what we have analyzed as a dx\*% is not really a theme at all, but merely a part of one, this will simply continue our ongoing demonstration that not only Classic instrumental melodies, but also their parts, tend to be built from a few common cadential and motivic schemes.

Notice that in exx 11.10b and 11.10d the repeat is not accomplished via repeat-sign, but is written out. In such cases the binary is recognizable by the dominant prolongation after the repetition (after the cadence where the “double bar” would be), and the return to tonic harmony thereafter. Two more examples with written-out repeats:

ex 11. 10f	Hn Conc K.417/ii	tc*%
ex 18.33b	Fl 4t K.285/iii	ct%

11.11 In the case of an apparent binary form in which the first strain is not repeated, I have let the medial cadence help me decide whether the whole form or just its first part constitutes “the melody”. If the cadence at what would be the double bar is tonic, it has usually seemed conclusive enough, and so I have analyzed the music to that point only, as the theme:

ex 11.11a	Pf Son K.570/iii	ac
ex 11.11b	Vn Conc K.216/iii, 264	tc
	Vn Conc K.219/iii, 132	tc

But there is one special case:

ex 8.4b	Pf Conc K.415/iii, 49	dx*
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in which the binary is cut off before it can finish, and so I have analyzed the remaining torso as a single entity; cf §8.4.

11.12 On the other hand, if an unrepeated first strain in a possible binary cadences non-tonically, the two parts so articulated seem to me to connect much more strongly, and in such cases I have usually considered the whole complex a reflex melody, often a quite extended and complicated one, rather than analyze just the first half :

	SQ H.57/iv, 40	rx*
	SQ H. 64/ii, 32	rx*
ex 11.12a	SQ H.74/ii, 23	rx*
	Sym H.100/ii, 57	rx
ex 11.12b	WW Ser K.388/iv, 215	rx
	Hn Conc K.417/iii, 69	rx

11.2 The da capo (or ternary, or song-form, etc.) is usually marked by clearly-defined sections, and so the melodies are quite self-contained and complete; the larger form modifies the component melodic forms very little. Conversely, none of the standard cadential schemes we've been using includes a reprise of the opening, and so the da capo form doesn't shade into smaller melody-types the way the binary does. There are, however, a very few examples of themes in this repertory which borrow the reprise-idea, thereby creating quite unusual melodic shapes:

	Pf Trio H.27/ii	?
ex 11.2a	SQ H.38/i	? (a miniature DC)

11.3 The sonata exposition at times includes a "bridge" section tuneful enough that I include it in the corpus:

ex 11.3a	Pf Son K.570/i, 23	ct*
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even though it's not one of the obligatory thematic passages in the form. Similarly for several "development themes", such as

ex 11.3b	Vn Son K.376/i, 48	ac%*
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Most of the time the themes are considered in their exposition, rather than their recapitulation, versions. In concertos, one must also choose at times between the version of the *tutti* exposition and that of the solo exposition; I have at times included both, when they are formally distinct.

## 12.0 Disambiguating two- and three-part melodies

If one imagines sorting our repertory into two large piles of melodies, one of quite clearly two-part themes, and the other of themes obviously in three parts, this section will explore the somewhat sparsely-populated valley in-between: melodies which have characteristics of both two- and three-part types, and so resist straightforward classification. What we wish to do is specify as clearly as we can just what leads to a two-part division, and what to a three-part, so that when appropriate we can say just what it is that makes a given theme ambiguous with respect to this kind of categorization.

In the discussion below we shall assume that we agree on the outer boundaries of the melody in question, and so our problem is how to group its component phrases. Specifically and typically, we may find a small part or phrase that might be the second limb of a ct melody, if it “pivots” – that is, if it groups preferentially neither to the left nor to the right – or else, if it clearly groups back, is instead the conclusion to the antecedent of a two-part melody. Or is it, as a third possibility, simply impossible to decide?

We will organize this discussion according to the motivic structure of the melody, discussing in each case what further features of the theme most strongly influence our decision to subdivide it into two or three parts.

12.10 When replicate (babc) motivics re-inforce a basically two-part cadential structure, there is of course no conflict: this is the usual arrangement in ac’s, rx’s, etc.

12.11 But replicate motivics are sometimes associated with a ct cadential articulation, which they nevertheless overcome to produce a two-part melody with a “ghost ct” in the background:

ex 12.11a	Pf Son H.39/i	rx*%
ex 12.11b	SQ K.590/iv	tc*%

It seems to me that in these two, and in similar cases, the purely replicate motivics – the fact that after the medial cadence the motivic structure of the opening is renewed, after an intervening contrast – produce a parallel and responding second half that overpowers the suggestion of a three-part division.

If, however, we were to modify the motivic structure slightly, so as to produce a pattern like [b . b . b . . c] (anaphor initials); or [b a . a b . . c] (bar terminals); or any other pattern that in some aspect includes barform motivics, a much more powerful stimulus to three-part division occurs. Such circumstances are discussed below under “equivocal motivics”.

12.12 Is it possible to write a melody with strictly replicate motivics, which nevertheless divides itself into a three-part ct? I can’t find any real examples; the nearest candidate is

ex 12.12a	Sym H.104/iii	ct%
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in which the motive at m 5 does indeed replicate the opening, after just barely contrasting intervening music. But this is very much a borderline instance, depending upon your interpretation of the motives; cf §12.44. (For the opposite case, strictly barform motivics in a melody which is nevertheless in two parts, cf. §12.222.)

12.20 Barform motivics (bbc or bb.c) in general accompany and reinforce a ct cadential structure to form an integrated three-part theme.

12.21 But the first two repeated units in a barform melody can also, simply by virtue of their repetition, divide a theme which is cadentially unarticulated or nearly so into the two limbs + tail of a ct:

ex 12.21a	Pf Son H.35/ii, 9	ct
ex 12.21b	Sym H.95/iv	ct%
ex 7.031a	Pf Son K.333/i, 39	ct
	Pf Conc K.271/iii	ct%*
	Pf Conc K.415/i	ct

Especially in H.95/iv, the dissimilarity of the two limbs – only the terminal aspect is barform – puts the melody on the dx boundary line.

12.220 The counterpart of two-part melodies with “ghost ct’s” (§12.11) are three-part melodies with “closed limbs”, in which some feature tends to unite the two limbs into a single unit, thus tending, if without success, to produce a two-part division. This may happen in several ways:

12.221 Barform melodies in which the limbs have endings slightly differentiated, forming to some degree an open/closed pattern, tend to have a first half nearly closed off from the tail:

ex 12.21b	Sym H.95/iv	ct%
ex 12.221a	Pf Son K.330/iii, 21	ct*
ex 7.3e	SQ K.575/i	ct%
ex 2.12c	Clar Trio K.498/ii	ct*%
ex 12.221b	Hn Conc K.412/i	ct
	2-Pf Conc K.365/iii	ct%
	Pf Conc K.482/i, 77	ct
	Pf Conc K.482/ii, 124	ct*
ex 10.1n	Pf Conc K.482/iii, 51	ct

12.222 The above themes may be compared to their counterparts just across the border, two-part melodies in which, in spite of having bar initials and being nonreplicate as a whole, nevertheless have first halves sufficiently replicate, I think, to close off, thus forming a two-part melody rather than a ct. Some of these are hard to decide about:

ex 5.1b	Pf Son K.533/i	dx%*
ex 2.18b	Vn Son K.303/i	dx
	SQ K.421/iv, 96	rx%
	Hn Conc K.495/iii, 16	dx*
	2-Pf Conc K.365/i, 103	ac
	2-Pf Conc K.365/ii	rx
ex 12.222a	Pf Conc K.595/iii	ac%
ex 13.225b	Vn Conc K.219/iii, 31	ac

And here are two themes with bar terminals and nonreplicate overall structure, also closing off (just barely) into two parts:

ex 12.222b	Pf Son H.40/i	rx*%
	Sym H. 85/iii	rx%

12.223 Extra-motivic features may also tend to close the limbs of a barform melody; in general anything that gives a sense of completeness to the first half, and/or a sense of new beginning to the tail, does so. In the melodies below, it is predominantly:

- (1) a (nearly) complete octave ambitus of the melody, and/or a melodic cadence on the tonic at the midpoint;
- (2) a full IV-V-I cadence at or by the midpoint;
- (3) a tail beginning with a strong downbeat  $I_3^5$  (cf. §8.2), or, after a half-cadence, a strong  $V_3^5$ .

ex 12.223a	Pf Son H.49/i, 24	ct (3)
	Pf Trio H.12/1iii, 31	ct (3)
ex 12.223b	Pf Trio H.16/ii, 17	ct (3)
ex 12.223c	SQ H.42/i	ct (1)(2)
	SQ H.78/i, 37	ct (1)(3)
ex 12.223d	Vc1 Conc H.1/i, 53	ct (1)(2)
ex 10.43b	Sym H.86/i, 22	uv+ct* (1)(2)
ex 12.223e	Vn Son K.303/1, 19	ct (2)
ex 12.223f	Vn Son K.376/i, 19	ct (1)(2)
ex 3.1d	Pf 4t K.493/i, 28	ct% (1)
	Vn Conc K.218/iii, 46	ct (1)(2)

See also §12.4322-23 for anaphoric ct's with closed-off limbs.

12.30 A nonmotivic melody, in this context, is one which specifies neither the replica nor the bar pattern, and has no elements of either.

12.31 In such cases, of course, often the cadential articulation alone will determine how the melody divides. Thus, nonmotivic structure plus a clear ct cadential pattern make a three-part melody, as listed in §18.1; the three-part articulation imposes itself on the uninformative motivics:

ex 12.31a	Vn Son K.305/ii	ct*%
ex 12.31b	Sym K.425/iv	ct

Conversely, a clear-cut two-part cadential scheme combined with an indeterminate motivic pattern results in a two-part melody, as listed in §14.2-3; for example

ex 12.31c	SQ H.72/i, 31	ac
ex 12.31d	Sym H.97/iii	rx*%

12.320 The combination of a nonmotivic leading voice and an indecisive cadential structure, one on the two-/three-part borderline, produces some highly equivocal cases. The issue in these is, again, given a potential second limb of a ct, not strongly articulated but still possible, does it more strongly group backwards, or pivot?

12.321 One important factor is the relative strength of the articulations: a medial cadence sufficiently more emphatic that its predecessor tends to form a two-part theme:

ex 2.17b	Pf Son K.331/ii	rx
ex 12.321a	Vn Conc K.219/i, 118	dx

These may be contrasted to nonmotivic melodies which, because of equipollent three-part cadencing, are more convincing as ct's:

ex 2.30a	Pf Son H.39/ii	ct%*
ex 12.31a	Vn Son K.305/ii	ct%*
ex 12.321b	SQ K.499/ i, 23	ct*
ex 11.10e	Pf Conc K.466/ii, 84	ct%*
ex 12.31b	Sym K.425/iv	ct

And finally, if the second half of the melody is just as divided as the first half, the melody again tends to split in two, on the theory that  $2+2+2+2 = 4+4$ :

ex 12.321c	SQ K.589/ii	ac%
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12.322 A potential second limb of a ct beginning with oblique harmony will, in the absence of countervailing motivic information, tend to bind the unit back, rather than letting it pivot (cf. §8.22 and §8.4), thus forming overall a two-part structure:

	Pf Trio H.26/ii	rx*
ex 12.322a	Vcl Conc H.1/ii	ac%*
ex 12.322b	Fl Conc K.314/ii	ac

These should be compared with nonmotivic ct's in which the limbs almost close (but do not quite, I think) for the same reason:

ex 12.31a	Vn Son K.305/ii	ct%*
ex 2.30b	Pf Trio K.496/i	ct%*
ex 2.30c	Hn Conc K.447/i	ct*
	Hn Conc K.447/i, 28	ct

12.323 When the potential second limb itself is organized as a small ct, it seems to have a tendency to bind back:

ex 12.323a	Str 5t K.516/iii	ac
ex 12.322b	Fl Conc K.314/ii	ac
ex 12.323b	Cl Conc K.622/i, 57	ac%
	Pf Conc K.414/ii	ac
	Sym K.425/ii	rx

13.324 A different kind of grouping ambiguity occurs in

ex 12.324a	Pf Conc K.482/ii	rx*
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(and in its subsequent version, Pf Conc K.482/ii, 144): m 5-6 are either the second limb of a ct, or instead they group forward (as I decided) because they're repeated and completed in the ensuing passage. This is virtually the only instance in the repertory of a potential second limb whose grouping is ambiguous because of a tendency to bind forward, rather than backward.

12.40 But the motivics of a melody, besides being bar, replicate, or neither, may be both. That is, they may be equivocal, by including both the rhyme and/or the initials of the bar, along with the midway motivic recovery of the replica, in such motivic schemes as

b	b	b	c
b	a	b	a
b	a	b	a
			- c



b a - a b - - c  
 b - b a b - - c

etc.

34063" In rare cases, the cadential articulation alone is decisive. In

ex 12.41a Pf Son H.43/ii, trio dx\*%

the second half is just as subdivided as the first, and so the tune tends to split into 4+4 (= 2+2+2+2). On the other hand, the following melodies are classed as ct's rather than two-part types only because their second half is marginally more tightly bound together rhythmically than their first, and so the whole pattern is more 2+2+4:

ex 12.41b SQ H. 77/i ct%\*

ex 12.41c Pf Son K.333/ii, 14 ct

12.42 Usually, however, other considerations intervene. In the case of a melody with bar or anaphoric terminals only (e.g., b a - a b - - c), the feeling of motivic return at the midpoint is quite strong. In many of the cases below, this two-part division is enhanced by a return to the initial pitch level at the midpoint of the melody, and also by a cadential articulation into 2+2+2+2 (= 4+4):

	Sym H.82/ ii, 32	ac*%
	Sym H.83/iii, trio	ac
	Sym H.89/iv, 92	tc*%
	Pf Son K.310/ii	ac
ex 7.02a	Pf Son K.576/ii	ac
	Vn Son K.378/i, 47	ac
	Vn Son K.526/iii	ac%
ex 9.12a	Pf 4t K.493/i, 79	ac
ex 12.42a	SQ K. 428/ iv, 60	ac%
	SQ K.458/i	ac
ex 12.42b	SQ K.465/iv	ac
	Hn Conc K.417/iii	ac%
	Vn Conc K.216/ii	ac
And in	ex 12.42c SQ H.65/ii, trio	dx*%

the return at the midpoint is not to the original pitch-level, but to the original contrapuntal arrangement, with the same effect.

When, however, the articulation has more of a ct shape – that is, the first half is subdivided, but the second half is much less so – the two-part feeling of such melodies (anaphoric or bar terminals, replicate initials) is weakened:

ex 10.32d	SQ H.72/i	v+tc
ex 12.42d	SQ K.421/i, 25	dec ac%

12.430 Melodies with anaphoric initials, as well as a bar or anaphor terminal aspect, make for some very equivocal cases. When they do in fact feel more like a two- or three-part melody, it usually has to do with (1) the relative pitch-level of the three anaphoric initials; or (2) with some nuance of the motivic construction, viz; it doesn't quite rhyme, or it's not quite replicate; or (3) the section following

the midpoint is so obviously derivative and “tail-like” that interpretation as a three-part melody is compelled.

12.4310 We will consider first the relative pitch-level of the anaphoric initials:

12.4311 If the third initial, beginning the second half of the melody, returns to the pitch level of the incipit, it feels much like we’ve started over again (as we noted in §12.42) and thus produces a two-part theme:

ex 14.91b	SQ H.43/iii	ac
ex 12.4311a	Sym H.88/iv	tc*%
	Sym H.92/i, 72	tc
ex 12.4311b	Sym H.94/ii	ac*%
ex 12.4311c	Str 5t K.614/iii, trio	tc%
	Fl 4t K.285/i, 53	ac
	Pf Conc K.488/ii, 12	ct
	Pf Conc K.488/iii, 262	ac
ex 12.4311d	Vn Conc K.218/iii, 138	ac%

12.4312 However, if the pitch-level of the third initial is displaced an octave, we apparently interpret this in a linear sense, instead of as a return; and thus the second group pivots to form a ct:

	Pf 4t K.289/iii, 41	ct
ex 12.4312a	Clar Trio K.498/i	ct
	Sym K.551/ii	ct%*

12.4313 When the three anaphoric initials form a line, either stepwise or by arpeggio, we tend to interpret the second term as a neutral way-station on the way to the third, i.e. as a pivoted group, and thus we have a three-part ct:

	Pf Trio H.29/iii	ct%*
ex 12.4313a	Pf Son K.545/ii, 17	ct
	Str 5t K.614/i	ct
ex 8.21b	Fl 4t K.285/i, 12	ct*
ex 12.4313b	Sym K.550/iii	ct*%
	F1-Hp Conc K.299/iii, 58	ct%

and many other examples among the anaphoric ct’s.

A prominent line in the bass works the same way:

	SQ H.42/iii, 26	ct*%
ex 12.4313c	Pf Son K.533/ii, 23	ct
ex 12.44d	Str 5t K.593/i	ct*

Similarly, if all three terms of the anaphor are on the same pitch-level, the second term tends to pivot, again forming a ct:

	SQ H.37/iii, 24	ct%
ex 12.4314a	SQ H.62/iv, 21	ct%
	SQ H.75/iv	ct*
ex 12.4314b	SQ H.82/iii	ct*%
	Sym H.93/iii, trio	ct*

ex 12.4314c	SQ. K.465/iv, 88	ct
	Clar Trio K.498/iii, 35	ct
	WW Ser K.388/i, 42	ct
	Don G K.527/Ov, 77	ct

12.4320 Details of the motivic structure may also push an anaphoric melody in either a two-part or three-part direction:

12.4321 It may happen, for example, that the motives beginning the melody and its second half, while similar enough in context to be labelled with the same letter, aren't quite similar enough to really feel like starting over, and so the melody isn't "really" replicate:

ex 12.4321a	Pf Son K.330/ii	ct*%
ex 12.4321b	Vn Son K.481/ii, 16	ct*

12.4322 On the other hand, if the first two terminal motives, ostensibly rhyming, are actually different enough to form open and closed endings, they can shut off the first half of the melody, and form a two-part structure – especially if the harmony concurs:

	Pf Trio H.19/i, 34	ac*%
	SQ H.57/ii	ac*%
ex 12.4322a	SQ H.75/i, 72	tc
	Vcl Conc H.1/iii	tc
ex 8.3f	Sym H.84/iv	dx
ex 13.225a	Sym H. 86/i, 64	tc
ex 12.4311a	Sym H.88/iv	tc*%
ex 12.4311d	Vn Conc K.218/iii, 138	ac%
ex 12.4322b	WW Ser, K.375/iii, 26	tc

12.4323 Similarly, a second term "responding" in some other way to the first – usually by reversing direction – tends to close the first two impulses into a unified first half:

ex 12.4311b	Sym H.94/ii	ac*%
ex 12.4323a	Pf Conc K.449/iii	ac

The examples in §12.4322-23 may be compared with the similar examples given in §12.22, in which the motivic structure is barform, rather than anaphoric, and therefore much more readily survives an interpretation as a three-part tune, even if the limbs close. Conversely, anaphoric melodies more readily form themselves into two-part themes if the limbs are slightly closed, since initial anaphoria is potentially replicate.

12.433 At times the second half of a melody with equivocal, anaphoric motivics is quite clearly the tail-section of a ct because of the quickening of the rhythm and the shortening of the motivic stride (cf. §19), typically in a pattern like [b a b a b b . . . c]:

ex 12.433a	Pf Son H.36/ii	ct*%
	Pf Trio H.13/ i, 20	ct*%
	Pf Trio H.14/i	ct
ex 12.433b	Pf Trio H.31/i, 32	ct*%
	SQ H.42/iii	ct%

	SQ H. 58/iv, 26	ct*0%
	SQ H.62/iii, trio	ct*0%
	Sym H.90/iii	ct*0%
	Sym H.92/ii	ct*0%
ex 12.21b	Sym H.95/iv	ct0%
ex 18.509a	Sym H.99/iii	ct*0%
	Sym H.99/iii, trio	ct*0%
ex 12.4321a	Pf Son K.330/ii	ct*0%
	SQ K.575/ii, 19	ct*
ex 12.4312a	Clar Trio K.498/i	ct

12.44 The themes with equivocal motivics yet to be discussed represent the real center of the borderline between two- and three-part melodies. As it happens, I have classed them all as three-part ct's, but in several cases this is virtually an arbitrary decision. All display the anaphoric [b a b a b . . c] or [b a b a b a . c] motivic pattern, permitting either a bar or replicate interpretation, and most display also in a conflicting manner characteristics that we have used above to help us differentiate between two- and three-part constructions.

In these two, for example, the second half of the melody returns to the original pitch-level (cf. §12.4311), but the harmony is altered, and moreover the second half is bound together rhythmically with the motivic acceleration characteristic of the ct tail:

ex 10.1c	Pf 4t K.478/iii, 60	ct*
ex 12.44a	WW Ser K.375/ii, trio	ct*0%

Here are four themes whose articulations hover between 2+2+4 and 2+2+2+2, while other aspects of the melody are likewise ambiguous; in the first two, mobile harmony at the critical point in the second half (the sixth bar) very slightly binds it into the tail of a ct:

ex 12.44b	Pf 4t K.493/i, 59	ct0%
ex 3.0a	Sym H.87/ii	ct0%

while here, the fact that the second half of the melody is scalar works to the same purpose:

ex 12.44c	Pf Trio H.16/iii, 64	ct*0%
ex 12.12a	Sym H.104/iii	ct0%

In the following melodies, the fact that the limbs form, to some degree, open and closed endings (cf §12.22 and §12.4322) conflicts with various three-part indications:

ex 12.44d	Str 5t K.593/i	ct*	(Initial bass pitches linear; tail-like diminution of the motive )
ex 12.44e	Sym H.85/i, 12	ct%*	(Linear initial pitches)
ex 12.44f	Sym H.86/iv	ct	(Initial pitches in a sense linear, but 2+2+2+2 phrasing; could easily be dx)
ex 12.44g	Pf Conc K.450/ii	ct*0%	(Initials in a sense linear; motivics not strongly replicate; very slightly bound as 2+2+4)
ex 12.44h	Pf Conc K.503/i, 50	ct0%	(Weakly-bound 2+2+4; not strongly replicate due to key change in m 55)

And one final special case, by Haydn:

ex 12.44j      Sym H.99/i, 19      ct%

which is a three-part theme only on the strength of a slight 2+2+4 articulation. The motivics, on one interpretation, are [b a a c], not at all a help in trying to decide between two- and three-part models; cf §14.32.

It remains to be emphasized that even though these melodies are ambiguous with respect to two- or three-part division, they are nevertheless perfectly successful themes. That is, an eighteenth-century composer has no obligation to write a melody that is clearly in either two or three parts in anything like the same sense that a contemporary essayist would feel an obligation to write sentences that are either clearly declarative, interrogative, or imperative. It's rather that clear two- and three-part construction form poles of attraction, with most Classic instrumental themes locatable somewhere between them. As it happens, the gradient between the poles is quite steep; most melodies are quite obviously closer to one idealized type or the other. However, this section has dealt with the population in the middle, and our aim has been not necessarily to pin them firmly into one category or another, but to account as nearly as possible for those characteristics that determine their position in the continuum.

We will now turn to the consideration in more detail, first of two-part melodies, and then (in §16-20) of three-part themes. We have in the next section, however, one final task of disambiguation before us, that of distinguishing in some consistent way between the various two-part melody-types.

## PART TWO: TWO-PART MELODIES IN DETAIL

### 13.0 The cadential structure of two-part melodies, in detail

We have already discussed, in §2.1 - 2.2 above, the cadencing rules and resulting cadential patterns for two-part melodies. To review and summarize: In a melody articulated into two main parts,

- 1) the second half does not begin with the tonic unless the first half does also;
- 2) the second half does not begin with the same harmony as the first half did, unless it follows a medial cadence on the tonic or dominant; and
- 3) rule (2) does not apply in the case of the “deceptive ac”.

We classed the resulting cadential patterns into four main types, with an appended fifth:

the antecedent-consequent, “ac”:	$A \rightarrow V, A \rightarrow I_k$
the tonic ac, “tc”:	$A \rightarrow I, A \rightarrow I_k$
the reflex, “rx”:	$A \rightarrow \sim I, [\sim I \ \& \ \sim A] \rightarrow I_k$
the duplex, “dx”:	$A \rightarrow I, [\sim I \ \& \ \sim A] \rightarrow I_k$
and the rare “deceptive sc”:	$I \rightarrow vi, I \rightarrow I_k$

where “A” is any harmony at all, “ $\sim I$ ” is harmony other than tonic, and “[ $\sim I \ \& \ \sim A$ ]” is harmony other than the tonic or A, whether or not A is tonic. In the case of deflected melodies, the concluding tonic cadence – “ $I_k$ ” – will be replaced by V, by  $V_t$  (a tonicized dominant), by V/V,  $III_t$ , V/III, etc. By far the most common harmonic patterns for the above four main melody-types are found simply by replacing “A” in the table above with “I”.

A violation of the first cadencing rule would present a pattern such as  $\sim I \rightarrow A, I \rightarrow I_k$  /deflection. There are in fact in the repertory of two-part melodies a few equivocal examples of melodies this pattern, and we list them here. Four of them require a harmonic interpretation of a unison passage, and are discussed below in §13.226; all proceed (on one view)  $V \rightarrow V, I \rightarrow .$

ex 13.226e	SQ H.48/iii	ac*%
ex 13.226f	SQ H.74/iii, trio	ac*%
ex 8.4a	Pf Son K.279/iii, 22	ac
ex 13.211e	SQ K.465/iii	ac*%

Another possible example turns on the interpretation of  $I_4^6$  harmony at the opening, and is mentioned in §13.225; if this harmony is considered to be dominant, the phrase structure violates the rule:

ex 13.225b	Vn Conc K.219/iii, 31	ac
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There are, however, at least two unequivocal instances violating the proposed rule:

ex 10.42a	Str 5t K.515/ii, trio	upac*
ex 10.42c	Cl Conc K.622/i, 100	upac

both of which clearly proceed  $V \rightarrow V, I \rightarrow .$

A contravention of the other cadencing rule would run  $A \rightarrow [\sim V \ \& \ \sim I], A \rightarrow .$  That is, the second half would begin with a harmonic recovery, even though the antecedent ended with a cadence neither tonic nor dominant. The only two possible examples of this (aside from dec ac’s) are both equivocal. One of them,

ex 13.31g	Pf Son H.50/iii	tc*%
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depends upon whether the phrase of mm 7-11 is assigned to the antecedent or the consequent, and is discussed in §13.31. The other,

ex 13.0a SQ H.69/i v+ac

depends upon whether the cadence-chord of the antecedent, the  $\text{vii}^7$  of m 20, is “really” a dominant or not.

13.11 By far the most usual harmony for the ac is  $I \rightarrow V$ ,  $I \rightarrow I_k$  /deflection. The (distant) second most common is  $V \rightarrow V$ ,  $V \rightarrow I_k$  /deflection, as in

ex 13.32a Pf Trio H.26/iii ac\*%

and about 15 others. Leaving aside the melodies mentioned directly above, in 13.0, here are the other instances in our repertory with unusual ac harmony:

ex 6.0d	Sym H.94/i, 17	ac*	$V/ii \rightarrow V$ , $V/ii \rightarrow V/V$
	Pf Son K.280/iii, 38	ac	$ii \rightarrow V$ , $ii \rightarrow I_k$
	Pf Son K.281/iii	ac	$V/ii \rightarrow V$ , $V/ii \rightarrow I_k$
	Pf Son K.576/i, 41	ac	$IV \rightarrow V$ , $IV \rightarrow I_k$

In this and in all such tabulations, the harmony of the phrase is considered to be that of its first downbeat, with the exception of unequivocal gavotte-meter (cf. §13.223).

13.12 The most usual harmony for the tc pattern is  $I \rightarrow I$ ,  $I \rightarrow I_k$  /deflection; and again, the second most common pattern begins the phrases with the dominant ( $V \rightarrow I$ ,  $V \rightarrow I_k$  /deflection), as in

ex 8.3b Pf Son K.332/ii, 8 tc

and about five others. The remaining unusual instances:

ex 13.225a	SQ H.68/iv, 46	tc	$IV \rightarrow I$ , $IV \rightarrow I_k$
	Sym H. 86/i, 64	tc	$V \rightarrow I_4^6$ , $V \rightarrow I_k$
ex 8.3a	SQ K.575/i, 87	tc	$IV \rightarrow I$ , $IV \rightarrow I$
	Hn Conc K.495/i, 32	tc%	$V/IV \rightarrow I$ , $V/IV \rightarrow I_k$ (gavotte-meter)
	Pf Conc K.450/iii, 93	tc%	$V/IV \rightarrow I$ , $V/IV \rightarrow I_k$
	Pf Conc K.456/i, 54	tc	$iii \rightarrow I$ , $iii \rightarrow I_k$
	Pf Conc K.467/iii, 154	tc	$V/V \rightarrow I$ , $V/V \rightarrow I_k$

13.13 There are very few deceptive ac's in this repertory. Most of them use the bassline plan (at some transposition):



13.14 The rx and dx melodies use a great variety of harmonic plans, and it's not much to the point to list unusual instances; there are many of them. With the reflex, the more common schemes are:

- $I \rightarrow V$ ,  $VI \rightarrow$
- $I \rightarrow V$ ,  $ii \rightarrow$
- $I \rightarrow ii$ ,  $V \rightarrow$
- $I \rightarrow ii$ ,  $ii \rightarrow$
- $I \rightarrow V$ ,  $IV \rightarrow$
- $I \rightarrow V$ ,  $III \rightarrow$  (in minor)

I → V, vi →  
I → V, VI →

The most common duplex harmonic schemes are:

I → I, IV →  
I → I, V →

13.20 Taxonomic ambiguity among the two-part melody types really comes down to just two types of problem: in the one case, we don't know exactly where to put the middle articulation (§13.21); and in the other, the point of articulation is not in question, but rather the exact harmony at that point (§13.22).

13.210 We first deal with cases in which the middle joint is hard to locate. In all such cases, we will be discussing nonreplicate melodies only – if the motivics of a melody begin to repeat, then the theme is judged to split just before that point:

ex 13.210a Sym H.99/ii ac%\*  
ex 13.31f Sinf Conc K.297b/i, 47 tc

– even if, as in these cases, a short phrase is “inserted” into what is, apparently, the joint between the antecedent and consequent (cf. §13.31).

13.211 In these cases below, then, there is a single isolatable phrase after what might be the antecedent cadence in a nonreplicate melody, and the question is, where does the phrase belong?

If the consequent is motivically convincingly organized internally, that helps us locate its beginning:

ex 8.23c Pf Trio H.14/i, 40 ac  
The music from m 48 turns out to be a ct, apparently the consequent; the intervening phrase, mm 44-46, is thrown back to the antecedent.  
ex 13.211a Pf 4t K.493/i dx%\*  
Although the phrase mm 8-12 begins obliquely, and therefore tends to group retrospectively, it becomes when repeated (in the piano) part of a tc; therefore the consequent begins with the upbeat to m 9.

An isolated phrase that echoes both the antecedent harmony and motivics tends to group back:

ex 13.211b SQ H.60/iii, trio tc\*%  
ex 13.211c Pf Conc K.595/ii, 49 dx\*%

However, if one of these elements is changed, it becomes less clear that the phrase groups backwards:

ex 8.23c Pf Trio H.14/i, 40 ac  
ex 13.211d Pf Son K.280/i dx

More equivocal yet is the case when the motivics of the cadence-echo go on to figure in the consequent:

ex 13.211e Pf Son K.331/ii, trio dx\*%  
SQ K.465/iii ac\*%

Similarly ambiguous is a phrase after the (apparent) antecedent cadence which begins with a contrasting *forte*, and so sounds like a new beginning:

ex 13.211f Fl Conc K.313/iii, 46 ac



(Here I grouped the phrase mm 58-60 back only because it prolongs the dominant of the antecedent cadence.)

13.212 There are a few instances in which melody seems to be made up exclusively of small discrete phrases, which organize themselves into antecedent and consequent only reluctantly, loosely, and somewhat arbitrarily:

ex 13.212a	SQ H.67/i	dx
	Sym H.82/iii	rx*%

These two could just as well be considered “one-part” melodies, or puzzles. And on a larger scale:

ex 13.212b	Trp Conc H.1/i	dx
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The antecedent goes at least to the downbeat of m 8; the consequent surely begins no later than the upbeats to m 13. Does the phrase between these two points group forward or back? Because it just spins out the tonic of the cadence in mm 7-8, I decided to call it part of the antecedent, and hence the melody a dx; but it could go either way.

13.213 The middle articulation in apparently two-part melodies can also be difficult to locate because it’s somehow been “smeared”, or distributed, in one of two ways:

1) the (apparent) cadence-figure or the antecedent is extended and/or transformed into the consequent, with no real pause:

	Pf Trio H.20/iii, 32	dx*%
ex 10.232b	SQ H.47/i	dx*
	SQ H.57/i, 56	rx%
ex 8.23d	SQ H.76/iv, 179	ac
ex 13.213a	SQ H.81/i, 27	rx
ex 8.4a	Pf Son K.279/iii, 22	ac
ex 13.213b	Cl 5t K.581/iii, trio I	dx*%

In all such cases, the point of division is to an extent *ad hoc* and arbitrary. Or,

2) the music simply doesn’t pause for a cadence:

	Sym H.86/iii	rx*%
ex 13.213c	Pf Conc K.482/iii, 71	dx

13.220 We turn next to various classification problems that arise when we know where to locate the medial joint in a two-part melody, but the nature of the harmony at that point makes it difficult to decide between ac, tc, rx, or dx. These are for the most part taxonomic “policy decisions”, a simple matter of trying to interpret similar situations in consistent ways.

13.221 We have already dealt with overlapping cadences on the dominant in §8.25, and on the tonic in §9. Many p-type themes, in particular, divide with an overlapped cadence, and the basic principle is to consider the antecedent to end on V and the consequent to begin on V in the case of a dominant overlap (hence the melody or component is reflex); and to use a corresponding interpretation of a tonic overlap (and hence the melody or component is tc).

ex 10.24a	Pf Son H.38/i, 13	ptc*
ex 8.25b	Pf Son H.37/i, 17	rx

13.222 In deflected melodies, the consequent frequently begins with the tonic in the new key, and this can sometimes give the theme a kind of ac feel to it. But for purposes of classification, I have

considered that ac's and tc's must begin the consequent with the tonic of the original key; if not, we have a dx or an rx:

ex 12.11a	Pf Son H.39/i	rx*%
ex 13.222a	Pf Son H.37/iii, 20	rx*%
ex 8.22c	Pf Son K.282/ii, Men II	rx*%
ex 3.1e	Pf Conc K.453/iii	dx*%
ex 13.222b	Entf K.384/Ov, 119	rx*%

13.223 The harmony that the antecedent or consequent begins with is usually considered to be that of the first downbeat. Many consequents in particular begin with upbeats which continue the harmony of the antecedent cadence; but for classification purposes, I've waited for the strong beat to arrive:

ex 13.212b	Trp Conc H.1/i	dx
ex 13.223a	SQ K.458/ii	ac%
ex 2.12d	Str 5t K.515/iii	dx
	Pf Conc K.456/ii	rx*%

However, I've ignored this principle when the antecedent or consequent begins squarely in the middle of a duple bar and sets up an unequivocal gavotte-rhythm:

ex 8.22b	Pf Son K.333/iii, 16	rx* (conq starts V)
ex 10.1d	Pf Conc K.503/iii, 32	tc (conq starts I)
	Vn Son K.376/i	ptc (conq – the “R-section” – starts I)

Similar, but obscured by the fact that the barlines are twice as far apart, is

ex 13.223b	Fl Conc K.313/ii, 17	rx (conq starts V)
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Conversely, one must disregard half the barlines in

ex 13.223c	Sym K.550/i	ac* (the first real downbeat of the ant is m 3, and of the conq is m 22)
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It can at times be difficult to decide how the antecedent ends, if it is run on into the consequent:

ex 8.23c	Pf Trio H.14/i, 40	ac (the very last harmony before the conq is IV, but ant “really” ends V)
ex 13.223d	SQ H.61/ii, 41	rx (ant ends V in spite of prominent tonic, m 44)

13.224 We have already mentioned in §2.15 that some tc's begin the consequent with I<sup>6</sup> harmony, which gives less of a feeling of full harmonic recovery than a I<sup>5</sup><sub>3</sub>, and so begins to sound a bit like a dx theme. Similarly, an ac whose consequent starts with first-inversion tonic harmony begins to feel like a reflex, but I've considered them tc's all the same:

ex 13.224a	SQ H.38/iii	ac%
ex 13.224b	SQ H.77/iv	ac%*

13.225 When a phrase begins or ends with I<sup>6</sup><sub>4</sub>, I have for classification purposes treated it as a tonic, even though this can be counter-intuitive at times. Thus:

	Vcl Conc H.1/iii, 21	rx (ant starts “I”)
ex 13.225a	Sym H.86/i, 64	tc (ant ends “I” in m 68; the I <sup>6</sup> <sub>4</sub> beginning to both halves doesn't affect classification)
	Pf Conc K.453/ii, 30	pv*ac (conq, m 43, begins “I”)

ex 13.225b Vn Conc K.219/iii, 31 ac (ant starts “I”; if the opening is treated as a dominant, we have a contravention of the rules of §2.1; cf. §13.0)

It’s important to note that, whatever we decide for labelling purposes, the tonic 6-4 is not “really” a V, nor “really” a I – in every case, substituting either dominant or tonic  $\frac{5}{3}$  for the harmony in question is a clearly unsatisfactory.

The same point needs to be made for the next situation we consider, the harmonic interpretation of unisons and empty octaves: while at times we could re-harmonize the passage in question with full harmony (usually tonic or dominant), the result will most often sound conspicuously worse. That is, unison/octave writing, and the tonic  $\frac{6}{4}$ , are genuine harmonic choices, though they are scarcely discussed as such in conventional theories of eighteenth-century harmony; and exactly what principles make such harmony appropriate in a given situation have yet to be defined.

13.226 In classifying the various two-part subtypes, I have treated unisons as follows: When possible, and usually, starting or ending a phrase on an unharmonized  $1^\circ$  or  $5^\circ$  is treated as doing so on the tonic or dominant, respectively. Thus,

ex 13.226a SQ H.59/iii, trio rx\*% (ant considered to begin, on its first downbeat, with I, and with V)  
 ex 10.21b Sym H.95/i prx\*% (opening p-section treated as I → V)

However, it should be noted that many p-type themes open with a unison passage that outlines a tonic  $\frac{6}{4}$ -chord, and while I’ve followed the above principle there too, for consistency’s sake, a tonic  $\frac{6}{4}$  is, again, not “really the same as” a V, or as a I, and a unison  $5^\circ$  at the end of such a passage still less so:

ex 10.232a Pf Son H.51/ii prx\*%  
 ex 13.226b SQ H.57/iii, trio prx\*%  
 ex 10.24c Vn Son K.302/i pac% (opening of “R”, m 3,  $I_4^6 = I$ )  
 ex 7.3c Vn Son K.305/i rx\*%  
 ex 2.2c Pf Trio K.548/i prx

And in one case I’ve disregarded this rule:

ex 13.226c SQ H.71/iii, trio rx\*%  
 Even though the first downbeat is solo  $5^\circ$ , I’ve interpreted the opening of the theme as tonic; otherwise both halves would begin with dominant harmony, and it would be classed as an ac, which just doesn’t feel right.

Other notes or combinations of unison or solo pitches are treated as the harmony implied by the context, I or V unless compelled otherwise:

ex 13.226d SQ H.63/iii, trio rx\*% (ant starts I)  
 ex 13.211e SQ K.465/iii ac\*% (ant starts and ends V)

Notice that if the harmony of K.465/iii is treated as  $V \rightarrow V$ ,  $I \rightarrow V_t$ , we in fact have a violation of the basic rule listed in §2.1 (1): that the second half of a theme begins on the tonic only if the first does. The only other examples of this in our repertory likewise depend upon the interpretation of an opening unison passage:

ex 13.226e SQ H.48/iii ac\*% ( $V \rightarrow V$ ,  $I \rightarrow V_t$ )

ex 13.226f SQ H.74/iii, trio ac\*% (V → V, I → V<sub>i</sub>)  
 ex 8.4a Pf Son K.279/iii, 22 ac (V → V, I → I<sub>k</sub>)

To these might be added

ex 13.225b Vn Conc K.219/iii, 31 ac (if the opening is treated as V, it then runs V → V, I → I<sub>k</sub>)

and a further special case:

ex 13.226g SQ H.68/i ac (in which the unison opening is probably interpreted the first time in D major, but the second time is harmonized in the tonic minor)

13.30 The relation of consequent to antecedent: “insertions”, “infixes”, short consequents, consequents which change mode, “morphological length”:

13.31 We’ll reserve the term “insertion” for a short phrase seemingly occurring “in the joints” of a theme; either right before the consequent and (apparently) after the antecedent cadence; or between a theme and its direct repetition. Such phrases have already been partly dealt with, to the extent they confuse classification, in §8.3 and §13.211. The latter section treated nonreplicate melodies, in which there’s a real question about “where does the ‘inserted’ phrase belong?” Here, we speak of replicate themes, and so it’s clear where the consequent begins: it’s where the opening motive recurs.

What we have, then, is a short phrase after what was, we thought, the antecedent cadence; but the motives haven’t begun to repeat yet. Sometimes it’s just a cadence-echo, both motivically and harmonically – that is, the cadence-harmony is simply restated:

ex 13.31a Pf Son H.50/i tc  
 SQ H.38/ii rx%  
 ex 13.210a Sym H.99/ii ac%\*  
 ex 13.223c Sym K.550/i ac\*

This insert can be arranged or extended into a kind of long upbeat to the consequent:

ex 13.33b Pf Son H.52/i dx%\*  
 ex 13.31b Pf Conc K.467/iii, 110 ac

And in this example, I can’t say whether the “inserted” phrase groups back, as an afterbeat/echo to the cadence, or forward, as a kind of upbeat to the consequent; it perhaps pivots between them:

ex 13.31c Vcl Conc H.1/i, 22 tc (see also the orchestral-tutti version, Vcl Conc H.1/i tc\*)

In the following examples, the appendix to the antecedent in fact contradicts the harmony of what might have been the antecedent cadence, moving from tonic to dominant, and so they’re classed as ac’s:

ex 13.31d Sym H.84/i, 21 ac  
 Sym H.9 6/i, 18 ac\*  
 ex 13.31e Vn Son K.301/i ac  
 ex 7.032b Vn Son K.304/i ac  
 Don G. K.527/Ov, 32 ac  
 (see also ex 8.3h SQ H.45/i ac\* – in which a phrase too long and

regular to be considered an “insert” has the same effect.)

Here is an example of the opposite case, a dominant cadence turned back to the tonic by an inserted appendix to the antecedent:

ex 13.31f Sinf Conc K.297b/i, 47 tc

In all of the above examples, the last cadence before the consequent – that is, before the recurrence of the opening motives – was taken as the one used for classifying the melody. But in

ex 13.31g Pf Son H.50/iii tc\*%

I abandoned this straightforward principle, since the phrase in question (mm 7-11) is obviously meant to sound like a wayward consequent; the antecedent “really ends” in m 7, on the tonic. And finally, a recadence just before the repetition of a melody can sound like a similar kind of “insertion”:

ex 13.31h Str 5t K.593/i, 21 rx%\*

13.32 By an “infix”, I mean a situation in a basically replicate motivic structure in which the consequent exhibits an expansion of and divergence from the antecedent pattern, to which it then returns at the point of divergence; schematically: (ant) a b c d e f

(conq) a b c x y z d e f.

All of these situations are necessarily “reconvergent” (cf §14.50), but in a kind of “nonmetric” sense, as opposed to the kind of motivic reconvergence one could represent (ant) a b c d e f

(conq) a b x y e f.

There aren’t many examples of genuine infixes in our repertory:

ex 13.32a	Pf Trio H.26/iii	ac*% (mm 7-10)
	SQ H.48/iii, trio	rx*% (mm 9-10)
	SQ H.71/iii	ac*% (mm 7-10)
ex 13.32b	Sym H.89/iii	ac*% (mm 4-5)
	Sym H.101/ii	ac% (m 8)
	Vn Son K.526/i, 54	ac% (m 61)
ex 2.12b	SQ K.464/ii	tc* (mm 13-16)
	Clar 5t K.581/iii, trio II	dec ac (mm 7-10)
ex 12.4311d	Vn Conc K.218/iii, 138	ac% (mm 153-55)
	Sym K.425/i, 20	ac (mm 33-36)

This kind of “true infix” should be distinguished from the common case in which the latter part of the consequent diverges from the pattern of the antecedent, but does not return to it:

ex 13.32e	Pf Son H.51/i, 11	ac
ex 13.32d	Hn 5t K.407/ii	ac%*

Similarly, a kind of “harmonic fermata”, repeating a motive in the middle of a phrase, might be a kind of Kochean *Einschaltung*, but is not really an insert into a pre-existing model:

ex 13.32e Trp Conc H.1/iii, 45 ac (mm 48-52)

§15 will discuss consequent expansion in detail.

13.33 We have said that in all two-part melodies, except P-types, the proportions of the two halves are roughly equal. In fact and more precisely, the principle can be stated that the length of the consequent is equal to or greater than that of the antecedent; the consequent can be extended, but is only very rarely truncated.

This section will list the only examples in our repertory of two-part melodies with genuinely shortened consequents. But first, we must set aside from consideration those melodies in which the consequent only appears shortened because of the elision of the final cadence-downbeat:

ex 13.33a	Sym K.425/iv, 58	ac
	SQ K.465/iv, 54	ac

In these, the tonic of the  $I_k$  occurs just where we would expect it, on the 8th “high-level 4/4” downbeat; the fact that this coincides with the onset of a new theme and makes it appear that the consequent has one measure fewer than the antecedent does not constitute a truly truncated consequent.

One should also note that some of those listed below, marked (+), have short consequents only because the antecedents have an appended phrase or cadence-extension of the type discussed in §13.212 and §13.31 above; in fact, they have “long antecedents” rather than short consequents. The remainder, then, represent the few examples in our repertory of genuinely truncated consequents:

ex 13.31a	+Pf Son H.50/i	tc
ex 13.33b	+Pf Son H.52/i	dx%*
	Pf Trio H.16/i	ac
ex 13.33c	Pf Trio H.19/ii	rx%
	+SQ H.38/ii	rx%
ex 14.91b	SQ H.43/iii	ac
ex 10.33b	SQ H.58/ii	v+rx
ex 13.211b	+SQ H.60/iii, trio	tc*%
ex 13.0a	SQ H.69/i	v+ac
ex 10.412c	+SQ H.73/i	pv+rx
	+Vc1 Conc H.1/i	tc*
ex 13.31c	+Vc1 Conc H.1/i, 22	tc
ex 8.4c	Sym H.86/i, 54	dx
ex 10.43c	Sym H.92/i, 21	ac*
	Sym H.94/i, 17	ac*
	+Sym H.96/i, 18	ac*
	Sym H.96/iii	ac*%
ex 2.17a	Sym H.100/i, 94	rx
ex 3.1b	Sym H.103/iv	ac
ex 8.4a	+Pf Son K.279/iii, 22	ac
ex 7.032b	+Vn Son K.304/i	ac
ex 12.322b	Fl Conc K.314/ii	ac
ex 13.31f	+Sinf Conc K.297b/i, 47	tc
	Pf Conc K.413/ii	ac
ex 10.412g	Pf Conc K.453/ii	pc+ac
ex 13.213c	Pf Conc K.482/iii, 71	dx
	+Pf Conc K.595/i, 16	ac
ex 13.223c	+Sym K.550/i	ac*
	+Don G. K.527/Ov, 32	ac

13.34 We will note here the few consequents which change mode, from major to parallel minor, or vice-versa. (Moves to the relative major or minor are considered deflections).

ex 8.23a	Pf Son H.52/i, 27	ac conq in minor
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	Pf Trio H.26/ii	rx* conq in minor (= Sym H.102/ii)
ex 13.34a	Pf Son K.332/ii	ac* conq in minor
	Str 5t K.515/i	ac conq begins minor
	Pf Conc K.453/ii, 30	pv+ac conq in major
	Sym K.504/i, 97	ac conq in minor
	Sym K.504/iii	ac* conq in minor

These might be compared to melodies whose repetition similarly changes mode, listed in §6.21.

13.35 Unlike three-part melodies (cf. §17.6), it is quite common for two-part themes to cadence within what Cooper and Meyer<sup>1</sup> call their “morphological length” – that is, before their 9<sup>th</sup>, 17<sup>th</sup>, or in general before the  $(2^n+1)^{th}$  downbeat. Thus the final tonic chord of the arrives on what is, metrically, a high-level weak beat, usually the 8<sup>th</sup> or 16<sup>th</sup> (or 2<sup>nth</sup>) on that metric level since the melody’s beginning:

ex 13.35a	Pt Son K.280/iii	ac
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Or, if the antecedent has, unusually, a structure that is not 2<sup>n</sup> downbeats long – for example, a six-bar antecedent – then the consequent will frequently cadence within the duration [2 x antecedent length]; in this example, within 12 bars, before the 13<sup>th</sup> downbeat:

ex 13.35b	Rondo K.494	ac
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Some other examples from the Mozart piano sonatas alone:

ex 6.0d	Pf Son K.281/iii	ac
ex 21.152a	Pf Son K.283/ii	ac
	Pf Son K.284/ii	ac
	Pf Son K.311/iii	ac
	Pf Son K.330/i, 34	ac
ex 21.155a	Pf Son K.333/i, 23	ac
ex 11.11a	Pf Son K.570/iii	ac
ex 7.02a	Pf Son K.576/ii	ac
	Pf Son K.576/i	ac

It’s unclear exactly why two-part melodies should so readily cadence within their “morphological length”, and three-part themes so often cadence beyond it (§17.6). But it is a fact somewhat similar to the circumstance that many two-part melodies end without a real I<sub>k</sub>, and this too is more rare in the three-part population: cf. §7.3.

#### 14.0 The replicate motivic structure of two-part melodies, in detail

Replicate motivic structure is by no means obligatory for two-part themes, but virtually all such melodies with a common motivic structure have one that can be derived from the basic replica: [b a b c] – that is, two phrases that begin similarly, then diverge into open and closed endings.

We will first, however, look at and list the non-replicate two-part melodies in our corpus, which in turn divide into two types: “symmetrical” themes, in which antecedent and consequent are of comparable length, and “p-type” melodies, in which the first part is much shorter and usually different in character from the continuation.

14.1 “P-types” have already been discussed briefly in §2.2, and in detail in §10, especially §10.2. Here we make only a few further remarks:

In some cases the p-section is so short compared to the rest of the theme that description as a “two-part” melody somewhat strains the language. Nevertheless, just as a sentence can have a very short subject and an indefinitely extended predicate, yet still be functionally in two parts, so, I think, can these:

ex 2.2b	Pf Son H.38/i, 19	ptc
	Pf Conc K.467/i, 109	pdx*

Conversely, a very long p-section begins to approach the more symmetrical nonreplicate two-part melodies in feeling, and no sharp boundary is to be drawn between them:

ex 10.25a	Vn Conc K.218/i	pdx *
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These should be compared to nonreplicate melodies whose first part is to a degree fanfarish or unison, but which I do not feel are really “p-types”:

ex 2.14b	Sym K.385/iv	ac*
	Pf Conc K.449/i	rx

Finally, there is a kind of p-type melody in which the first part overlaps into the second, the tonic of the  $I_k$  coming just as the “r-section” begins. These I have considered ptc’s:

ex 10.24a	Pf Son H.38/i, 13	ptc
ex 10.24e	Fl-Hp Conc K.299/i	ptc*

We will now list all at the p-type (hence also two-part nonreplicate) melodies in our repertory. The main reasons for such lists are, first, to provide examples for further inspection; and second, to give a concrete idea of the proportions of various motivic subtypes within the general population under review.

ex 10.21a	Pf Son H.36/i	ptc%*
ex 10.24a	Pf Son H.38/i, 13	ptc*
ex 2.2b	Pf Son H.38/i, 19	ptc
ex 10.24b	Pf Son H.39/iii	ptc*
ex 10.232a	Pf Son H.51/ii	prx*%*
ex 10.233a	Pf Trio H.11/ii	ptc*%*
	Pf Trio H.13/ii	ptc%*
ex 2.2d	Pf Trio H.15/i, 44	pdx
ex 5.0e	SQ H.58/i	pdx
ex 10.233b	SQ H.69/ii	ptc*%*
	SQ H.75/iv, 24	pac



	Sym H.87/i	ptc
ex 10.21b	Sym H.95/i	prx%*
ex 10.232c	Sym H.97/i, 14	ptc
ex 10.21c	Pf Son K.309/i	ptc%
ex 10.24c	Vn Son K.302/i	pac%
ex 10.233c	Vn Son K.306/iii, 30	pdx
	Vn Son K.376/i	ptc
ex 10.24d	Vn Son K.454/iii, 30	pac*
ex 2.2c	Pf Trio K.548 /i	prx
	SQ K.421/iii	ptc%
ex 10.233d	SQ K.428/i	pdx%*
ex 10.42a	Str 5t K.515/ii, trio	upac*
	WW Ser K.375/v, 16	prx*
ex 10.21d	WW Ser K.388/i	prx%*
ex 10.42b	Fl Conc K.313/ii	uptc%*
ex 10.24e	Fl-Hp Conc K.299/i	ptc*
ex 10.42c	Clar Conc K.622/i, 100	upac
ex 2.2a	2-Pf Conc K.365/i	pac
	Pf Conc K.413/i	ptc
	Pf Conc K.467/i, 109	pdx*
ex 10.22c	Pf Conc K.595/i	ptc
ex 10.25a	Vn Conc K.218/i	pdx*
	Sinf Conc K.364/i	pdx
	Sinf Conc K.364/i, 174	prx*%

14.2 Here we list all the “symmetrical” nonreplicate two-part melodies in our repertory, in which the antecedent and consequent are of roughly comparable length, but there is no motivic relation between the antecedent and consequent, with the occasional exception of parallel upbeats to both halves (for example, in the Haydn string quartet tc examples listed).

In many cases, what we have are two nearly-independent and well-organized (as ac, tc, etc.) themes, hooked together by an inconclusive medial cadence. This is particularly true among the rx and dx, which are over-represented here, in proportion to their share in the total repertory.

The numbers to the right indicate the “motivic length” of the antecedent; that is, the number of motivic units, and hence of downbeats on some level, the antecedent contains when parsed into the motives I have found most convenient for analysis. It must again be emphasized that this is always arbitrary to a degree, and a melody with “4 units” in its antecedent can usually as well be analyzed as having 2, or 8, such units. But the numbers do give a rough idea of length and motivic complexity, and also of metric binarity – how often, that is, antecedents are built in units of 2, 4, 8, 16, etc., as compared to the more unusual phrase lengths of 3,5,6,7,9,10, etc.

(14.2) (“Symmetrical” nonreplicate two-part themes)

ex 10.22a	Pf Son H.33/i, 24	rx	6
	Pf Son H.35/iii 54	rx*%	4
ex 8.25a	Pf Son H.36/i, 12	rx	10
	Pf Son H.36/iii, trio	dx*%	4
ex 8.25b	Pf Son H.37/i, 17	rx	10

	Pf Son H.37/iii	dx*%	4	
ex 12.222b	Pf Son H.40/i	rx*%	4	
	Pf Son H.43/i, 12	rx*	9	
	Pf Son H.43/ii	ac*%	4	
ex 13.33b	Pf Son H.52/i	dx%*	10	
	Pf Son H.51/i, 17	dx	6	
ex 8.23a	Pf Son H.52/i, 27	ac	4	
	Pf Son H.52/iii, 65	rx	13	
	Pf Trio H.6/i, 26	rx	30	
ex 9.21a	Pf Trio H.11/i, 32	ac	12	
ex 8.23c	Pf Trio H.14/i, 40	ac	7	
	Pf Trio H.15/ii, 16	dx*%	4	
	Pf Trio H.17/i, 13	dx	8	
ex 13.33c	Pf Trio H.19/ii	rx*	8	
	Pf Trio H.23/i, 20	tc*%	4	
	Pf Trio H.26/ii	rx*	8	(= Sym H.102/ii)
	Pf Trio H.28/iii, 42	dx*%	6	
	Pf Trio H.30/i	tc	3	
	Pf Trio H.31/ii	rx*%	4	
	SQ H.38/ii	rx%	6	
	SQ H.41/iii	rx%	4	
	SQ H.43/iv	ac%*	4	
ex 10.232b	SQ H.47/i	dx*	12	
ex 13.226b	SQ H.57/iii, trio	rx*%	4	
ex 10.33b	SQ H.58/ii	v+rx	11	
ex 13.211b	SQ H.60/iii, trio	tc*%	6	
	SQ H.61/i, 27	rx*%	4	
ex 13.223d	SQ H.61/ii, 41	rx	4	
ex 2.15a	SQ H.64/i, 24	tc	6	
	SQ H.64/ii, 32	rx*	5	
	SQ H.66/iii, 39	ac*	4	
ex 13.212a	SQ H.67/i	dx	3	
ex 2.18a	SQ H.70/ii	dx	4	
ex 12.31c	SQ H.72/i, 31	ac	4	
	SQ H.72/iii	tc*%	4	
ex 8.22a	SQ H.76/i, 13	rx	7	
ex 8.23d	SQ H.76/iv, 179	ac	26	
ex 11.10d	SQ H.77/ii	dx*%	2	
	SQ H.82/ii, trio	dx*%	3	
ex 13.212b	Trp Conc H.1/i	dx	8	
	Trp Conc H.1/iii, 80	rx	18	
	Vcl Conc H.1/i, 27	tc*	4	
	Vcl Conc H.1/i, 40	dx	5	
ex 12.322a	Vcl Conc H.1/ii	ac%*	7	
	Vcl Conc H.1/iii, 21	rx	10	
	Vcl Conc H.2/ii	rx%	4	
	Sym H.85/iii	rx%	4	
ex 8.4c	Sym H.86/i, 54	dx	11	

	Sym H.89/iii	dx*%	4
	Sym H.95/iii, trio	dx*%	4
	Sym H.96/iii, trio	dx*%	4
	Sym H.97/ii, 66	rx*%	6
ex 12.31d	Sym H.97/iii	rx*%	4
ex 10.22b	Sym H.98/i, 59	rx	13
ex 8.4a	Pf Son K.279/iii, 22	ac	10
ex 13.211d	Pf Son K.280/i	dx	6
ex 9.21b	Pf Son K.282/i	tc*	6
ex 8.22c	Pf Son K.282/ii, Men 2	rx*%	8
	Pf Son K.282/iii	rx*	15
ex 10.231a	Pf Son K.284/i	ac*	8
	Pf Son K.284/i, 22	rx	25
ex 8.23b	Pf Son K.311/ii, 16	ac	8
	Pf Son K.331/i, Var V	ac%	4
	Pf Son K.331/i, Var VI	ac%	4
ex 2.17b	Pf Son K.331/ii	rx	5
ex 7.5c	Pf Son K.331/iii	dx*%	4
ex 3.0b	Pf Son K.332/i	ac	4
ex 8.22b	Pf Son K.333/iii, 16	rx*	8
ex 5.1b	Pf Son K.533/i	dx%*	4
ex 10.231c	Pf Son K.570/i	dx	12
	Pf Son K.570/ii, 13	ac*%	4
	Pf Fant K.397, 55	dx*%	4
ex 10.231b	Vn Son K.296/i	dx%	4
ex 2.18b	Vn Son K.303/i	dx	4
	Vn Son K.306/ii	tc%	3
	Vn Son K.547/ii, 32	ac	14
	Pf Trio K.548/ii	ac	4
	SQ K.387/iii	dx	7
ex 2.14a	SQ K.421/iii, trio	ac%	4
	SQ K.421/iv, 96	rx%	4
	SQ K.428/i, 40	rx%	4
ex 2.17e	SQ K.499/ii	rx%	4
	SQ K.499/iii	rx%*	4
ex 12.321c	SQ K.589/ii	ac%	4
	Ser K.525/iv, 17	rx*	8
ex 2.12d	Str 5t K.515/iii	dx	4
	Str 5t K.516/ii	rx*%	4
ex 12.323a	Str 5t K.516/iii	ac	8
ex 13.31h	Str 5t K.593/i, 21	rx%*	2
	Fl 4t K.285/iii, 33	rx*	8
	Ob 4t K.370/ii	tc*	4
ex 2.17c	Clar 5t K.581/ii	rx	9
	WW Ser K.375/ii	rx%	4
	WW Ser K.388/ii, 24	ac%	4
ex 11.12b	WW Ser K.388/iv, 215	rx	8
	Fl Conc K.313/i	rx	15

ex 13.223b	Fl Conc K.313/ii, 17	rx	6
ex 13.211f	Fl Conc K.313/iii, 46	ac	14
	Fl Conc K.314/i	tc*	5
ex 9.11a	Fl-Hp Conc K.299/ii, 32	ac%	4
	Fl-Hp Conc K.299/iii, 207	tc%	4
ex 12.323b	Clar Conc K.622/i, 57	ac%	4
ex 2.16a	Clar Conc K.622/iii, 35	dec ac	4
ex 11.10f	Hn Conc K.417/ii	tc*%	4
	Hn Conc K.417/iii, 69	rx	8
	Hn Conc K.495/iii, 16	dx*	8
ex 8.21d	Sinf Conc K.297b/i	rx*	31
	Sinf Conc K.297b/iii	rx	4
	Sinf Conc K.297b/iii, 261	rx	4
	Pf Conc K.271/ii, 25	rx	7
	Pf Conc K.271/iii, 232	tc*%	4
	Pf Conc K.414/ii	ac	8
ex 8.4b	Pf Conc K.415/iii, 49	dx	6
	Pf Conc K.451/i	ac*	17
ex 10.412g	Pf Conc K.453/ii	pv+ac	13
	Pf Conc K.453/ii, 30	pv+ac	8
	Pf Conc K.482/i, 248	dx*	5
ex 12.324a	Pf Conc K.482/ii	rx*	4
	Pf Conc K.482/ii, 144	rx*	4
	Pf Conc K.482/iii, 218	ac%	4
	Pf Conc K.491/ii, 20	rx*%	4
	Pf Conc K.491/ii, 42	dx*%	4
	Pf Conc K.491/iii, 220	rx	8
	Pf Conc K.503/i, 148	tc*	4
	Pf Conc K.503/ii	ac	12
	Pf Conc K.503/ii, 23	rx*	12
ex 10.1d	Pf Conc K.503/iii, 32	tc	8
	Pf Conc K.595/i, 16	ac	13
ex 13.211c	Pf Conc K.595/ii, 49	dx*%	3
ex 12.222a	Pf Conc K.595/iii	ac%	4
	Vn Conc K.216/i, 41	rx*	4
ex 8.23e	Vn Conc K.218/i, 66	ac	8
ex 2.18c	Vn Conc K.219/i, 40	dx	4
	Vn Conc K.219/i, 74	ac	13
	Vn Conc K.219/ii	rx%*	16
ex 13.225b	Vn Conc K.219/iii, 31	ac	8
	Vn Conc K.219/iii, 78	dx%*	4
	Sinf Conc K.364/i, 94	rx	13
	Sinf Conc K.364/iii	ac%	4
	Sym K.385/ii	dx*	4
ex 2.14b	Sym K.385/iv	ac*	8
	Sym K.425/ii, 13	rx	7
	Sym K.425/iii	rx%	4
	Sym K.504/iii, 120	tc	10

14.30 There is also a small group of (symmetrical) two-part melodies that might be called “semi-motivic”, which in turn divide into two types: first, themes in which the second half begins in a way recognizably similar to the opening, but different enough so that it doesn’t really seem like starting over – “near-replicate” – and second, themes which aren’t in any sense replicate, but in which a motive or two from the antecedent appears reshuffled in the consequent.

14.31 “Near-replicate” two-part themes:

ex 8.10a	Pf Trio H.20/i	ac*	12
ex 11.12a	SQ H.74/ii, 23	rx*	8
ex 9.11b	SQ H.79/iv, 76	rx%	7
ex 13.213a	SQ H.81/i, 27	rx	6
	Sinf Conc H.105/i	rx	36
	Sym H.84/ii, 16	ac*%	4
ex 2.17a	Sym H.100/i, 94	rx	8
	Sym H.100/ii, 57	rx	13
	Pf Son K.280/ii	rx	2
ex 10.232d	SQ K.499/i	tc	12
	Str 5t K.593/iii	dx*%	4
ex 13.213b	Clar 5t K.581/iii, trio I	dx*%	4
ex 12.322b	Fl Conc K.314/ii	ac	10
	Hn Conc K.495/i	dx*	4
	2-Pf Conc K.365/i, 103	ac	16
	Pf Conc K.449/ii	ac*%	10
	Pf Conc K.466/iii, 63	ac	6
ex 13.213c	Pf Conc K.482/iii, 71	dx	9
	Sym K.385/i, 48	dx	20
	Sym K.550/iii, trio	tc*%	3

14.32 Nonreplicate two-part themes in which the antecedent and consequent share one or two reshuffled motives; the Haydn themes marked (+) all have some version of a [baac] or [baaac] motivic pattern:

	Pf Son H.35/i	rx%	4
ex 5.1c	+Pf Son H.42/ii	rx*%	4
	+Pf Trio H.8/ii	dx%	6
	Pf Trio H.20/iii, 32	dx%	3
	+Pf Trio H.21/iii	rx%	4
	Pf Trio H.25/i	ac*%	4
	SQ H.37/ii	ac*%	4
ex 7.5a	SQ H.39/ii, 34	tc*%	4
	SQ H.43/ii	rx*%	4
	SQ H.49/iii	dx%	4
	+SQ H.57/i, 56	rx%	4
	+SQ H.57/iv	rx%	4
	SQ H.60/i	dx	8
	SQ H.62/iii	rx*%	4
	+SQ H.63/iii	dx*%	4

	+SQ H.66/i, 16	dx*	6
	SQ H.66/ii	ac%	4
	SQ H.67/ii, 33	rx*%	4
	SQ H.68/iii	dx*%	5
	SQ H.70/ii, 17	ac	3
	+SQ H.79/iii	dx*%	4
	+Sym H.82/iii	rx*%	4
	Sym H.86/iii	rx*%	4
	Sym H.91/iii, trio	ac%	4
	+Sym H.95/ii	rx%	4
	Sym H.95/ii, 30	rx*	4
	+Sym H.97/iii, trio	rx%	4
	Sym H.98/i, 16	dx%	8
	+Sym H.98/iii	dx*%	4
	Pf Son K.284/iii, Var XI	ac*%	8
	Pf Son K.331/ii, trio	dx*%	3
ex 21.161c	Pf Son K.570/iii, 45	tc*%	4
	Vn Son K.302/ii, 17	ac	8
ex 7.3c	Vn Son K.305/i	rx%	8
ex 8.3g	Vn Son K.380/ii	rx*%	14
	Pf Trio K.564/ii	rx*%	4
ex 13.211a	Pf 4t K.493/i	dx%*	8
ex 13.223a	SQ K.458/ii	ac%	3
ex 13.211e	SQ K.465/iii	ac*%	6
	SQ K.575/i, 32	dx	34
	Ser K.525/iii, trio	ac%	4
	Str 56 K.614/iv	ac%	4
ex 8.4e	Fl 4t K.298/ii, 13	tc	8
ex 2.15c	Hn Conc K.417/i, 25	tc	4
	Hn Conc K.495/i, 43	dx	4
	Pf Conc K.271/ii	rx%*	7
	2-Pf Conc K.365/ii	rx	22
	Pf Conc K.449/i	rx	4
ex 12.321a	Vn Conc K.219/i, 118	dx	4
	Sym K.425/ii	rx	8

14.40 We now begin to enumerate the truly replicate two-part themes in this repertory, and we start with what I shall call “2x2” replicates – those in which the motivic structure is sufficiently simple that a description in terms of just four elements, the basic replica [b a b c], seems adequate. Thus, the antecedent is described with just two motivic elements (b a), and so is the consequent, disregarding consequent expansion. If the consequent is expanded, in this and subsequent lists, some plausible substitute for the expanded part is devised; in 2x2 replicates, the substitute would be simply (c). As we have already noted in §13.33, a truncated consequent is rare.

In these lists of melodies sorted by motivic pattern, then, it’s important to remember not only that the melodies were described as though consequent expansion did not occur – as though antecedent and consequent were of corresponding length – but also:

that quite often the difference between motive “a” and “c” – the ends of the antecedent and the consequent – is minimal (cf. §14.92); and also

that the metric level of the motivic description is to a degree arbitrary, at times highly so, and does not always correspond to the self-contained rhythmic units we customarily think of as “motives”. Thus a theme described as [b a b c] could, for example, quite possibly be just as well described [b ++ a b ++ c].

14.41 Here, then, are the 2x2 replicates in our repertory, [b a b c]. A few could also be described as [b<sup>2</sup> a b<sup>2</sup> c] or [b b<sub>2</sub> b c].

	Pf Son H.35/iii	ac%
ex 13.222a	Pf Son H.37/iii, 20	rx*%
	Pf Son H.41/i	rx
	Pf Son H.43/iii	tc%
	Pf Son H.50/ii	ac
ex 8.3d	Pf Trio H.17/i, 26	rx%
	Pf Trio H.18/ii, 16	dx*%
	Pf Trio H.24/iii	ac*%
	Pf Trio H.25/iii, 34	tc%
ex 2.17d	SQ H.44/iii, trio	rx%
	SQ H.46/iii, trio	dx%
	SQ H.47/iii	dx*%
	SQ H.49/ii	rx%*
	SQ H.63/iv	ac%
	SQ H.69/iii, trio	ac%
	SQ H.76/ii	ac%
	SQ H.77/iii, trio	tc*%
	Sym H.82/iii, trio	rx%
	Sym H.85/iii, trio	tc%
	Sym H.92/ii, 40	ac*%
	Sym H.94/ii, 49	rx*%
	Sym H.96/ii	rx%
	Sym H.104/ii	ac*%
	Pf Son K.576/i	rx%
	Vn Son K.377/iii	rx%
	SQ K.421/iv	rx%
	SQ K.464/ii, trio	ac%
	SQ K.465/i, 71	ac
	Str 5t K.515/ii	ac%
	Str 5t K.614/iii	rx%
	Ob 4t K.370/iii, 51	tc%
	WW Ser K.375v	ac%
	Hn Conc K.412/i, 11	ac%
	Hn Conc K.495/i, 32	tc%
	Pf Conc K.491/ii	ac%
	Vn Conc K.219/iii, 164	tc%
	Sym K.550/iv	rx%

14.42 We next list the few 2x3 replicates in the two-part repertory:

ex 9.12b	Pf Son H.49/iii	ac*%	b b d, b b [c]
	SQ K.421/i, 32	ac	b + a, b + c
	Fl Conc K.314/iii	ac%	b + a, b + c

14.50 Motivic strings which represent plausible analyses of 2x4 replicas in this repertory – replicas with four-unit antecedents – are all derived from the basic replica pattern, [b a b c]. “Derived from” here means, “inside a replica envelope”, [b . . . a, b . . . . c], and subject to certain other constraints. To specify these constraints, let us first remind ourselves of the symbols used in this kind of analysis:

b = the initial motive (and hence in replicates, the motive beginning both antecedent and consequent)

a = the motive ending the antecedent (or the limb of a ct)

c = the motive ending the consequent (or the tail of a ct)

b<sup>2</sup> = a short redoubled motive, equivalent in total metric length to that of a motive without the superscript

b<sub>2</sub> = a motive just slightly different from “b”

- = a “singlet”, an antecedent motive or metric unit which does not recur, or does not recur in a corresponding position, in the consequent.

+ = a “duplet”, an antecedent motive recurring only in its corresponding place in the consequent (or in the second limb of a ct)

We will next number the motivic positions in a 2x4 replica, before consequent expansion, like so:

b	.	.	c	,	b	.	.	c
1	2	3	4		5	6	7	8

It then appears that any pattern may occur in the empty positions, subject to these limitations:

1) “c” occurs just once, in position 8. That is, the ending motive is not anticipated, and melodies in this repertory do not end with motivic structures such as [. . . c c], [. . . c - c], or the like. (Remember, this is before consequent expansion.)

2) “a” does not occur in both positions 2 and 3. Thus, for example, [b b a a] and [b a b a] are both possible patterns for a four-place antecedent, but not [b a a a]. (“a” by definition occurs, as indicated, in position 4 in a four-place antecedent).

3) “b” occurs at least in positions 1 and 5.

4) “Reconvergence” is forbidden: once the “second ending” of the consequent is underway – after it has diverged from the motivic pattern of the antecedent – it does not revert to it. Thus patterns such as [b - + a, b - + c] will not occur.

5) “Motivic reshuffling” is likewise proscribed: any antecedent motive which re-appears as a singlet in the consequent must first occur as a duplet. Thus permissible patterns include

antecedent:	[ b d - a ,	[ b d d a ,	[ b a - a ,	[ b a - a ,
consequent:	b d d c ]	b - b c ]	b d d c ]	b a a c ]
	↑	↑		↑



But patterns such as these:

antecedent:	[ b - - a ,	[ b a - a ,	[ b d - a ,	[ b - d a ,
consequent:	b a - c ]	b - a c ]	b - d c ]	b d - c ]
	!	!	!	!

are disallowed. (In fact, the consequent pattern [b - b c] also seems not to occur – cf. §14.5219, §14.5224, etc. – but it’s unclear why not.)

Altogether this leaves 64 possible 2x4 replicate motivic patterns, of which in this repertory most occur at least a few times, and some (for example [b ++ a, b ++ c] ) very often. The easiest way to show this, and also to give an idea of the distribution of motivic patterns among the possibilities, is simply to list them. It must be borne in mind first, that a pattern like [b ++ a, b ++ c] is equivalent to [b a b c] (and also to [b + + + + + a, b + + + + + c] ); and second, that the analysis of a theme into any given pattern is a highly interpretive exercise, and that other interpretations are almost always possible.

Here then is a list of 2x4 replicate themes, sorted by motivic pattern:

14.511	b ++ a b ++ c		
	ex 7.3a	Pf Son H.36/iii Pf Son H.37/iii, 60 Pf Son H.40/ii Pf Son H.49/ii Pf Son H.51/i	rx% ac% ac*% ac*% ac
	ex 10.32c	Pf Trio H.18/i Pf Trio H.18/i, 44 Pf Trio H.21/ii Pf Trio H.22/iii Pf Trio H.23/i Pf Trio H.25/iii, 67 Pf Trio H.30/ii SQ H.61/i SQ H.65/iv SQ H.66/i SQ H.66/iv, 38 SQ H.67/ii SQ H.73/i, 57 SQ H.75/i	v+ac% ac dx*% ac%* rx*% tc% ac*% rx*% ac ac dec ac ac*% ac v+rx%
	ex 13.224b	SQ H.77/iv SQ H.81/ii SQ H.81/iv Sym H.84/ii Sym H.91/iv Sym H.93/iv, 118 Sym H.100/iv Sym H.101/iv Sym H.102/i, 22 Sym H.103/i, 79	ac%* ac% tc% ac ac% ac* ac% rx% ac% ac

		Pf Son K.311/ii	ac%
		Pf Son K.332/i, 41	ac
		Pf Fant K.475, 26	ac%
ex 7.3d		Vn Son K.376/iii	ac%
		Vn Son K.376/iii, 48	dx%
		Vn Son K.377/iii, 76	tc%
ex 8.3c		Vn Son K.454/iii, 16	tc%
		Pf 4t K.478/i, 57	ac
		Pf 4t K.493/iii, 72	ac%
		SQ K.387/iv, 92	tc%
		SQ K.421/i	tc
		SQ K.458/iv	ac%
ex 8.3e		SQ K.464/i, 37	tc%
ex 8.3a		SQ K.575/i, 87	tc
		SQ K.575/ii, 33	tc
ex 10.1h		SQ K.575/iii, trio	ac%
		SQ K.589/ii, 28	tc
		Str 5t K.516/iv, 138	ac%
ex 10.412f		Hn 5t K.407/i	pv+tc
		Hn 5t K.407/iii	ac%
		Pf-WW 5t K.452/iii	ac%
		Pf Conc K.415/i, 60	ac
		Pf Conc K.415/iii	ac%
		Pf Conc K.466/i, 127	rx%
		Pf Conc K.466/ii	ac%
		Pf Conc K.466/iii	ac%*
		Pf Conc K.467/iii	tc%
		Pf Conc K.537/iii, 89	ac%
		Pf Conc K.595/i, 55	tc
		Pf Conc K.595/ii	ac%
		Pf Conc K.595/iii, 65	ac
		Sym K.504/ii	tc
14.512	b + b a		
	b + b c		
		Pf Trio H.6/ii, 32	ac*%
ex 7.3b		Pf Trio H.10/i	rx
		SQ H.79/i	ac%*
		Sym H.85/ii	tc*%
		Sym H.88/i, 61	tc
		Sym H.93/ii	ac*%
		Sym H.94/iii, trio	rx*%
		Pf Trio K.564/i, 22	ac
		Clar 5t K.581/iv	ac%
14.513	b + b a		
	b + - c		
		Pf Trio H.25/ii, 19	ac*%

		Pf Trio H.28/i	rx%
	ex 13.224a	SQ H.38/iii	ac%
		SQ H.43/ii, trio	dx*%
		SQ H.68/iv, 46	tc
		SQ H.71/ii	tc*%
		SQ H.73/iii	rx*%
	ex 14.922a	SQ H.79/ii	ac
		SQ H.80/ii	ac%*
		Sym H.99/iv	ac*%
		Pf Son K.576/iii, 50	ac
		Vn Son K.547/i	ac%
		Ser K.525/i, 28	ac
		Hn Conc K.495/iii	ac%
		Pf Conc K.537/i, 38	ac
		Pf Conc K.595/iii, 107	ac%
		Vn Conc K.218/i, 18	ac
14.514	b + a a b + b c		
		[no examples]	
14.515	b + a a b + a c		
	ex 15.0a	Pf Trio H.13/ii, 74	ac%
		WW Ser K.375/iv, trio	ac%
		Sym K.551/iii, trio	ac%
		Sym K.543/iii, trio	rx%
14.516	b + a a b + - c		
		Sym H.97/i, 76	rx
		Vn Son K.380/iii	ac%
		Pf Conc K.488/iii	ac%
		Sym K.385/iii, trio	ac%
14.517	b + - a b + b c		
	ex 2.17h	SQ K.589/iii	rx%
14.518	b + - a b + - c		
	ex 14.91a	Pf Son H.34/iii	ac*%
		Pf Son H.37/ii	ac*%
		Pf Son H.38/iii	ac%
	ex 13.32c	Pf Son H.51/i, 11	ac
		Pf Trio H.7/i	dx*%
		Pf Trio H.8/ii, 54	ac*%
		Pf Trio H.12/ii	ac

		Pf Trio H.14/iii	rx%	
		Pf Trio H.15/ii	ac*%	
		Pf Trio H.20/ii	ac	
ex 13.32a		Pf Trio H.26/iii	ac*%	
		Pf Trio H.31/i	ac*%	
		SQ H.39/ii	dx%	
		SQ H.40/iii	ac	
		SQ H.41/iii, trio	ac*%	
		SQ H.46/ii	ac%	
		SQ H.47/ii	ac*%	
		SQ H.58/iii, trio	ac*%	
		SQ H.59/i	ac	
		SQ H.60/ii	ac%	
		SQ H.60/iv	ac%	
		SQ H.65/iii	rx*%	
		SQ H.73/iv	tc*%	
		SQ H.75/ii	ac%	
		Vcl Conc H.1/i	tc*	(ignoring insert)
ex 13.31c		Vcl Conc H.1/i, 22	tc	(ignoring insert)
		Sinf Conc H.105/ii	rx%	
		Sym H.82/ii	ac%	
		Sym H.89/ii	ac*%	
		Sym H.89/iii, trio	tc*%	
		Sym H.90/i, 51	tc%	
		Sym H.90/ii	ac*%	
		Sym H.91/ii	ac%	
ex 7.032a		Sym H.93/i, 74	ac%	
ex 21.152a		Pf Son K.283/ii	ac	
ex 21.161b		Pf Son K.330/i, 19	tc	
		Pf Son K.333/ii	ac	
		Pf Son K.333/iii	ac%	
		Ser K.525/ii	ac%	
		Fl 4t K.285/i	dx	
ex 7.02b		Fl 4t K.289/ii	ac%	
		Cl Trio K.498/iii	ac%	
		WW Ser K.388/iv	ac*%	
		Hn Conc K.447/ii	ac%	
		Fl Conc K.313/i, 31	tc	
		Pf Conc K.488/ii, 35	ac	
		Pf Conc K.488/iii, 106	ac%	
		Pf Conc K.503/i, 170	ac%	
14.5210	b b + a			
	b b + c			
ex 3.0c		Pf Son H.37/i	ac	
		Pf Son H.38/iii, 28	tc*%	
		Pf Trio H.21/i, 6	ac	
		Pf Trio H.25/iii, 121	tc%	

		Pf Trio H.28/iii	ac%
ex 10.32e		Pf Trio H.29/i	v+tc*%
		Pf Trio H.29/ii	ac%
		SQ H.38/ii, trio	rx%
		SQ H.64/iii, trio	rx%
		SQ H.74/iii	ac*%
		SQ H.76/i	ac
		Sym H.84/iii	tc*%
		Sym H.84/iii, trio	rx%
		Sym H.87/iii	rx%
		Sym H.100/iii	rx%
		Sym H.103/i, 39	dx%
		Sym H.103/ii, 26	tc*%
		Sym H.104/iv	ac%
		Vn Son K.306/ii, 18	tc
		Vn Son K.378/iii, 74	dec ac%
		Vn Son K.547/i, 40	ac
		Pf 4t K.478/i, 104	rx
		Pf 4t K.478/iii, 111	tc%
		SQ K.428/iv	tc
		SQ K.458/ii, trio	tc*%
		Fl 4t K.285/iii, 109	dx%
		Pf-WW 5t K.452/iii, 87	ac*
		Cl Conc K.622/i, 49	rx
		Hn Conc K.412/ii	ac%
		Pf Conc K.451/ii, 46	ac
		Pf Conc K.456/i, 54	tc
		Pf Conc K.456/ii, 126	rx*%
		Pf Conc K.482/i, 72	tc
		Pf Conc K.537/iii, 137	tc
		Vn Conc K.218/iii, 23	tc
		Sym K.504/ii, 35	tc
		Sym K.543/iv	ac
14.5211	b b b a		
	b b b c		
		SQ H.46/iii	rx%
		SQ H.74/i, 54	tc%
		SQ H.76/ii, 16	ac*
		Vn Son K.377/ii	ac%
		Pf Trio K.496/iii	ac%
		Pf Trio K.564/iii	ac%
		Pf Conc K.503/iii	ac
ex 11.11b		Vn Conc K.216/iii, 264	tc
		Vn Conc K.218/iii, 128	ac

14.5212	b b b a b b - c	Pf Trio H.13/i SQ H.68/ii SQ H.72/iv SQ H.78/iv Vn Son K.296/ii Vn Son K.547/iii WW Ser K.375/iv Pf Conc K.271/i, 26 Pf Conc K.453/iii, 64	ac*% tc*% ac% ac% ac% rx% ac*% rx dx*%
	ex 7.1a		
	ex 6.3a		
14.5213	b b b a b d d c	Pf Trio H.20/iii Pf Son K.310/i, 22	dx*% tc
	ex 10.0a		
14.5214	b b b a b - - c	SQ H.59/ii SQ H.68/iii, trio SQ H.75/ii, 33 Fl 4t K.298/iii Vn Conc K.216/i	rx*% dx*% tc rx rx
14.5215	b b a a b b b c	Sym H.96/iv Pf Conc K.451/iii	ac*% ac*%
14.5216	b b a a b b a c	Sym H.90/iv Vn Son K.376/i, 48 Pf 4t K.493/iii	ac% ac%* ac%
	ex 11.3b		
14.5217	b b a a b b - c	Vn Son K.379/ii	ac*%
14.5218	b b a a b d d c	[no examples]	

14.5219	b b a a b - b c	[no examples]	
14.5220	b b a a b - - c	[no examples]	
14.5221	b b - a b b b c	[no examples]	
14.5222	b b - a b b - c	Pf Son H.42/i Pf Trio H.19/i, 108 Pf Trio H.23/ii SQ H.40/iv SQ H.67/iv SQ H.71/iv ex 21.161a Pf Son K.279/iii Pf Son K.331/iii, 24 ex 21.141a Pf Son K.545/iii Pf Son K.576/ii, 17 Pf Son K.576/iii Vn Son K.481/iii Vn Son K.526/i, 54 Pf Trio K.548/iii ex 2.12b Cl 5t K.581/iii, trio II WW Ser K.388/ii, 16 Pf Conc K.456/ii Pf Conc K.459/iii Sinf Conc K.364/iii, 16	ac*% ac* ac rx% ac ac*% ac ac% ac% ac* ac ac*% ac% ac% ac% ac ac* rx*% ac*% ac%
14.5223	b b - a b d d c	Pf Trio H.19/iii, 67	rx
14.5224	b b - c b - b c	[no examples]	
14.5225	b b - a b - - c	SQ H.48/ii SQ H.67/iii	ac tc%

		Hn 5t K.407/iii, 73	ac*%
14.5310	b a + a b a + c ex 6.0e ex 9.12a	Pf Trio H.27/iii Sym H.82/ii, 32 Pf 4t K.493/i, 79 SQ K.458/i Hn Conc H.417/iii	ac% ac*% ac ac ac%
14.5311	b a b a b b - c ex 12.4311d	Pf Trio H.18/ii Vn Conc K.218/iii, 138	ac*% ac%
14.5312	b a b a b a b c ex 12.41a ex 12.42c ex 13.4322a ex 13.225a ex 12.4311a ex 12.4311b ex 12.4322b	Pf Son H.43/ii, trio SQ H.65/ii, trio SQ H.75/i, 72 Sym H.86/i, 64 Sym H.88/iv Sym H.92/i, 72 Sym H.94/ii Fl 4t K.285/i, 53 WW Ser K.375/iii, 26	dx*% dx*% tc tc tc*% tc ac*% ac tc
14.5313	b a b a b a a c	[no examples]	
14.5314	b a b a b a - c	Pf Trio H.19/i, 34 Vcl Conc H.1/iii Sym H.93/iv	ac*% tc ac%
14.5315	b a b a b d d c	[no examples]	
14.5316	b a b a b - - c	SQ H.57/ii	tc%



14.5317	b a - a b b b c <a href="#">ex 12.4311c</a>	Str 5t K.614/iii, trio	tc <sup>0</sup> %
14.5318	b a - a b b - c	[no examples]	
14.5319	b a - a b a b c	Sym H.89/iv, 92	tc <sup>*0</sup> %
14.5320	b a - a b a a c <a href="#">ex 12.42d</a>	Sym H.83/iii, trio SQ K.421/i, 25	ac <sup>*0</sup> % dec ac <sup>0</sup> %
14.5321	b a - a b a - c <a href="#">ex 7.02a</a>	Pf Son K.310/ii Pf Son K.576/ii Vn Son K.378/i, 47	ac ac ac
14.5322	b a - a b d d c	[no examples]	
14.5323	b a - a b - b c	[no examples]	
14.5324	b a - a b - - c	[no examples]	
14.5410	b d b a b d d c	Pf Trio H.26/iii, 44	ac <sup>*0</sup> %
14.5411	b d a a b d d c	[no examples]	
14.5412	b d d a b b b c	[no examples]	

14.5413	b d d a b b - c	SQ H.60/iii	ac*%
14.5414	b d d a b d b c	[no examples]	
14.5415	b d d a b d d c	SQ H.58/iv SQ H.64/ii SQ H.66/iii Sym H.86/iii, trio SQ K.K.499/ii, trio Str 5t K.515/iv Pf Conc K.451/iii, 55 Pf Conc K.503/iii, 163 Pf Conc K.537/i, 59	rx*% ac*% ac*% tc*% ac% ac rx% rx% ac
14.5416	b d d a b d - c  ex 10.412b	Pf Son H.33/iii Pf Trio H.16/iii, 20 SQ H.44/iv SQ H.70/i Ser K.525/iv Fl 4t K.298/ii, trio Pf Conc K.466/iii, 139	ac% dx*% tc% pv+ac ac% ac% ac%
14.5417	b d d a b - b c	[no examples]	
14.5418	b d d a b - - c	Sym H.100/iii, trio	ac%
14.5419	b d d a b e e c ex 13.226a	SQ H.59/iii, trio	rx*%
14.5420	b d - a b d d c  ex 13.32b	SQ H.64/i Sym H.101/ii Vn Son K.306/iii, 62	ac ac% ac*

14.5510	b - b a b b - c	Pf Son H.33/iii, 16 Pf trio H.25/ii SQ H.39/iii	rx*% ac*% rx
14.5511	b - b a b d d c	Pf Son K.332/iii, 15 Ser K.525/ii, 16 Ser K.525/iii	tc ac*% ac%
14.5512	b - b a b - - c	Pf Conc K.459/i	ac%
14.5513	b - a a b b b c	Pf Son H.36/ii, 16	ac*%
14.5514	b - a a b b - c	SQ H.75/iii, trio	tc*%
14.5515	b - a a b d d c	[no examples]	
14.5516	b - a a b - b c	[no examples]	
14.5517	b - a a b - - c	[no examples]	
14.5518	b - - a b b b c <a href="#">ex 13.226e</a>	SQ H.48/iii	ac*%
14.5519	b - - a b b - c	Pf Son H.334/iii, 18 Pf Son H.39/i, 6 Pf Trio H.6/ii SQ H.73/ii Sym H.85/iv	tc*% ac*% dx*% ac*% ac%

		Pf Son K.576/i, 41	ac	
		Pf Conc K.491/iii, 165	rx*%	
14.5520	b - - c b d d c	SQ H.59/iii	rx%	
		Pf Conc K.450/iii, 93	tc%	
		Sym K.385/iii	rx%	
14.5521	b - - a b - b c	[no examples]		
14.5522	b - - a b - - c	Pf Trio H.10/ii, 53	rx*%	
		SQ H.45/iii	rx%	
	ex 2.17g	SQ H.65/ii	rx%	
		SQ H.83/i	ac*%	
		Trp Conc H.1/ii	ac%	
		Pf Son K.570/ii	ac%	
		Fl 4t K.298/i	ac*%	
		Sym K.550/i, 44	rx%	
14.56	2x4 replicate themes which are motivically anomalous, and fit into one of the above categories by no plausible interpretation:			
		Pf Son H.49/iii, 61	tc*%	[a a + a, a a + c]
		SQ H.40/ii, 25	rx*%	[a a a a, a <sub>2</sub> a <sub>2</sub> a <sub>2</sub> c]
		SQ H.42/iv	rx%	[b d d a, b b d c]
		SQ H.42/iv, 16	rx*%	[b + a a, b + c c]
	ex 13.226d	SQ H.63/iii, trio	rx*%	[b a a a, b a a (c)]
		SQ H.65/iv, 30	dx%	[b b b a, b a - c]
		SQ H.70/iii	v+tc%	[b b + a, b b + b]
		SQ H.70/iii, trio	dx*%	[a a a a, a <sub>2</sub> a <sub>2</sub> a <sub>2</sub> a <sub>2</sub> ]
		SQ H.71/iii	ac*%	[b a a a, b a (a c)]
		SQ H.75/iii	dx*%	[a a a a, a a a (c)]
		SQ H.81/iii	dx*%	[b c c a, b c (c c)]
		Sym H.87/iii, trio	tc%	[b d d a, - d d c]
		Sym H.89/iv	tc%	[a - a a, a a a c]
		Sym H.91/iii	tc%	[b b - b, b b - c]
		Sym H.93/iii	tc*%	[b b - b, b b b (c)]
		Sym H.94/iv	dx%	[b c + a, b c + c]
		Sym H.97/ii	ac*%	[b <sup>2</sup> - + a, b <sup>2</sup> - + c <sub>a</sub> ]
		Sym H.98/iii, trio	dx%	[b - + a, b - + c]
		Sym H.103/ii	rx*%	[b - b a, b a a c]
		Pf Son K.284/iii, var XII	ac*%	[b a a a, b c c c]
		Sym K.425/i, 71	rx%	[b a a a, b - - c]

14.57 We will take this occasion for a final digression on this kind of motivic analysis. Consider again

ex 12.4311c Str 5t K.614/iii, trio tc%

the motivic structure of which can be represented [b a b a b - - c]. This pattern is contained within the replica envelope [b.....a, b.....c], and so can be considered replica-derived. However, an equally-plausible interpretation is this:

$$\begin{aligned} & [b a b a b - - c] \\ & = [B B - - ] \end{aligned}$$

– that is, as fundamentally a bar-form structure. And further, we have three phrases in a row beginning with the motive “b”; perhaps then this should be considered an anaphor?

It is obvious that in any moderately-intricate motivic structure the bar, reflex, and anaphor patterns are not mutually exclusive, and what we wish to avoid is being forced in some misleading way to choose among these descriptions when we specify the motivic structure of the melody. One helpful way or regarding the combination of these patterns is as the product of intercalation: the pattern above represents the intercalation of an anaphoric initial aspect:

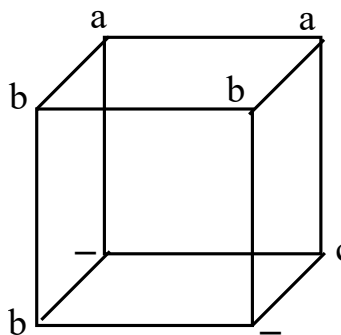
$$\begin{aligned} & b \ b \ b \ - \\ & \text{with a barform } \underline{\text{terminal}} \text{ aspect: } \underline{a \ a \ - \ c} \\ & = b \ a \ b \ a \ b \ - \ - \ c \end{aligned}$$

This is merely to say that the phrases start the same way three times, and the first two also have rhyming ends; but it also accurately, I think, reflects the way in which our formal sense responds first to the way in which longer units begin and end, and only then to their internal details.

If, moreover, we retreat a step and regard the four-place aspects themselves as derived by intercalation,

$$\begin{aligned} & b \ b \ \text{and} \ a \ - \\ & \underline{b \ -} \quad \underline{a \ c} \\ & = b \ b \ b \ - \quad = a \ a \ - \ c \end{aligned}$$

we can think of the whole process as an intercalation “in three dimensions”:

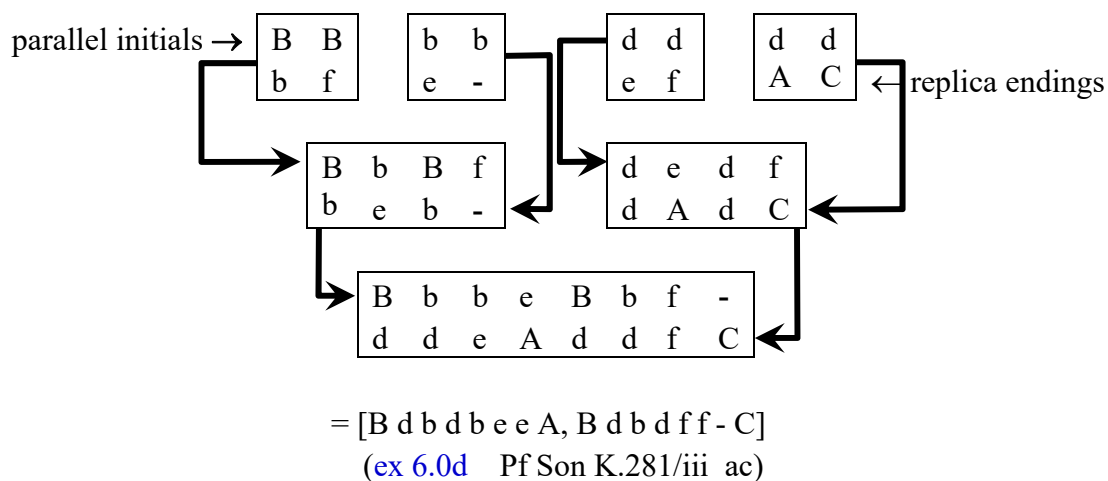


– that is, a process analogous to reducing dimensional information to a linear display. The cube above represents most aspects of the 8-place string in readily available form: as a concatenation of antecedent [b a b a] and consequent [b - - c] (top and bottom planes); intercalated anaphor and bar (front and rear planes); the replica envelope [b.....a, b.....c] (leftmost and rightmost vertices). Motivic units including the strongest metric values are in the foreground; among those, to the left, and between those, above.

The point is twofold: first, there is no privileged view of the cube; it is rather that we have a choice of aspects. Second, given a cube with its corners labelled as above, the pattern [b a b a b - - c] represents one of the systematic ways to read off all the letters in a line; to represent, in a recoverable way, the cube’s information in a single dimension. In such a transformation, items originally adjacent in a given dimension come to occupy corresponding positions in the linear version, and it is just this sense of “corresponding linear position” that we refer to as *meter*. Conversely, meter is a sequential linear organization that makes possible the idea of corresponding position, and thereby permits the association,

as though in some dimension adjacent, of items spatially or temporally remote. Meter is, on this interpretation, equivalent to a one-dimensional representation of a multi-dimensional space, and it seems possible that this has some connection to the role that meter plays in music.

With motivic strings longer than eight items, this poly-dimensionality is difficult to display directly, but one can still represent the strings as the product of successive intercalations:



A diagram like this is too cumbersome to be very useful in describing the motivic structure of two-part themes, and my only point here is that it depicts a kind of weaving, a braiding together, of elements, again resulting in items in some sense “originally adjacent” (in the top row) falling into corresponding positions in the final string. This kind of systematic serial combination of elements is the most characteristic, and essentially the only, kind of order in the motivic structure of these two-part melodies, and it seems to have considerably more in common with abstract decorative patterns in the visual arts, often textile-inspired – borders, tilings, and so on – than with, for example, the kind of syntactic relations found in the grammars of natural languages.

14.60 In this section we list the replicate themes whose antecedents are five, six, or seven metric/motivic units long (and whose consequents therefore are as long or longer). There are too few of these to justify inventing detailed motivic rules about, but in general (and except as noted below in §14.9), they of course occur within the replica envelope (b.....a, b.....c), avoid endings such as (.....cc), and also avoid motivic reconvergence and reshuffling. This section and §14.42 will, when compared to §14.41, §14.5, and §14.7, give a more concrete sense to the frequent observation that Classic themes are much more often constructed in  $2^n$  units – that is, units of 2, 4, 8, 16, 32.... – than in so-called “irregular” lengths.

#### 14.61 2x5 replicates

	Pf Trio H.22/ii	ac
	SQ H.39/i, 42	tc
	SQ H.58/iii	ac%
	SQ H.66/ii, trio	ac%
ex 13.226f	SQ H.74/iii, trio	ac*%
	SQ H.77/iii	tc*%

ex 10.1g	Sym H.101/i, 23	tc
	SQ K.590/iii, trio	ac%
	Pf Conc K.415/iii, 30	ac
	Pf Conc K.537/ii, 44	ac*
ex 13.222b	Entf K.384/Ov, 119	rx*

## 14.62 2x6 replicates

ex 10.32f ex 13.226c	Pf Trio H.5/ii, 29	tc
	Pf Trio H.11/ii, 32	ac*%
	Pf Trio H.12/i	rx%*
	Pf Trio H.19/i	ac*%
	Pf Trio H.23/iii	ac
	Pf Trio H.24/i	v+rx
	SQ H.48/iii, trio	rx*%
	SQ H.61/iii	ac%
	SQ H.64/iii	tc*%
	SQ H.71/i	v+rx%
	SQ H.71/iii, trio	rx*%
	SQ H.83/ii, trio	ac%
	Sym H.92/iii	ac*%
	Sym H.92/iii, trio	tc*%
ex 13.210a ex 2.17f	Sym H.99/ii	ac%*
ex 2.13c	Sym H.102/i, 81	rx
	Pf Trio K.542/i, 51	ac%*
	SQ K.387/i, 24	ac
	SQ K.421/ii	tc*%
	SQ K.428/iii	dx*%
	SQ K.589/i	ac
ex 3.1c	Vn Conc K.219/iii, 132	tc
	Sym K.543/iv, 41	ac
	Sym K.551/i, 56	ac

## 14.63 2x7 replicates

ex 13.31g	Pf Son H.50/iii	tc*%
	SQ K.590/iii	dx*%

14.70 The principles governing 2x8 motivic strings appear to be similar to those for 2x4's: the replica envelope is preserved, reconvergence and reshuffling are proscribed, and the second-ending motive, "c", occurs just once, disregarding consequent expansion. The antecedent may end on a continuously-repeated motive on a given metric level, up to but not including [b + . a . a . a]; thus permissible antecedent-endings include

a a a a)

a a a)  
 a a)  
 a - a)  
 a - - a)

Also, as indicated above, the second motivic element of the antecedent and consequent is normatively a “duplet” (indicated by +) – that is, the same in both halves of the theme. In other words, the two halves of the theme don’t diverge motivically until the third motivic unit, at the earliest.

It is quite impracticable to list all the possibilities within these rules, as we did for 2x4 strings. The list below instead sorts the melodies concerned by terminal aspect; I have also for each theme given a plausible motivic analysis (again, usually only one of several), in order that one may gain some idea of the possibilities and distributions within them. (Recall that “o”, whether as ordinary symbol or superscript, indicates a motive/metric unit that is just a single note, and “ø” denotes a “motive” that is just a rest. Expanded consequents are replaced by hypothetical non-expanded versions in brackets.)

Two common Mozart patterns should be noticed: [b . b . b b (b) a, b . b . b b (b) c]

ex 14.70a Pf Son K.309/iii ac  
 ex 14.70b SQ K.589/i, 45 ac

and the similar [b d . d d d . a, b d . d d (d) . c]

ex 14.70c Pf Son K.331/i ac%  
 ex 14.70d Pf Trio K.496/ii ac

It might also be noticed that in this section, as in §14.5, only a quite small proportion of the themes are rx or dx.

14.711	b + + a b + + c	( <u>terminal</u> aspect)		
		Pf Trio H.10/ii	tc%	b+++ dd-a, b+++ dd-c
		SQ H.61/ii	ac	bbdd d+-a, bbdd d+-c
		SQ H.63/ii	ac*	b+b+ dd+a, b+b+ dd+c
		SQ H.66/iv	ac	bbb+ +++a, b+b+ +++c
	ex 13.226g	SQ H.68/i	ac	bdd+ o+oa <sup>o</sup> , bdd+ o+[oc]
		Sym H.104/i, 17	ac	bo++ dd+a, bo++ dd+c
	ex 6.0b	Pf Son K.309/ii	ac%	bbb <sub>2</sub> + dd-a, bbb <sub>2</sub> + dd-c
		Vn Son K.301/ii	ac%	bb++ dd+a, bb++ dd+c
		Vn Son K.302/ii	ac%	bb++ +-a, bb++ +-c
		Vn Son K.304/ii	ac%	b+++ +-a, b+++ +-c
		Vn Son K.378/iii, 152	ac%	b+b+ dd-a, b+b+ dd-c
		Vn Son K.403/iii	ac	bb <sub>2</sub> ++ +++a, bb <sub>2</sub> ++ +++c
	ex 2.12a	Vn Son K.454/i, 14	ac*	b+++ dd-a, b+++ dd-c
		Vn Son K.526/i	ac	b+b <sub>2</sub> + dd+a, b+b <sub>2</sub> + dd+c
		Vn Son K.547/ii	ac	bbb+ +-a, bbb+ +-c
		Pf Trio K.502/ii	ac	b+++ dd-a, b+++ dd-c
		Pf 4t K.478/iii	ac	bdd+ eeea, bdd+ eeec



		SQ K.575/iv	ac	b+++ +-a, b+++ +[-c]
		Str 5t K.515/iv, 58	ac*	bdd+ oo-a, bdd+ oo[-c]
		Str 5t K.614/ii	ac%	b+bo dd+a, b+bo dd+c
		Clar 5t K.581/i, 65	tc	b+d+ ddda, b+d+ ddd[c]
		Pf-WW 5t K.452/i, 43	ac	b+++ dd-a, b+++ d <sub>2</sub> d <sub>2</sub> -c
		Pf-WW 5t K.452/ii	ac	b+++ dd-a, b+++ dd-c
		Fl Conc K.313/iii	ac	bdd+ +eea, bdd+ +e-c
		Cl Conc K.622/iii, 57	ac*	b+++ dd+a, b+++ dd+c
		Pf Conc K.413/iii	ac	b <sup>o</sup> b <sup>o</sup> ++ ddda, b <sup>o</sup> b <sup>o</sup> ++ dddc
		Pf Conc K.450/iii, 43	ac	b+++ dd-a, b+++ dd[-c]
		Pf Conc K.451/iii, 135	ac	b+bo ee-a, b+bo ee[-c]
	ex 7.4a	Pf Conc K.453/i, 110	ac	b <sup>2</sup> +++ dd+a, b <sup>2</sup> +++ dd[+c]
	ex 3.1e	Pf Conc K.453/iii	dx*%	b+dd d++a <sup>o</sup> , b+dd d++c <sup>o</sup>
		Pf Conc K.456/iii	ac	bbb+ dd-a, bbb+ dd[-c]
		Pf Conc K.456/iii, 90	ac%	bbb+ dd-a, bbb+ dd-c
		Pf Conc K.488/iii, 230	ac	b+b+ dd-a, b+b+ ddd[c]
		Pf Conc K.503/iii, 144	ac	b <sup>2</sup> +++ dd+a, b <sup>2</sup> +++ dd[-c]
		Pf Conc K.537/ii	ac%	bbdo dd-a, bbdo dd-c
		Sym K.550/ii	ac	bbb+ dd+a, bbb+ dd[-c]
		<u>DG</u> K.537/Ov, 32	ac	b <sup>o</sup> b <sup>o</sup> dd eeaa, b <sup>o</sup> b <sup>o</sup> dd ee[-c]
		<u>Tito</u> K.621/Ov, 29	ac	bb++ dd-a, bb++ dd-c
14.712	b + b a b + b c	SQ H.41/iv	rx*%	bbb+ bboa <sup>o</sup> , bbb+ bboc <sup>o</sup>
		Pf Son K.310/iii	ac	bbb+ bbba, bbb+ bb[-c]
		SQ K.590/i, 31	tc	bd++ +d+a, bd++ +d+[c]
		Str 5t K.516/i	ac	bb++ bbba, bb++ bbb[c]
		Fl-Hp Conc K.399/iii	ac	bdee bdda, bdee bddc
14.713	b + b a b + - c	Sym H.93/i, 21	ac	bdb+ dd-a, bdb+ ee-c
		Sym K.385/iv, 38	ac	bdb+ bdba, bdb+ beec
14.714	b + a a b + b c	[no examples]		
14.715	b + a a b + a c	Sinf Conc K.364/iii, 80	ac%	bdd <sub>2</sub> + aaaa, bdd <sub>2</sub> + -a-c
	ex 13.33a	Sym K.425/iv, 58	ac	b+++ aaaa, b+++ aa[-c]

		Fig K.492/Ov, 108	tc	b+++ baaa, b+++ baac
14.716	b + a a b + - c	SQ H.64/iv Vcl Conc H.2/i, 50 Sym H.95/iii Sym H.102/iii	ac*% ac tc*% ac*%	bbb <sup>2</sup> e dada, bbb <sup>2</sup> e e-e <sup>2</sup> c b+++ aa-a, b+++ ee[-c] bbdo -a-c, bbdo d-d[c] bbb+ dada, bbb+ d[--c]
14.717	b + - a b + b c	Pf Trio H.17/ii	ac*	bbb+ ddda, bbb+ bb-c
14.718	b + - a b + - c	Pf Trio H.22/i ex 10.33d Pf Trio H.28/ii SQ H.62/i SQ H.62/iv Sym H.100/i, 24 ex 21.2341a Pf Son K.281/i Pf Son K.311/iii, 41 ex 21.155a Pf Son K.333/i, 23 Vn Son K.378/ii Vn Son K.378ii, 16 Pf 4t K.478/ii Pf 4t K.478/iii, 44 SQ K.387/ii, trio SQ K.465/iv, 54 ex 2.13d SQ K.575/iii Cl Conc K.622/iii ex 7.02c Pf Conc K.414/i Pf Conc K.415/ii Pf Conc K.451/ii Pf Conc K.482/iii, 128 Pf Conc K.488/i Pf Conc K.488/iii, 62 ex 7.4b Vn Conc K.218/iii Vn Conc K.219/iii Sinf Conc K.364/i, 125	ac v+rx* ac%* ac ac tc ac ac ac% ac* ac ac* ac*% ac ac* ac% ac ac%* ac%* tc ac ac ac ac ac	bbb+ +--a, bbb+ +--c bbdd ---a, bbdd ---[c] bbbo b--a, bbbo b--c bbbd d--a, bbbd d--c b+dd e--a, b+dd e--c bddo e-ea <sup>o</sup> , bddo --ec <sup>o</sup> bb <sub>2</sub> ++ dd-a, bb <sub>2</sub> ++ ---c b+d <sup>2</sup> + eeda, b+d <sup>2</sup> + ---c b+++ -aaa, b+++ dddc b+b+ -d <sup>2</sup> d <sup>2</sup> a, b+b+ -eec b+++ dd-a, b+++ -[--c] b+++ dd-a, b+++ d--c bbod ---a, bbod d[--c] b+dd eaaa, b+dd e-[-c] bb++ dd-a, bb++ eeec b+oo dd-a, b+oo ee-c b+b+ ddda, b+b+ eee[c] b+++ +--a, b+++ +--c b+b+ b--a, b+b+ dd-c bb++ beea, bb++ b-[-c] b+++ dd-a, b+++ ee[-c] b+++ b--a, b+++ ---c b+++ --aa, b+++ ee[-c] b+++ dd-a, b+++ ee-c bbb+ dd-a, bbb+ --[-c]

14.7210	b b + a b b + c			
		Vcl Conc H.2/iii	ac	bdbd ee-a, bdbd ee-c
		Sym H.97/iv	ac*%	bdbd ee+a, bdbd ee+c
		Pf Son K.284/ii	ac	bdbd ee-a, bdbd ee-c
	ex 14.70a	Pf Son K.309/iii	ac	bobo bbba, bobo bbb[c]
		Pf Son K.330/iii	ac	bdbd bb-a, bdbd bb-c
		Vn Son K.376/ii	ac	bdbd ee-a, bdbd ee-c
		Vn Son K.378/iii	ac%	bddd eeaa, bddd eeac <sup>o</sup>
		Vn Son K.454/i, 29	ac	bdbd ee-a, bdbd ff[-c]
		Vn Son K.454/ii	ac	bdbd ee-a, bdbd ee[-c]
		Vn Son K.481/ii	ac%	bddd d+-a, bddd d+-c
		Pf Trio K.542/iii	ac	bdbd eeaa, bdbd ee[-c]
		Pf 4t K.478/ii, 35	ac	bddd ++-a, bddd ++-c
		SQ K.575/i, 17	tc*	bobo ddda, bobo ddd[c]
		SQ K.590/ii	ac	bdbd bbba, bdbd bbbc
		Str 5t K.515/iii, 13	ac*	bdbd ee-a, bdbd ee[-c]
		Str 5t K.515/iv, 102	ac	bobo ++aa, bobo ++[-c]
		Ob 4t K.370/iii	ac	bddd ee-a, bddd ee[-c]
		Pf-WW 5t K.452/iii, 16	ac*	bdbd b <sup>2</sup> b <sup>2</sup> -a, bdbd b <sup>2</sup> b <sup>2</sup> [-c]
		Pf Conc K.413/iii, 33	ac	bbbb dd-a, bbbb dd-c
		Pf Conc K.414/i, 50	ac	bddd deea, bddd deec
		Pf Conc K.4114/iii, 108	ac	bdbd ee-a, bdbd ee[-c]
		Pf Conc K.415/i, 93	ac	bdbd ++-a, bdbd ++-c
		Pf Conc K.450/i, 25	tc	bdbd bbba, bdbd bb-c
		Pf Conc K.537/iii	ac%	bdbd eeea, bdbd ee-c
		Pf Conc K.537/iii, 48	ac	bdbd ++-a, bdbd +++[-c]
		Vn Conc K.216/iii	ac	bdbd eeea, bdbd eeec
		Sym K.543/ii	ac*%	bdod d+++a, bdod d+++ca
		Sym K.551/iv	ac	b <sup>o</sup> b <sup>o</sup> b <sup>o</sup> b <sup>o</sup> +++a, b <sup>o</sup> b <sup>o</sup> b <sup>o</sup> b <sup>o</sup> +++[-c]
14.7211	b b b a b b b c			
	ex 13.31a	Pf Son H.50/i	tc	bddd dd+[a], bddd dd+c
		SQ H.59/iv	ac	bdbd bd-a, bdbd bd-c
		Sym H.92/iv	ac%	bdbd bdaa, bdbd bdac <sup>a</sup>
	ex 11.10a	Pf Son K.545/ii	ac%	bdbd dd-a, bdbd dd-c
	ex 8.11a	Vn Son K.379/i	ac*	bddd dd-a, bddd ddd[c]
	ex 14.70d	Pf Trio K.496/ii	ac	bdbd dd-a, bdbd dd-c
		SQ K.575/ii	ac	bd+d dd-ab, d+d dd[-c]
		Fl Conc K.313/iii, 108	ac	bdbd bd <sup>2</sup> +a, bdbd bd <sup>2</sup> +c
	ex 7.2b	Pf Conc K.450/iii	ac	bdbd bd+a, bdbd bd+c

	<a href="#">ex 13.31b</a>	Pf Conc K.467/iii, 110	ac	bbbb bb-a, bbbb bbb[c]
14.7212	b b b a b b - c	SQ H.80/iv	ac*	bbbb bb-a, bbbb b[--c]
	<a href="#">ex 14.70c</a>	Pf Son K.331/i	ac%	bdbd dd-a, bdbd eeec
	<a href="#">ex 21.162a</a>	Pf Son K.457/iii	ac	bbbb bbba, bbbb b--c
		Vn Son K.301/ii, 75	rx*%	bobo bo-a, bobo ---c
		Cl Conc K.622/iii, 137	ac*	bbbb bb-a, bbbb ---[c]
		Pf Conc K.467/iii, 154	tc	bdbd bd-a, bdbd beec
14.7213	b b b a b d d c	SQ H.82/i	ac	bdbd ddda, bdbbe be-c
14.7214	b b b a b - - c	[no examples]		
14.7215	b b a a b b b c	SQ H.72/iv, 24	tc*	bdbd aaaa, bdbd bdd[c]
14.7216	b b a a b b a c	SQ K.464/ii	tc*	bdbd eaea, bdbd [ea-c]
		Hn Conc K.495/i, 97	ac	bdbd +a-a, bdbd +a-c
14.7217	b b a a b b - c	Pf Son H.34/i	ac*	bbbb baaa, bbbb bdd[c]
	<a href="#">ex 13.35a</a>	Pf Son K.280/iii	ac	beee aaaa, beee dd-c
14.7218	b b a a b d d c	[no examples]		
14.7219	b b a a b - b c	[no examples]		
14.7220	b b a a b - - c	[no examples]		



14.7310	b a + a b a + c	Vn Son K.526/iii SQ K.428/iv, 60 SQ K.458/iv, 81 SQ K.465/iv Pf-WW 5t K.452/i, 21 Pf Conc K.488/iii, 16	ac% ac% ac ac ac tc	b <sup>a</sup> +aa ddaa, b <sup>a</sup> +aa dd-c b <sup>o</sup> +da eeda, b <sup>o</sup> +da eecc bb+a ddda, bb+a dddc bb+a dd-a, bb+a dd-c bbba deea, bbba de-c bbba dd+a, bbba dd+[c]
	ex 12.42a			
	ex 12.42b			
14.7311	b a b a b b - c	[no examples]		
14.7312	b a b a b a b c	SQ H.65/i	tc	bdea bdea, bdea bdec
14.7313	b a b a b a a c	[no examples]		
14.7314	b a b a b a - c	[no examples]		
14.7315	b a b a b d d c	[no examples]		
14.7316	b a b a b - - c	SQ H.43/iii	ac	bdba bdba, bd[-- ----c]
	ex 14.91b			
14.7317	b a - c b b b c	[no examples]		
14.7318	b a - a b b - c	Pf Son H.39/i	rx*%	bd-a <sup>o</sup> ee+a <sup>o</sup> , bdbd ff+c <sup>o</sup>
	ex 12.11a			
14.7319	b a - a b a b c	[no examples]		

14.7320	b a - a b a a c	[no examples]		
14.7321	b a - a b a - c			
	<a href="#">ex 8.3f</a>	Sym H.84/iv	dx	bdeo b--a, bd-o ee-c
	<a href="#">ex 21.34a</a>	Cl Conc K.622/i	ac	b+++a dd-a, b+++a ee-c
	<a href="#">ex 12.4323a</a>	Pf Conc K.449/iii	ac	bdda bb-a, bdda ee-c
		Pf Conc K.488/iii, 262	ac	b+++a b--a, b+++a b--c
		Vn Conc K.216/ii	ac	bdda ---a, bdda dd-c
14.7322	b a - a b d d c	[no examples]		
14.7323	b a - a b - b c	[no examples]		
14.7324	b a - a b - - c			
	<a href="#">ex 10.32d</a>	SQ H.72/i	v+tc	bdda -eea, bdd-ff-c
14.7410	b d b a b d d c	[no examples]		
14.7411	b d a a b d d c			
		Pf Trio H.30/iii	ac*%	bbbd daaa, bbbd ddac
14.7412	b d d a b b b c	[no examples]		
14.7413	b d d a b b - c	[no examples]		
14.7414	b d d a b d b c	[no examples]		

14.7415	b d d a b d d c	Str 5t K.516/iv Hn 5t K.407/ii Pf Conc K.413/i, 24 Pf Conc K.414/iii, 21	ac% ac%* rx* ac	bbbd dd-a, bbbd dd-c b <sup>o</sup> +de deda, b <sup>o</sup> +de eee[c] b+de deda, b+de de[-c] b++d dd-c, b++d dd[-c]
	<a href="#">ex 13.32d</a>			
14.7416	b d d a b d - c	Pf Son K.284/iii WW Ser K.288/ii	ac*% ac	bode deea, bode dggc b <sup>o</sup> +dd dd-a, b <sup>o</sup> +dd d--c
14.7417	b d d a b - - c	SQ H.70/iv	ac*%	bbbd dd-a <sup>o</sup> , bbb- ---c <sup>o</sup>
14.7418	b d d a b e e c	Pf-WW 5t K.452/iii, 40	ac	bbbd dd-a, bbbe ee[-c]
14.7419	b d - a b d d c	Pf Trio K.542/iii	ac%	b+dd +-da, b+dd +ddc
14.7510	b - b a b b - c	[no examples]		
14.7511	b - b a b d d c	[no examples]		
14.7512	b - b a b - - c	[no examples]		
14.7513	b - a a b b b c	[no examples]		
14.7514	b - a a b b - c	[no examples]		



14.7515	b - a a b d d c	[no examples]		
14.7516	b - a a b - b c	[no examples]		
14.7517	b - a a b b b c	[no examples]		
14.7518	b - - a b b b c	[no examples]		
14.7519	b - - a b b - c	F1 4t K.285/ii SQ K.590/iv	ac tc*%	bdb- eeea, bdbd ---c bb-- dd-a, bbbb b--c <sup>o</sup>
	<a href="#">ex 12.11b</a>			
14.7520	b - - a b d d c	[no examples]		
14.7521	b - - a b - b c	[no examples]		
14.7522	b - - a b - - c	SQ H.74/iv Sym H.96/iii Pf Son K.330/i, 34 Hn Conc K.495/iii, 84	ac* ac*% ac ac*	bbde effa, bddd gg[-c] b+bo dd-a, b+be e[--c] bde- --da, bdee e--c b+++ ---a <sup>o</sup> , b+++o dd-c
14.76	In one of the above categories by no plausible interpretations: anomalous terminal aspects:			
	<a href="#">ex 7.01b</a>	Pf Trio H.11/i, 60 Sinf Conc H.104/iii, 35 Sym H.83/iv Sym H.102/iii, trio Pf Son K.533/i, 41	ac ac rx% ac% rx%	baba bad <sub>2</sub> a, baba b-d <sub>2</sub> c baba baba, baba baba bbb- dd-a <sup>o</sup> , bdbd ddoc baeo effa, baea ac <sup>o</sup> ac <sup>o</sup> bddo eeea, bdd- oeec

Vn Son K.304/ii, 93	ac*%	baba b--a, baba ---c
SQ K.428/iv, 9	ac*	bbba -aaa, bbb- aa-c
Hn Conc K.447/iii, 97	ac	bobo +dda, -obo +ddc
Pf Conc K.503/iii, 75	ac%	bado ddda, bado dddc
Pf Conc K.488/ii	rx	b--- dd-a, bb-o ee[-c]
Sym K.550/iv, 70	ac%	b--- dd-a, b-ee ---[c]

14.77 It will have been noticed that in a theme such as, for example,

ex 14.70a Pf Son K.309/iii ac

both halves of the larger ac are themselves small ct's, with barform motivics. This is a typical instance of the *componential* nature of many of these long themes, especially Mozart's: they are often (but by no means always) built from small units themselves of familiar shape. One further example will suffice here:

ex 14.77a SQ K.465/i, 23 ac

The two large limbs of the overall ac have anaphoric initials and a ct phrase structure; in the antecedent the last unit (mm 29-30) is also a small barform; in the "consequent expansion" (from m 36) an extended barform occurs, of which the tail (from m 39) is yet another bar, and its tail, in turn (from m 40) is a small replica, with tc structure in miniature.

14.80 We now list the replicate two-part themes in our repertory which have a motivic structure of intricacy such that describing the antecedent with more than 8 units seems appropriate. These continue to follow the principles of non-reconvergence and non-reshuffling, and lie within a replica envelope.

14.809 2x9 replica

SQ H.74/iv, 18 dec ac

14.810 2x10 replicas

ex 10.24g Pf Trio H.16/i ac  
 Sym H.89/i tc\*  
 Pf Son K.533/ii ac\*  
 Pf 4t K.493/ii ac\*  
 SQ K.387/ii ac\*  
 Hn Conc K.495/ii ac  
 Pf Conc K.459/ii ac  
 Pf Conc K.491/i, 201 ac  
 Sym K.425/i, 20 ac

14.811 2x11 replica

SQ H.45/iv ac\*

14.812 2x12 replicas

Pf Son H.48/ii ac\*%  
 Pf Son H.52/ii ac\*%  
 SQ H.46/iv ac

ex 10.412c	SQ H.73/i	pv+rx
	SQ H.73/i, 28	ac*
ex 13.32e	Trp Conc H.1/iii, 45	ac
ex 13.31d	Sym H.84/i, 21	ac
	Pf Son K.280/iii, 38	ac
	Pf Son K.332/iii	ac
	Pf Son K.457/ii	ac
ex 14.91c	Pf Fant K.475, 91	ac
ex 13.35b	Pf Rondo K.494	ac
ex 13.31e	Vn Son K.301/i	ac
	Vn Son K.303/ii	ac*
ex 7.032b	Vn Son K.304/i	ac
	Pf Trio K.542/i	ac
ex 13.31f	Sinf Conc K.297b/i, 47	tc
14.814 <u>2x14 replicas</u>		
	Sym H.96/i, 18	ac*
	Sym K.543/i, 26	ac
14.815 <u>2x15 replica</u>		
	Sym K.504/iii	ac*
14.816 <u>2x16 replicas</u>		
	SQ H.57/iv, 40	rx*
	Sym H.83/i	ac*
	Pf Son K.310/iii, 142	tc*
	Pf Son K.311/iii	ac
ex 8.3b	Pf Son K.332/ii, 8	tc
	Vn Son K.306/iii	ac
	Vn Son K.454/iii	ac
	Pf Trio K.502/iii	ac
	Pf Trio K.564/i	ac
	SQ K.464/iv	ac*
ex 14.77a	SQ K.465/i, 23	ac
	Str 5t K.515/i, 86	ac
	Str 5t K.614/i, 38	ac
	Pf Conc K.413/ii	ac
	Pf Conc K.414/i, 152	ac
	Pf Conc K.456/iii, 58	ac*
	Pf Conc K.459/i, 130	tc
	Pf Conc K.467/i, 128	ac
	Vn Conc K.216/iii, 41	ac*

		Sym K.504/i, 97	ac
		Sym K.504/iii, 66	ac
14.818	<u>2x18 replicas</u>		
	ex 13.0a	SQ H.69/i	v+ac
		Sym H.87/iv	ac*
14.819	<u>2x19 replica</u>		
	ex 13.223c	Sym K.550/i	ac*
14.820	<u>2x20 replicas</u>		
	ex 8.3h	SQ H.45/i	ac*
		Sym H.82/i	ac*
	ex 14.43c	Sym H.92/i, 21	ac*
		Str 5t K.515/i	ac
14.821	<u>2x21 replica</u>		
		Sym H.82/iv	ac*
14.822	<u>2x22 replica</u>		
		SQ H.41/i	v+ac*
14.823	<u>2x23 replica</u>		
		Sym K.551/i	ac*
14.840	<u>2x40 replica</u>		
	ex 3.1b	Sym H.103/iv	ac
14.844	<u>2x44 replica</u>		
		Sym H.94/i, 17	ac*

14.90 Motivic anomalies. In this section we discuss and list virtually all the cases in which two-part replicate themes in this repertory fail to follow the motivic rules as set out in §14.50. Some of these instances have already been listed in §14.56 and §14.76, but by no means all of them. The point of such lists and examples is of course to aid the reader in evaluating the proposed principles; if a rule has too many counterexamples, it should perhaps be modified or abandoned.

14.91 There are first a few matters of interpretation to clarify, especially concerning the endings of the antecedent and consequent, the final motives of which are by convention here designated “a” and “c”, respectively.

We have already mentioned in §14.40 that we have disregarded “consequent expansions” (taken up in §15) in compiling the motive lists of §14. That is, given an instance such as

ex 14.91a Pf Son H.37/ii ac\*%

in which the antecedent is four units long but the consequent is expanded to five, I have re-written the original motivic description

b d - a, b d<sub>2</sub> e e<sub>2</sub> c

as the string

b + - a, b + [- c]

for inclusion in the 2x4 motivic list §14.518. The best way to see how often this kind of re-writing is required is to inspect the lists of §14.7, where the motivic descriptions of 2x8 replicas are given directly.

In the more unusual case of truncated consequents (§13.33), it is also necessary to re-write the motivic description for inclusion in the motivic lists, in which it is pretended that all consequents match their antecedents in length. Thus

ex 14.91b      SQ H.43/iii      ac

whose motivic description originally reads

b d b<sub>2</sub> a b d b<sub>2</sub> a, b d - c


was re-written as

b d b<sub>2</sub> a b d b<sub>2</sub> a, b d [- - - - c]


The “terminal aspect” of this 2x8 string is [d a d a d - - c], or [b a b a b - - c], and so appeared under §14.7316.

There are two other common situations in which the literal motivic description of a theme must be (somewhat speculatively) re-written to conform to what I hope is, somehow, an underlying structure. One of these is illustrated by

ex 14.91c      Pf Fant K.475, 91      ac%

One would prefer to describe this melody as having a 2x12 motivic structure, in order to capture the repeated  motive. In that case, the motivic description reads something like

b o ø b o b - - - o a° U  
b o b b - - - - - o c<sup>ø</sup>

That is, the fine mesh of a 2x12 motivic analysis has captured the repeated “b” motive, but also many single notes (o) and a rest or two (ø). But in particular, the  upbeat to the consequent, designated U above, clearly groups forward rhythmically. If, however, we count it as part of the consequent, we have an 11-unit antecedent – which seems quite mistaken, given the clearly 2x12 cadential structure. In this and similar cases, then, I have written the upbeat to the consequent out of the description, thus:

b o o b o b - - - [- - a]  
b o b b - - - - - c.

And similarly, when a consequent is apparently truncated by elision (cf. §13.33) I have re-written its motivic description in more regular form:

ex 6.0c      Pf Son K.311/i, 16      ac (as bdbd bboa, bdbd -<sup>2</sup>-[-c]; cf.  
cf. §14.7222)

14.92 The first kind of motivic rule violation we will examine is the case where the motive “a” is very similar or identical to “c”, contrary to the implication of the use of different letters in the motivic analysis, and to the concept of open and closed (that is, replicate) endings.

14.921 One of the inevitable artifacts of this kind of motivic analysis is the occasional designation as “a” or “c” of a single note, usually the last downbeat of a phrase. I have considered this a genuine instance of  $a = c$ , and hence a contravention of the rule, only when the antecedent and consequent motives diverge, and then reconverge on an ending which stops short with a single note, so that the rhyme of the endings is definitely audible. Here then is a list, meant to be complete, of cases in replicated themes in which

$a^{\circ} = c^{\circ}$ , with reconvergence:

	Pf Trio H.24/ii	ac*%
	Pf Trio H.25/ii	ac*%
ex 13.224a	SQ H.38/iii	ac%
	SQ H.43/ii	dx*%
	SQ H.59/iii	rx%
	SQ H.62/i	ac%*
	SQ H.68/ii	tc*%
	SQ H.68/iii, trio	dx*%
ex 2.17h	SQ K.589/iii	rx%
	Hn 5t K.407/iii, 73	ac*%
	Pf Conc K.456/ii	rx*%
	Pf Conc K.488/iii, 106	ac%
	Sym K.385/iii	rx%

14.922 Similarly, the occasional rhyming of “a” and “c” on a characteristic and stereotyped appoggiatura cadence-figure I have not considered a genuine violation of the principle that  $a \neq c$ , except again when the antecedent and consequent reconverge after diverging:

$a = c =$  standard appoggiatura-figure, reconvergent:

	Pf Trio H.19/iii, 67	rx
	Pf Trio H.31/i	ac*%
	SQ H.45/iii	rx%
	SQ H.65/iii	rx*%
ex 14.922a	SQ H.80/ii	ac%*
ex 21.147b	Pf Son K.284/iii	ac*%
	Pf Conc K.491/iii, 165	rx*%
	Pf Conc K.595/iii, 107	ac%

14.923 There are a fair number of instances among replicate themes of a consequent following the antecedent pattern so closely that it nearly fails to diverge at all. In such cases  $a = c$ , or nearly so, and the fundamental replicate idea of open and closed endings must be conveyed by differing harmony, or differing pitches, or some other slight variation from one ending to the other, in the absence of a motivic difference. (The single example of absolutely no difference from the end of the antecedent to the end of the consequent is

Pf Trio H.25/iii, 121      tc%.)

Here then is a list of replicas in which  $a = c$  because the entire antecedent = the whole consequent; there is no reconvergence, because there is no divergence:

ex 7.3b	Pf Trio H.10/i	rx
	Pf Trio H.18/ii, 16	dx*%
	Pf Trio H.25/iii, 67	tc%
	Pf Trio H.25/iii, 121	tc%
ex 6.0e	SQ H.27/iii	ac%
	SQ H.38/ii, trio	rx%
ex 2.17d	SQ H.42/iv, 16	rx*%
	SQ H.44/iii, trio	rx%
	SQ H.49/ii	rx%*
	SQ H.58/iv	rx*%
	SQ H.66/i	ac
	SQ H.69/iii, trio	ac%
	SQ H.70/iii, trio	dx*%
	SQ H.74/iii	ac*%
	SQ H.75/i	v+rx%
	SQ H.76/ii, 16	ac*
	Sym H.82/ii, 32	ac*%
	Sym H.83/iii, trio	rx%
	Sym H.85/ii	tc*%
	Sym H.85/iii, trio	tc%
	Sym H.92/iv	ac%
	Sym H.103/i, 39	dx%
	Sym H.103/ii, 26	tc*%
	Sym H.104/iv	ac%
	SQ K.421/iv	rx%
	SQ K.590/iii, trio	ac%
Str 5t K.516/iv, 138	ac%	
Cl 5t K.581/iv	ac%	
Pf Conc K.456/ii, 126	rx*%	
Vn Conc K.219/iii, 132	tc	
Sym K.543/ii	ac*%	
Sym K.543/iii, trio	rx%	
Sym K.550/iv	rx%	

14.924 Finally, then, we come to the situation where the antecedent and consequent genuinely diverge, but reconverge on a characteristic figure (other than a single note or a cadence-appoggiatura) that ends both antecedent and consequent, a true violation of the principle the “a” ≠ “c”:

a = c = a genuine motive, genuinely reconvergent

ex 10.32f	SQ H.46/iii	rx%
	SQ H.58/iii, trio	ac*%
	SQ H.71/i	v+rx%
	Sym H.88/i, 61	tc

Sym H.98/iii, trio	dx%
Fl 4t K.285/i	dx

14.930 Here we list for inspection the instances that violate the restrictions on the occurrence of “a” or “c” elsewhere in the theme, other than the cases where a = c just discussed.

14.931 Cases in which the motive “a” (excluding single notes, appoggiatura-figures, and scales) occurs too many times at the end of the antecedent (e.g., [baaa] in 2x4 replicas, etc.):

	Pf Trio H.11/i, 60	ac
	SQ H.40/ii, 25	rx*%
ex 13.226d	SQ H.63/iii, trio	rx*%
	SQ H.70/iii, trio	dx*%
	SQ H.71/iii	ac*%
	SQ H.75/iii	dx*%
	Sinf Conc H.105/iii, 35	ac
	Pf Son K.284/iii, var XII	ac*%
	Vn Son K.547/iii	rx% (on one analysis, but cf. §14.5212)
	Sym K.425/i, 71	rx%

14.932 Cases where “a” occurs too early in the consequent; reshuffling:

SQ H.65/iv, 30	dx%
Sym H.103/ii	rx*%

14.933 A special Haydn antecedent-type, built [a a – a] or [a - - a]:

Pf Son H.37/iii	dx*% (nonreplicate)
Pf Son H.49/iii, 61	tc*%
Sym H.91/iii	tc%
Sym H.93/iii	tc*%

and also perhaps

SQ H.72/iv	ac% (but cf. §14.5212)
Sym H.89/iii, trio	tc*% (but cf. §14.518)

14.934 Consequents ending [... c . c], [... c . c], [... c c c c], etc; excluding such endings as part of a consequent expansion:

	SQ H.42/iv, 16	rx*%
	SQ H.57/iv, 40	rx*
	SQ H.70/iii, trio	dx*%
ex 10.32f	SQ H.71/i	v+rx%
	SQ H.81/iii	dx*%
	Sym H.94/iv	dx%
	Sym H.102/iii	ac%
ex 7.4b	Vn Conc K.218/iii	ac
	Sym K.543/iii, trio	rx%



14.935 Themes in which “c” occurs elsewhere in the tune (other than a = c):

SQ H.57/iv, 40	rx*
SQ H.70/iii	v+tc%
SQ H.73/iv	tc*% (but cf. §14.518)
SQ H.81/iii	dx*%
Sym H.94/iv	dx%

14.94 Violations of the rule specifying that “in a 2x8 replica, the second element is a duplet” (cf. §14.70):

ex 11.12a	SQ H.74/ii, 23	rx*
	Pf Conc K.488/ii	rx
	Sym K.550/iv, 70	ac%

14.950 The principle of motivic non-reconvergence stipulates that in a replicate melody, once the consequent departs from the motivic pattern of the antecedent, it does not revert to it, except possibly as part of a consequent expansion. This section will list all the examples in our repertory of genuinely “metric” reconvergence; that is, reconvergence of the form

a b c d e f g h  
a b x y z f g h

in which the antecedent and consequent are of corresponding length, and so one can identify corresponding motivic positions. (For “nonmetric reconvergence”, caused by an infix in the consequent, cf. §13.32). This section also ignores reconvergence caused solely because “a” = “c”, discussed above.

14.951 One kind of motivic reconvergence takes the form [b . . b,  
b b b b] – that is, the consequent repeats continuously a motive that the antecedent does not:

	Sym H.92/iii	ac*%
	Pf Son K.311/iii	ac
ex 13.32d	Hn 5t K.407/ii	ac*%*
	Str 5t K.515/i, 86	ac
ex 12.4311d	Vn Conc K.218/iii, 138	ac% (on one interpretation)

14.952 In the more usual kind of reconvergence, the consequent returns to the pattern of the antecedent after diverging from it: [b . . b,  
b . . b]:

ex 12.11a	Pf Son H.39/i	rx*%
	Pf Trio H.11/i, 60	ac
	Pf Trio H.30/iii	ac*%
	SQ H.42/iv	rx%
ex 7.01b	Sym H.83/iv	rx%
ex 8.3f	Sym H.84/iv	dx
	Sym H.97/ii	ac*%
	Pf Son K.533/i, 41	rx
	Pf Trio K.542/ii	ac%
	Sinf Conc K.364/iii, 80	ac%

14.953 Two cases in which reconvergence depends very much on the interpretation of the motives:

Pf Conc K.459/i	ac%
Sym K.504/ii	tc

14.954 Two cases in which the antecedent and consequent diverge at the beginning, then reconverge:

Sym H.87/iii, trio	tc%
Hn Conc K.447/iii, 97	ac

14.96 Motivic reshuffling – the recurrence of an antecedent motive as a singlet in the consequent absent its preceding occurrence as a duplet – is rare in this repertory; here are the few instances:

	Pf Trio H.11/ii, 32	ac%
	Pf Trio H.19/i	ac*%
ex 13.336f	SQ H.74/iii, trio	ac*%
	Sym H.82/ii	ac% (at a 2x8 analysis)
	Sym H.92/iii	ac*%
	SQ K.590/iii	dx*%

## 15.0 Consequent extensions

A “consequent extension” is material that extends the consequent past the length established by the antecedent, and in so doing delays the cadence. Obviously retrospective music occurring after the cadence is termed “recadencing”, cf. §2.13. Moreover, as we have discussed in §13.32, true infixes in the consequent are rare; consequents are virtually always extended at their end – after, that is, the point at which they diverge from the pattern of the antecedent.

It is this kind of extension we discuss here. Furthermore, since the consequent can be considered “extended” only by reference to the antecedent pattern, we will consider here only two-part themes with replicate motivic schemes. The frequent occurrence in nonreplicate two-part themes of a consequent longer than its antecedent is thus not considered “consequent extension”.

It is worth remarking again, that consequents shortened with respect their antecedents are rare, cf. §13.33. And it should also be noted that quite often repeated melodies undergo consequent extension only the second time, as in

ex 15.1a      Pf Trio H.13/ii, 74      ac%

A great proportion of the cases of consequent extension fall into one of the standard motivic and/or cadential shapes, and we will discuss them in those categories. This section, again in order to convey an idea of relative distribution, discusses all cases of consequent extension among two-part replicate themes in our repertory.

15.1 Consequent extensions that themselves take a two-part replica shape are a Mozart specialty; there are just two plausible Haydn examples:

ex 15.1a      Pf Trio H.13/ii, 74      ac%  
                  Sym H.102/iii      ac\*%

In the Mozart instances listed below, I have given in parentheses the cadential scheme of the extension:

	Pf Son K.280/iii, 38	ac	(tc)
	Pf Son K.310/iii	ac	(dec ac)
	Vn Son K.306/ii, 18	tc	(dec ac)
	+Vn Son K.481/i, 37	ac	(tc)
	Vn Son K.526/i	ac	(dec ac)
	Pf Trio K.502/iii	a	(tc)
	Pf Trio K.542/i	ac	(dec ac)
	Pf Trio K.542/iii	ac	(tc)
	Pf 4t K.478/ii	ac	(dec ac)
	+Pf 4t K.493/ii	ac*	(tc)
	SQ K.387/i, 24	ac	(tc)
	SQ K.575/ii	ac	(ac)
	SQ K.575/iv	ac	(ac)
	Ob 4t K.370/iii	ac	(tc)
ex 11.10f	Hn Conc K.417/ii	tc*%	(dec ac)
	Pf Conc K.414/iii, 21	ac	(ac)

	Pf Conc K.450/iii, 43	ac	(ac)
	Pf Conc K.456/i	ac	(ac)
	Pf Conc K.456/iii	ac	(tc)
	Pf Conc K.466/iii	ac%*	(ac)
ex 13.31b	Pf Conc K.467/iii, 110	ac	(chain+ac)
	Pf Conc K.488/iii, 16	tc	(tc)
ex 12.4311d	Vn Conc K.218/iii, 138	ac%	(tc)
ex 3.1c	Sym K.551/i, 56	ac	(ac)
	Sym K.551/iv	ac	(tc)

The themes marked (+) above are good examples of complex extensions, in which the parts of the extension are themselves subdivided and/or extended.

15.2 A special kind of consequent extension adds a third phrase to the consequent, which equals both the antecedent and consequent in length and retrospectively organizes the whole complex {consequent+extension} into some two-part cadential plan, creating in effect a three-part theme, subdivided 1+2:

	Pf Trio H.8/ii, 54	ac*%
	SQ H.46/iii	rx%
	SQ H.60/i	dx (nonreplicate)
	SQ H.72/iv	ac%
	Sym H.84/iii	tc*%
ex 10.24g	SQ K.387/ii	ac*
ex 2.12d	Str 5t K.515/iii	dx
	Fl 4t K.285/i	dx
	Hn Conc K.495/i, 43	dx

15.3 Most numerous are consequent extensions which in some way incorporate barform motivics and/or a ct cadential scheme. The examples listed below include those in which the whole expanded divergent end of the consequent is organized this way, those in which the extension merely incorporates a bar/ct among other material, those in which material before the divergence is included in the bar/ct, and those in which the entire consequent is organized retrospectively by its extension into a bar and/or a ct. Once again, extensions organized in a particularly complex or interesting way are marked (+).

ex 14.91a	Pf Son H.37/ii	ac*%
	Pf Son H.40/ii	ac*%
	Pf Son H.41/i	rx
	Pf Son H.51/i	ac
ex 13.32c	Pf Son H.51/i, 11	ac
	Pf Trio H.6/ii, 32	ac*%
	Pf Trio H.18/i, 44	ac
	Pf Trio H.22/ii	ac
	Pf Trio H.26/iii, 44	ac*%
	Pf Trio H.28/iii	ac%
10.32e	Pf Trio H.29/i	v+tc*%
	Pf Trio H.30/ii	ac*%

	SQ H.39/ii	dx%
	SQ H.47/iii	dx*%
ex 13.226d	SQ H.63/iii, trio	rx*%
ex 12.42c	SQ H.65/ii, trio	dx*%
	SQ H.67/iv	ac
	SQ H.68/iv, 46	tc
	SQ H.71/iii	ac*%
	SQ H.74/iv, 18	dec ac
	SQ H.80/iv	ac*
	SQ H.81/iii	dx*%
	Vcl Conc H.1/iii	tc
	Vcl Conc H.2/i, 50	ac
	Sym H.87/iv	ac*
	Sym H.89/ii	ac*%
	Sym H.89/iv, 92	tc*%
	Sym H.92/ii, 40	ac*%
	Sym H.93/iii	tc*%
ex 21.161a	Pf Son K.279/iii	ac
ex 10.1a	Pf Son K.310/i, 22	tc
ex 21.161b	Pf Son K.330/i, 19	tc
ex 13.31e	Vn Son K.301/i	ac
	+Vn Son K.378/i, 47	ac
	+Vn Son K.403/iii	ac
	Vn Son K.454/i, 29	ac
	SQ K.387/ii, trio	ac*%
	SQ K.428/iii	dx*%
	+SQ K.464/ii	tc*
ex 14.77a	SQ K.465/i, 23	ac
	Str 5t K.515/i	ac
	Str 5t K.515/iii, 13	ac*
	Fl 4t K.298/iii	rx
ex 2.12b	Cl 5t K.581/iii, trio 2	dec ac
	Pf-WW 5t K.452/ii	ac
	Fl Conc K.313/i, 31	tc
	Cl Conc K.622/iii, 37	ac*
	Hn Conc K.447/iii, 34	ac*
	Pf Conc K.413/i, 24	rx*
	Pf Conc K.414/iii, 108	ac
	Pf Conc K.415/iii, 30	ac
	Pf Conc K.488/i	ac
	Pf Conc K.488/iii, 106	ac%
	Pf Conc K.537/i, 38	ac

Vn Conc K.216/i	rx
Sym K.504/iii, 66	ac
Sym K.543/i, 26	ac
Sym K.543/iv, 41	ac

15.31 To this list should be appended some examples of consequent extensions made up of or including the cadential shape of a ct with anaphoric motivic schemes:

	Pf Trio H.19/i, 108	ac*
	SQ H.73/i, 28	ac*
	Sym H.88/i, 61	tc
	Sym H.92/iii, trio	tc*0%
ex 14.70a	Pf Son K.309/iii	ac
ex 8.3b	Pf Son K.332/ii, 8	tc
	Pf Son K.332/iii	ac
	Pf Son K.457/ii	ac
	Pf Son K.533/ii	ac*
	SQ K.590/i, 31	tc
	Str 5t K.515/i, 86	ac
	Pf Conc K.459/i, 130	tc
	Pf Conc K.482/iii, 128	tc
	Pf Conc K.503/i, 170	ac%
	Sym K.504/ii, 35	tc

15.4 Many consequent extensions are organized in “chain” motivics – a single motive repeated three or more times, or several such chains linked together – especially those organized as sequences or canons. The list below includes themes in which the chain extends some motivic feature of the antecedent:

	Pf Son H.34/i	ac*
	Pf Son H.36/ii, 16	ac*0%
	Pf Trio H.5/ii, 29	tc
	Pf Trio H.12/i	rx*0%
	Pf Trio H.24/iii	ac*0%
	SQ H.39/i, 42	tc
	SQ H.41/i	v+ac*
	SQ H.45/iv	ac*
	SQ H.72/iv, 24	tc*
	SQ H.73/i, 57	ac
ex 13.226f	SQ H.74/iii, trio	ac*0%
	SQ H.74/iv	ac*
	SQ H.75/iii	dx*0%
	SQ H.76/i	ac
	Sym H.82/i	ac*
	Sym H.82/iv	ac*

	Sym H.83/i	ac*
	Sym H.89/i	tc*
ex 7.032a	Sym H.93/i, 74	ac%
	Sym H.93/iv, 118	ac*
	Sym H.101/iii	ac*0%
	Sym H.103/i, 79	ac
ex 8.11a	Vn Son K.379/i	ac*
ex 8.3e	SQ K.464/i, 37	tc%
	SQ K.464/iv	ac*
	SQ K.575/i, 17	tc*
ex 14.70b	SQ K.589/i, 45	ac
	Str 5t K.515/iv, 102	ac
	Str 5t K.516/i	ac
	Cl 5t K.581/i, 65	tc
ex 7.02c	Pf Conc K.414/i	ac
	Pf Conc K.451/iii, 135	ac
ex 7.4a	Pf Conc K.453/i, 110	ac
	Pf Conc K.503/iii, 144	ac
	Pf Conc K.537/i, 59	ac
	Sym K.504/iii	ac*

15.5 To complete the list of replicate melodies which undergo consequent extension, here are all those in which the extension is of no particular standard motivic shape, even though it may (a) extend or otherwise include motives from the antecedent, or (b) display some other nonstandard motivic orderliness.

	Pf Son H.38/ii	rx*0%
	Pf Son H.49/iii	ac*0%
	SQ H.46/iii, trio	dx%
(a)	SQ H.48/iii, trio	rx*0%
	SQ H.60/iv	ac%
	SQ H.66/iv, 38	dec ac
ex 13.226g	SQ H.68/i	ac
	SQ H.75/iii, trio	tc*0%
(a)	SQ H.77/iii	tc*0%
	SQ H.79/ii	ac
ex 13.225a	Sym H.86/i, 64	tc
(b)	Sym H.95/iii	tc*0%
ex 13.210a	Sym H.99/ii	ac%*
ex 13.32b	Sym H.101/ii	ac%
	Pf Son K.576/i, 41	ac
	Vn Son K.454/ii	ac
	SQ K.421/ii	tc*0%

	(a) SQ K.458/ii, trio	tc*%
	(b) Str 5t K.515/iv, 58	ac*
	Str 5t K.614/iii	rx%
	Pf Conc K.537/iii, 48	ac
	Sym K.550/ii	ac
ex 13.222b	Entf K.384/Ov, 119	rx*



## PART THREE: THREE-PART MELODIES IN DETAIL

16.0 The ct cadential scheme, in detail

16.10 The harmony of the limbs of a ct, as defined by the “edges” – how they begin and how the end – appears to follow the same principles as those for two-part themes, given in §2.1, insofar as they can be applied to small melodic units that often consist of but a single harmony<sup>1</sup>. Specifically,

16.11 There are no “non-parallel medial tonic initials”: the second limb begins with the tonic only if the first limb does as well. There are few opportunities to test this, since not many ct’s begin with non-tonic harmony. Apparent exceptions such as

ex 16.11a Sym H.86/iv, 38 ct%  
 ex 12.4321a Pf Son K.330/ii ct\*0%

become regular if we follow the suggestion of §13.223 and consider the downbeat harmony definitive for such rules. Similarly, the apparent violation of

ex 16.11b SQ H.61/iii, trio ct\*0%

hinges on the harmonic interpretation of a unison passage: here, the real harmonic sense of the two limbs seems to me to be  $[V_3^5, i_4^6]$ , and it’s hard to know whether this violates the rule or not. Finally, the only other possible violation of this principle among the ct’s in our repertory turns on a modulation:

ex 16.11c Pf Son K.279/i, 48 ct\*

Here the second limb begins with harmony which is (in the initial key) tonic, and so “antiparallel”; but in the new key a subdominant – hardly an unambiguous violation of the principle.

16.12 Likewise, the principle that there “are no non-reflex cadences on  $[\sim V \ \& \ \sim I]$ ” – that is, if the first limb proceeds  $A \rightarrow X$ , where X is harmony other than the tonic or dominant, the second limb must begin with harmony other than A or the tonic – apparently permits such cases as

ex 16.12a Pf Trio H.5/iii ct\*%  
 ex 16.12b Pf Son K.279/i, 20 ct

in which one must consider the harmony with which the first limb ends to be that of the downbeat, since the ensuing weak-beat is strongly grouped forward as an upbeat to the second limb. In H.5/iii, furthermore, if the second limb “begins with V”, on its downbeat, and so the true sense, for our purposes, of the harmony is  $[I \rightarrow ii, V \rightarrow V]$ , the tonic upbeat to the second limb is left in a kind of unanalyzed limbo.

16.13 We have already noted (§2.31) that the harmonic patterns of the limbs of a ct are often analogous to those of two-part themes. It should be mentioned, however, that a strict “ac-analog” ct – one with limbs in the pattern  $[I \rightarrow V, I \rightarrow I]$  – is rare, possibly because the open/closed harmonic endings are too conclusive for the midpoint of a theme. In fact, the only real example among our ct’s is

ex16.13a SQ H.37/i, 17 ct (limbs  $[I-IV-ii-V, I-V-V-I]$ )

– and even here, the harmony of limb 1 occurs over a tonic pedal.

<sup>1</sup> Cf. Schoenberg, *Fundamentals*, p.22 (table)

16.14 The internal harmony of the limb sections has no specific rules, other than those of §2.12. Quite often the limbs will include or comprise a “slow  $I_k$ ”, as discussed there:

ex 16.14a	Sym H.98/ii	ct <sup>0</sup> *
ex 8.23f	Str 5t K.593/ii	ct*

16.20 As a way of showing that the distribution of various harmonic patterns for the limbs of a ct follows fairly closely that of the harmonically analogous two-part theme types, here are all the ct's in the Haydn Piano Trios and the Mozart Piano Sonatas, subdivided by harmonic pattern:

16.21 AC\*-analog limbs: harmony  $I \rightarrow V$ ,  $I \rightarrow V$  except as otherwise noted:

	Pf Trio H.5/i, 11	ct*	
ex 10.31c	Pf Trio H.5/ii	v+ct*	
ex 17.5a	Pf Trio H.8/i, 32	ct	
	Pf Trio H.19/ii, 15	ct <sup>0</sup>	
	Pf Trio H.22/i, 16	ct <sup>0</sup> *	
	Pf Trio H.22/iii, 21	ct	
	Pf Trio H.25/iii, 83	ct <sup>0</sup>	
ex 18.503a	Pf Trio H.26/i	ct*	(I-V, I-V/III)
	Pf Trio H.27/i, 19	ct	
	Pf Trio H.29/i, 51	pv+ct*	
ex 8.24a	Pf Trio H.30/i, 16	ct*	
ex 10.411b	Pf Trio H.30/i, 42	pv+ct	
	Pf Trio H.30/iii, 42	ct*	(I-V, I-IV)
	Pf Son K.281/iii, 90	ct	
ex 20.6a	Pf Son K.283/i, 23	ct	
	Pf Son K.283/ii, 9	ct	
ex 18.506a	Pf Son K.309/i, 35	ct	
	Pf Son K.310/i	ct <sup>0</sup> *	
ex 18.32b	Pf Son K.310/ii, 15	ct	
	Pf Son K.457/i, 23	ct*	
	Pf Son K.457/ii, 24	ct* <sup>0</sup>	
	Pf Son K.545/i, 14	ct	
ex 11.3a	Pf Son K.570/i, 23	ct*	(I-V, I-V/V)

16.22 TC- and TC\*-analog limbs:  $I \rightarrow I$ ,  $I \rightarrow I$  except as noted:

	Pf Trio H.9/i	ct	
	Pf Trio H.9/ii	ct <sup>0</sup>	
	Pf Trio H.9/ii, 53	ct	
	Pf Trio H.12/iii, 31	ct* <sup>0</sup>	(I-I, I-V)
	Pf Trio H.18/iii	ct* <sup>0</sup>	
	Pf Trio H.19/iii, 33	ct	(V-I, V-I)
	Pf Trio H.21/i, 29	ct	(I, I)

	Pf Trio H.24/i, 46	ct	
ex 2.13b	Pf Trio H.26/i, 22	ct	
ex 10.31d	Pf Son K.279/i	v+ct	
ex 16.11c	Pf Son K.279/i, 48	ct*	(IV-I, (I=) IV-I [in V] )
ex 21.235a	Pf Son K.281/i, 17	ct	
	Pf Son K.281/iii, 28	ct	
	Pf Son K.282/i, 9	ct	
ex 7.01a	Pf Son K.283/iii	ct	
ex 5.0b	Pf Son K.330/i	ct	
ex 17.3	Pf Son K.330/iii, 33	ct	
ex 7.031a	Pf Son K.333/i, 39	ct	(V-I, V-I)
	Pf Son K.570/iii, 22	ct*0%	

16.23 RX and RX\*-analog limbs: [I→V, V→I], [I→ii, V→I], [I→IV, V→I], etc.:

	Pf Trio H.5/i	ct	
ex 16.12a	Pf Trio H.5/iii	ct*0%	
	Pf Trio H.7/ii	ct*0%	
	Pf Trio H.7/iii	ct*0%	
	Pf Trio H.7/iii, 16	ct*0%	
	Pf Trio H.12/iii	ct*0%	
	Pf Trio H.14/i	ct	
ex 8.21a	Pf Trio H.16/i, 30	ct*	
ex 7.2a	Pf Trio H.16/ii	ct0%	
ex 12.223b	Pf Trio H.16/ii, 17	ct	
	Pf Trio H.16/iii	ct*0%	
ex 12.44c	Pf Trio H.16/iii, 64	ct*0%	
ex 19.10c	Pf Trio H.16/iii, 112	ct*0%	
	Pf Trio H.27/i	ct	
	Pf Trio H.29/iii	ct0%*	
	Pf Trio H.29/iii, 58	ct	
	Pf Trio H.31/i, 94	ct*0%	
	Pf Son K.279/ii	ct	
	Pf Son K.280/i, 27	ct	
	Pf Son K.281/ii, 28	ct	
	Pf Son K.282/ii	ct*0%	
ex 20.1a	Pf Son K.283/i	ct	
	Pf Son K.283/iii, 41	ct	
	Pf Son K.284/ii, 17	ct*	
	Pf Son K.309/iii, 33	ct	
	Pf Son K.309/iii, 39	ct*	
ex 10.31e	Pf Son K.311/i	v+ct*	
ex 12.4321a	Pf Son K.330/ii	ct*0%	

ex 12.221a	Pf Son K.330/iii, 21	ct*
ex 6.1a	Pf Son K.333/i	ct <sup>0</sup> *
ex 12.41e	Pf Son K.333/ii, 14	ct
ex 5.1a	Pf Son K.333/ii, 76	ct*
ex 6.1b	Pf Son K.457/i	ct
	Pf Son K.567/i, 36	ct
	Pf Son K.567/ii, 8	ct
ex 12.4313a	Pf Son K.545/ii, 17	ct
	Pf Son K.570/ii, 33	ct* <sup>0</sup> %

16.24 DX and DX\*-analog limbs: [I→I, IV→I], [I→I, V→I], [I→I, V→V], etc.:

	Pf Trio H.11/i	ct
	Pf Trio H.13/i, 20	ct* <sup>0</sup> %
	Pf Trio H.17/i	ct
	Pf Trio H.24/i, 30	ct*
	Pf Trio H.25/iii	ct <sup>0</sup> %
	Pf Trio H.30/i, 59	ct*
ex 12.433b	Pf Trio H.31/i, 32	ct* <sup>0</sup> %
ex 19.10a	Pf Son K.280/ii, 9	ct
	Pf Son K.330/ii, 20	ct* <sup>0</sup> %
ex 17.72b	Pf Son K.332/i, 71	ct <sup>0</sup> %
	Pf Fant K.394	ct*
ex 19.32a	Pf Son K.545/i	ct*
	Pf Son K.545/ii, 33	ct*

16.25 Other harmonic patterns for ct limbs in the Haydn Piano Trios and Mozart Piano Sonatas:

ex 10.411a	Pf Trio H.8/i	pv+ct <sup>0</sup> %	3-limbed: I, IV-I, IV-I, IV-I
	Pf Trio H.14/ii	ct* <sup>0</sup> %	I, V
ex 10.32b	Pf Trio H.15/i	v+ct <sup>0</sup> %	I, V
	Pf Trio H.28/ii, 23	ct	I, ii
ex 16.12b	Pf Son K.279/i, 20	ct	I, IV-I, IV-I
ex 18.22a	Pf Son K.279/i, 31	ct <sup>0</sup> %	I, V
ex 21.147a	Pf Son K.280/i, 43	ct <sup>0</sup> %	3-limbed: I, V, I
	Pf Son K.309/iii, 19	ct* <sup>0</sup> %	I <sub>4</sub> <sup>0</sup> -I, I <sub>4</sub> <sup>0</sup> -I
ex 17.5b	Pf Son K.330/i, 42	ct <sup>0</sup> %	I, IV-I, IV-I
ex 5.0f	Pf Son K.457/iii, 46	ct	I, V-I, V-I
ex 12.4313c	Pf Son K.533/ii, 23	ct	I, V (or: V <sub>4</sub> <sup>6</sup> , V <sub>3</sub> <sup>4</sup> )

## 17.0 CT morphology in more detail

17.1 Three-limbed ct's – those, that is, with the structure [b b b tail. . .] – are not too uncommon; here are some typical examples:

ex 17.1a	Pf Son H.35/i, 45	ct <sup>0</sup> %
ex 10.411a	Pf Trio H.8/i	pv+ct <sup>0</sup> %
	SQ H.82/iv, 8	ct
ex 2.13a	Sym H.88/iii	ct* <sup>0</sup> %
	Sym H.92/iv, 79	ct
ex 21.147a	Pf Son K.280/i, 43	ct <sup>0</sup> %
ex 10.1j	SQ K.428/iii, trio	ct* <sup>0</sup> %
	SQ K.589/i, 27	ct
ex 10.1k	Str 5t K.593/iv	ct* <sup>0</sup> %
	Fl Conc K.314/i, 12	ct
	Pf Conc K.466/i, 33	ct*
	Pf Conc K.466/i, 115	ct*
	Sinf Conc K.364/ii, 35	ct <sup>0</sup> %
ex 17.1b	Sym K.551/i, 89	ct <sup>0</sup> %*
	Sym K.551/i, 101	ct

Usually in these there is little doubt about where the tail-section begins. To the extent, however, that the third limb represents a change from the previous two, in harmony, texture, or some other feature, it can create an ambiguity about the beginning of the tail, and an interpretation as simply a two-limbed ct with anaphoria (cf. §20) becomes possible:

ex 17.1c	Pf Son H.49/i, 12	ct*
ex 5.0f	Pf Son K.457/iii, 46	ct
ex 12.4313c	Pf Son K.533/ii, 12	ct
ex 17.1d	Pf Conc K.488/ii 20	ct*

17.2 CT's of the form [b b b b tail. . .] are usually groupable as ordinary ct's [bb bb tail....]; cf §18.32 for more examples of this kind of motivic structure:

ex 17.2a	SQ H72/iv, 75	ct
ex 10.31d	Pf Son K.279/i	v+ct

CT's of the form [b b a a tail (?). . .] can, like the three-limbed ct's just discussed, leave some doubt about exactly where the tail begins: with the "a" units, or after them?

ex 17.2b	Pf Son H.35/i, 36	ct
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17.3 There are also a few examples of ct's with a shortened second limb – that is, those in which the tail seems to begin early, chopping off the end of the second limb, or else incorporating it into the tail in such a way that the limbs don't completely rhyme:

ex 16.11c	Pf Son K.279/i, 48	ct*
ex 17.3a	Pf Son K.330/iii, 33	ct

ex 17.3b	Vn Son K.380/i	ct
	SQ K.458/iii	ct
	Hn Conc K.447/i, 51	ct

In Sym K.385/i ct\*%\*

the second limb is shortened, relative to the first, because its beginning is changed. And quite an unusual case is presented by

ex 17.3c	Cl Trio K.498/ii, trio	ct*%*
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– the second limb is shortened (compared to the first), but then this shortened second limb is stated twice more, forming a strange 4-limbed ct.

17.4 The second limb of a ct is, in rare cases, expanded internally in comparison to the first limb:

	SQ H.67/i, 33	ct*
ex 17.4a	Str 5t K.516/i, 29	ct*

Much more common is the extension of the second limb by repetition of its terminal motive; in the instances below, the beginning of the tail is nevertheless quite clearly articulated:

	Pf Son H.41/ii, 30	ct*%*
	Pf Trio H.24/i, 46	ct
ex 5.0a	SQ H.46/i	ct
ex 17.4b	SQ H.79/iii, trio	ct*%*
ex 17.4c	SQ K.465/i, 56	ct
	Pf Conc K.456/i, 39	ct
	Pf Conc K.503/i	ct
	Entf K.486/Ov	ct*

In many cases the second limb is extended in such a way that it can be difficult or arbitrary to define the beginning of the tail-section:

	Pf Son H.48/i	ct*%*
	SQ H.59/iv, 45	ct
ex 17.4d	SQ H.80/iv, 34	ct
ex 10.1e	Sym H.104/iii, trio	ct*%*
ex 12.4313c	Pf Son K.533/ii, 23	ct
ex 11.3a	Pf Son K.570/i, 23	ct*
	Str 5t K.593/iii, trio	ct*%*
ex 7.031b	Cl 5t K.581/i, 42	ct%*
ex 17.4e	WW Ser K.388/i, 66	ct%*
	Pf Conc K.449/i, 37	ct
	Vn Conc K.219/i, 46	ct

17.5 The cases just listed, however, should not be confused with those in which the beginning of the tail is made more clear by a change of harmony, accompaniment, figuration, pitch-level, etc., *even though* the tail may begin with a repetition of the terminal aspect of the second limb:

ex 17.5a	Pf Trio H.8/i, 32	ct
ex 8.21a	Pf Trio H.16/i, 30	ct*
ex 19.10c	Pf Trio H.16/iii, 112	ct*%
ex 12.223c	SQ H.42/i	ct
	SQ H.72/iii, trio	ct*%
	Sym H.90/iii, trio	ct%
	Sym H.103/iii, trio	ct%
ex 19.10a	Pf Son K.280/ii, 9	ct
ex 17.5b	Pf Son K.330/i, 42	ct%
ex 10.1b	Pf 4t K.478/iii, 70	ct
ex 8.23f	Str 5t K.593/ii	ct*

17.6 The length of the ct tail, as measured in high-level downbeats, is generally equal to or greater than the combined length of the two limbs (or the first two limbs, in the case of a three-limbed ct); thus at least twice the length of the first limb. It is not uncommon for a ct to cadence within its “morphological length” (cf. §13.35) – that is, before the 9<sup>th</sup>, 17<sup>th</sup>, 33<sup>rd</sup> etc. downbeat. However, this is virtually always accompanied in ct’s by one or more of the following conditions:

- 1) elision: the final cadence is simultaneously the beginning of new material;
- 2) deflection: so that the theme is in a sense incomplete anyway;
- 3) repetition or at least starting over;
- 4) recadencing that effectively prolongs the tail beyond its “morphological length”.

There are also quite a number of themes in which the tail-section is so short as to be comparable to the length of a single limb; these are taken up in §17.7. Setting these aside, the whole sum of ct’s that cadence just within the proportions 1+1+2, and yet are not deflected, repeated, recadenced, or elided, consists of:

ex 17.6a	Pf Son H.34/ii	ct
	SQ H.65/iv, 22	ct
ex 12.4313a	Pf Son K.545/ii, 17	ct
	SQ K.421/ii, 35	ct

In the absence of one of the above circumstances, then, it is quite rare for a three-part theme to cadence just within its “morphological length”, on a high-level weak beat, and this is in strong contrast to the behavior of two-part melodies, as discussed in §13.35.

At times, however, the tail extends beyond the morphological length only by virtue of its repetition:

ex 7.1b	Pf Trio K.548/i, 30	ct
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19.70 CT’s with short tails: even though the tail of the ct is generally twice the length of a single limb, there is a minor subset of instances in which the tail is shorter than that:

17.71 In the first instance, there are a very few cases in which the tail is shorter than the length of either single limb; in such instances, the tail can give a distinct impression of ending too soon:

	SQ H.69/ii	ct*0%
ex 17.2a	SQ H.72/iv, 75	ct
ex 17.71a	Vn Son K.481/i	ct

17.72 There is an important cluster of themes in which the tail is just the length of one limb, producing a “triple ct”, with limbs and tail in the proportions 1+1+1:

	Pf Son H.43/i	ct0%
ex 18.502a	Pf Son H.49/i	ct
ex 10.32b	Pf Trio H.15/i	v+ct0%
	Pf Trio H.19/ii, 15	ct0%
	Pf Trio H.22/i, 16	ct0%*
	Pf Trio H.25/iii, 83	ct0%
ex 17.72a	SQ H.39/i	ct
	SQ H.44/ii, 24	ct*0%
	SQ H.48/iv	ct0%*
	SQ H.49/iii, trio	ct*0%
ex 11.10b	SQ H.61/iv	ct*0%
	SQ H.63/i, 8	ct
	SQ H.67/i, 33	ct*
ex 12.44e	Sym H.85/i, 12	ct0%*
	Sym H.86/ii	ct*
ex 16.11a	Sym H.86/iv, 38	ct0%
	Sym H.93/iii, trio	ct*
	Sym H.94/iv, 75	ct
	Sym H.101/iii, trio	ct*0%
	Sym H.102/iv	ct*0%
	Pf Son K.279/ii	ct
ex 12.221a	Pf Son K.330/iii, 21	ct*
ex 17.72b	Pf Son K.332/i, 71	ct0%
	Vn Son K.379/i, 50	ct*
ex 8.24b	Pf 4t K.493/iii, 35	ct*
ex 7.3e	SQ K.575/i	ct0%
	Pf Conc K.466/i, 77	ct0%
	Pf Conc K.503/i	ct

17.73 There are as well a number of ct melodies with (on some interpretation) tails intermediate in length between the length of one limb and the length of two – that is, shorter than the length of the tail of an “ordinary” ct, and longer than that of a “triple ct”:

ex 19.10b	Pf Son H.52/iii	ct
	Pf Trio H.5/i	ct



ex 10.31c	Pf Trio H.5/ii	v+ct*
ex 18.11a	SQ H.37/ii, trio	ct*0%
ex 18.507a	SQ H.39/iv, 22	ct*0%
	SQ H.72/ii	ct
	SQ H.72/iii, trio	ct*0%
	Sym H.94/i, 79	ct0%
ex 18.6a	Pf Trio K.542/iii, 19	ct*
ex 12.4314c	SQ K.465/iv, 88	ct
	Str 5t K.575/ii, 19	ct*
ex 8.23f	Str 5t K.593/ii	ct*
	Str 5t K.593/iii, trio	ct*0%
	Cl Trio K.498/i, 25	ct0%
ex 7.031b	Cl 5t K.581/i, 42	ct0%
	Pf Conc K.453/iii, 171	ct
	Vn Cnc K.219/i, 19	ct
	Sinf Conc K.364/i, 210	ct*

The lists in §17.71 – §17.73 are meant to be complete.

## 18.0 The motivic structure of ct limbs, in detail

The characteristic, but not inevitable, feature of ct motivics is rhyme: the first and second limbs generally end with the same, or nearly the same, motivic figure. We will first, however, discuss the relatively few exceptions to this principle.

18.10 In ct's with non-rhyming limbs, the interpretation as ct components follows from clear cadential articulation and (usually) a standard harmonic pattern. §§18.11-18.14 will consider all such cases within our ct repertory.

18.11 In simple instances, the limbs have essentially the same motivic structure, except that the ending of the second is slightly changed, often in order to elide smoothly into the tail-section:

ex 10.412a	Pf Son H.41/i, 20	pv+ct
	Pf Trio H.7/ii	ct*%
	Pf Trio H.18/iii	ct*%
ex 18.11a	SQ H.37/ii, trio	ct*%
	SQ H.71/ii, 16	ct*%
	SQ H.78/i, 37	ct
ex 12.21b	Sym H.95/iv	ct%
	Pf Son K.457/ii, 8	ct
ex 12.4321b	Vn Son K.481/ii, 16	ct
ex 18.11b	Pf Trio K.496/i, 37	ct
	SQ K.458/iii	ct
	SQ K.465/ii	ct
ex 2.12c	Cl Trio K.498/ii	ct*%
	Vn Conc K.218/ii, 21	ct

18.12 As the terminations of the two limbs become progressively different from each other, eventually a point is reached where they have genuine replicate motivics. This impression is strengthened if it's reinforced by the harmony, and can lead to a kind of classificatory ambiguity discussed above in §12.22:

ex 12.41b	Pf Trio H.12/iii, 31	ct*%
	SQ H.77/i	ct%*
ex 12.221b	Hn Conc K.412/i	ct
	2-Pf Conc K.365/iii	ct%
	Pf Conc K.482/i, 77	ct
ex 10.1n	Pf Conc K.482/ii, 124	ct*
	Pf Conc K.482/iii, 51	ct

1: .13 There are a few ct's whose limbs are simply nonmotivic – they begin and end differently. Again, the themes are interpreted as ct's because of their clear articulation, and sometimes also because of the clearly derivative, “internal” nature of the ensuing tail material:

ex 2.30a	Pf Son J Ø9/ii	ct%*
	Sym H.101/ii, trio	ct*%

ex 12.331a	Vn Son K.305/ii	ct*%
ex 2.30b	Pf Trio K.496/i	ct <sup>0</sup> %*
ex 10.1j	SQ K.428/iii, trio	ct*%
ex 12.321b	SQ K.499/i, 23	ct*
ex 2.30c	Hn Conc K.447/i	ct*
	Hn Conc K.447/i, 28	ct
ex 11.10e	Pf Conc K.466/ii, 84	ct*%
	Pf Conc K.482/i, 128	ct*
ex 12.31b	Sym K.425/iv	ct

18.14 Finally, there is a type of theme which Haydn in particular favors, with motivics [b b d d . . . .], in which it's not obvious whether the tail begins with the [d d], or just after it; in the latter case, the non-corresponding limbs are [bb] and [dd]. (Cf. also §17.2.)

ex 17.2b	Pf Son H.35/i, 36	ct
ex 18.14a	Pf Son H.51/i, 26	ct
ex 10.32b	Pf Trio H.15/i	ct%
	SQ H.68/iv	ct
	SQ H.78/iv, 34	ct*%
	Pf Conc K.449/ii, 41	ct*

18.20 We will now take up limbs with (ordinary) rhyming motivic structure, according to whether each limb can be described adequately by a single letter, two letters (as in b a, b a), etc. For any given theme the choice of descriptive metric level is a matter of convenience, and is, within limits, largely arbitrary. Thus (as we discussed in §3.0 and §14.40) the categories of “one-unit” limbs, “two-unit” limbs, etc., are categories of motivic description, rather than categories of melodies themselves.

18.21 One-unit limbs: In these, then, the motivic structure is sufficiently simple, or coarse, that it seems sufficient to describe the motivic structure as simple two repeated units: [a, a], or as often, [a<sub>1</sub>, a<sub>2</sub>]:

	Pf Son H.33/ii	ct*%
	Pf Son H.42/i, 40	ct*%
ex 12.223b	Pf Trio H.16/ii, 17	ct
	Pf Trio H.21/i, 29	ct
	Pf Trio H.28/ii, 23	ct
ex 18.21a	SQ H.48/i	ct%
ex 10.24f	SQ H.57/iii	ct%
	Pf Conc K.482/i, 36	ct*%

18.22 In many of these the motivic structure of the ct as a whole is that of a small anaphor, [a a a c]:

ex 8.24d	Pf Son H.35/ii	ct*%
	SQ H.40/iv, 36	ct*%
	SQ H.45/iii, trio	ct*%
	SQ H.47/iii, trio	ct*%

	SQ H.68/i, 34	ct%
ex 12.41b	SQ H.77/i	ct%*
	Sym H.88/i, 16	ct%
ex 18.22a	Pf Son K.279/i, 31	ct%
	SQ H.499/i, 83	ct%
	Pf-WW 5t K.452/ii, 32	ct%

18.23 There is also in this group a sizable fraction of three-limbed ct's (cf. §17.1):

ex 17.1a	Pf Son H.35/i, 45	ct%
ex 10.411a	Pf Trio H.8/i	pv+ct%
	SQ H.82/iv, 8	ct
	Sym H.99/i, 71	ct%
ex 21.147a	Pf Son K.280/i, 43	ct%
	Vn Son K.402/i, 52	ct%*
	Sinf Conc K364/ii, 35	ct%
ex 17.1b	Sym K.551/i, 89	ct%*

18.24 And two quite similar triple-proportioned ct's (mentioned in §17.72) belong here:

	Pf Trio H.19/ii, 15	ct%
	Pf Trio H.22/i, 16	ct%*

18.25 And finally, the themes listed in §18.14 may belong with this group, if they are analyzed as [b b d d . . . .].  
tail→

18.30: Two-unit limbs. It should be re-emphasized that what we are discussing as “two motivic units long” is normatively the first limb; the second usually follows the same pattern, but is occasionally expanded or shortened; the ct can have as well an extra third limb. The permissible motivic patterns in two-unit limbs are those that rhyme; viz: b a, b a (or [+ a, + a] )

a a, a a  
- a, - a  
- a, a a  
a a, - a

18.31 The pattern [b a, b a] is so common that we will not list the instances in their entirety; roughly 200 of the ct themes in our repertory are readily analyzable this way. Here are the examples in just the Mozart string quartets and quintets:

ex 6.1c	SQ K.387/i	ct
ex 18.31a	SQ K.387/iii, 30	ct
	SQ K.458/iv, 48	ct
	SQ K.489/iv	ct%*
ex 10.412e	Ser K.525/i	pv+ct
	Str 5t K.593/iii, trio	ct%*

On another level, of course, these can all be considered simply [a, a] patterns. (In the [Appendix](#), all ct's with this motivic pattern are identified with the reference [§18.31]).

18.32 Here is a complete list of ct's whose limbs have a motivic structure describable as [a a, a a]. About half of these one would perhaps want to label [a a<sub>2</sub>, a a<sub>2</sub>], or even at times [b a, b a]; it depends partly upon the range of motivic variation in the themes as a whole. Many are nearly monomotivic.

ex 18.32a	Pf Son H.34/i, 30	ct <sup>0</sup> %
ex 17.6a	Pf Son H.34/ii	ct
	Pf Son H.40/i, 26	ct* <sup>0</sup> %
ex 19.23a	Pf Son H.40/ii, 25	ct* <sup>0</sup> %
ex 17.1c	Pf Son H.49/i, 12	ct*
ex 12.223a	Pf Son H.49/i, 24	ct
	Pf Trio H.19/iii, 33	ct
	Pf Trio H.22/iii, 21	ct
	Pf Trio H.25/iii, 83	ct <sup>0</sup> %
	Pf Trio H.29/i, 51	pv+ct*
ex 10.411b	Pf Trio H.30/i, 42	pv+ct
ex 16.13a	SQ H.37/i, 17	ct
	SQ H.39/i, 28	ct
	SQ H.45/iv, 50	ct
	SQ H.60/i, 30	ct
	SQ H.62/iii, trio	ct* <sup>0</sup> %
	SQ H.67/iii, trio	ct* <sup>0</sup> %
	SQ H.69/i, 39	ct
	SQ H.73/i, 68	ct <sup>0</sup> %
ex 17.4d	SQ H.80/iv, 34	ct
	Sym H.83/i, 45	ct <sup>0</sup> %
	Sym H.87/i, 48	ctd
ex 12.12a	Sym H.104/iii	ct <sup>0</sup> %
	Pf Son K.282/i, 9	ct
ex 18.32b	Pf Son K.310/ii, 15	ct
ex 10.31e	Pf Son K.311/i	v+ct*
	Vn Son K.296/ii, 22	ct* <sup>0</sup> %
ex 12.223f	Vn Son K.376/i, 19	ct
	Vn Son K.454/ii, 29	ct
	Pf 4t K.478/i 65	ct <sup>0</sup> %
	Str 5t K.516/i, 64	ct
	WW Ser K.375/iii, 16	ct
	Fl Conc K.314/i, 33	ct
	Pf Conc K.459/iii, 67	ct
	Sym K.543/ii, 30	ct*
	Fig K.492/Ov, 59	ct <sup>0</sup> %

Zbfl K.620/Ov, 64 ct%

18.33 Limbs in the pattern [- a, - a]:

	Pf Son H.38/i	ct%
	Pf Son H.52/i, 33	ct
	Pf Trio H.17/i	ct
	SQ H.67/iv, 59	ct
ex 10.33c	SQ H.76/iii, trio	v+ct*%
	SQ H.82/ii	ct*%
ex 18.33a	Vcl Conc H.2/i	ct%*
	Sym H.90/iii	ct*%
	Pf Son K.279/ii	ct
	Vn Son K.403/i, 9	ct
	Vn Son K.526/ii, 24	ct%
	SQ K.421/ii, 35	ct
	SQ K.464/iii	ct*%
ex 10.1k	Str 5t K.593/iv	ct*%
ex 18.33b	Fl 4t K.285/iii	ct%
ex 18.35a	Cl 5t K.581/i	ct%
ex 6.0a	Cl 5t K.581/iii	ct%
	Fl Conc K.313/iii, 124	ct%
	Fl-Hp Conc K.299/ii	ct%*
	Pf Conc K.451/ii, 56	ct
	Pf Conc K.466/ii, 40	ct
ex 8.21c	Vn Conc K.218/i, 57	ct*
	Sinf Conc K.364/i, 72	ct
	Sym K.385/i	ct%*
	Sym K.551/iv, 74	ct*%

18.34 Limbs in the pattern [- a, a a]:

	Pf Son H.43/i	ct%
	Sym H.103/iii, trio	ct%
ex 18.34a	Vn Son K.378/i	ct%
ex 17.3b	Vn Son K.380/i	ct

18.35 Limbs in the pattern [a a, - a]:

ex 18.35a	Cl 5t K.581/i	ct % (on one interpretation; cf. §18.33)
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18.40 Three-unit limbs: the sample of these is so small it seems best just to list them; many conceivable patterns do not occur.

18.41 [b + a, b + a]:

	Pf Trio H.5/i	ct
	SQ H.75/iv, 54	ct
ex 12.223d	Vcl Conc H.1/i, 53	ct
ex 10.1f	Vn Son K.306/i, 25	ct
	Vn Son K.403/ii	ct*
	Str 5t K.516/ii, trio	ct*%
	Fl Conc K.314/i, 49	ct*
ex 12.4313b	Sym K.550/iii	ct*%

18.42 [- - a, - - a]:

ex 18.42a	Pf Conc K.467/ii	ct%
	Pf Conc K.467/ii, 73	ct*
	Pf Conc K.595/i, 100	ct*

18.42 [b b a, b b a]:

ex 18.43a	SQ H.73/iii, trio	ct*%
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18.44 [a a a, a a a]:

ex 10.31c	Pf Trio H.5/ii	v+ct*
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18.500 Four-unit limbs. Virtually all the four-place motivic patterns for ct limbs are formed from the model [. . . a, . . . a], without the use of “singlets” – variables in the first limb which fail to recur in the corresponding position in the second. Thus reshuffling and reconvergence do not normally occur, and the motivic descriptions can be written without the symbol “-”. The symbol “+” will be used, as formerly, for “duplets” – motives recurring only at corresponding positions; but we will continue to label the first and last units ‘b’ and ‘a’, respectively. The terminal “a” occurs in the first (leftward) position only if it occurs also in positions 2 and 3 (and, of course, 4); thus patterns such as [a . . a, a . . a] or [a a . a, a a . a] do not occur.

We will proceed through the logical possibilities in order, once again to get an idea of the relative distribution of patterns among the possibilities.

18.501 Limbs in the pattern [b + + a, b + + a]:

This is, of course, equivalent to the two-unit pattern [b a, b a] at higher resolution; it may be some motivic intricacy in the tail-section of the theme, or perhaps the rhythmic articulation of the limbs themselves, that seems to call for four-place instead of two-place analysis. Hence, all of these melodies could have been listed as well in §18.31, and again, it’s a common pattern, all of whose representatives

it is unnecessary to list separately. Altogether in this repertory I find about 35 of these; here are, for inspection, the instances from just the Mozart string quartets and quintets:

	SQ K.464/i	ct
ex 5.0d	SQ K.499/iv, 44	ct*
ex 7.3e	SQ K.575/i	ct%
ex 12.44d	Str 5t K.593/i	ct*
ex 8.23f	Str 5t K.593/ii	ct*

18.502 [b b + a, b b + a] (in §§18.502-18.511, the lists are intended to be complete)

ex 18.502a	Pf Son H.49/i	ct
	SQ H.49/iii, trio	ct*0%
	SQ H.67/i, 33	ct*
	SQ H.72/ii	ct
	SQ H.72/ii, 14	ct*
ex 12.44e	Sym H.85/i, 12	ct%*
	Sym H.85/i, 78	ct
ex 7.5b	Sym H.94/iii	ct*0%
ex 20.6a	Pf Son K.283/i, 23	ct
ex 7.031a	Pf Son K.333/i, 39	ct
	Pf Son K.570/iii, 22	ct*0%
	SQ K.598/i, 27	ct
ex 17.4a	Str 5t K.516/i, 29	ct*
	Hn Conc K.417/i, 45	ct
ex 10.411e	Pf Conc K.271/i	v+ct*
	Pf Conc K.459/i, 16	ct
ex 3.1f	Pf Conc K.466/i	ct%* (on one interpretation)
	Vn Conc K.219/i	ct
	Sym K.543/i, 97	ct

18.503 [b + b a, b + b a]

ex 18.503a	Pf Trio H.26/i	ct*
	Vn Son K.303/ii, 25	ct

18.504 [b b b a, b b b a]

	SQ K.465/iii, trio	ct*0%
ex 12.4314c	SQ K.465/iv, 88	ct
	Fl 4t K.298/iii, 41	ct
ex 10.31a	WW Ser K.375/i	v+ct%
	Hn K.495/iii, 38	ct
ex 18.504a	Pf Conc K.459/i, 87	ct*
	Vn Conc K.216/iii, 73	ct
	Vn Conc K.219/i	ct



## 18.505 [b a b a, b a b a]

	Pf Trio H.30/iii, 42	ct*
	Sym H.102/iv	ct*0%
	Pf Son K.457/i, 36	ct
	Vn Son K.304/i, 36	ct
ex 10.1b	Pf 4t K.478/iii, 70	ct
	SQ K.575/ii, 19	ct*
	SQ K.589/iii, trio	ct*0%
	Pf Conc K.271/iii, 82	ct
	Pf Conc K.449/iii, 63	ct*
	Pf Conc K.459/ii, 58	ct
ex 10.1n	Pf Conc K.482/iii, 51	ct
	Sinf Conc K.364/iii, 48	ct

## 18.506 [b b a a, b b a a]

	SQ H.81/i	ct <sup>0</sup> %*
ex 18.506a	Pf Son K.309/i, 35	ct
	Pf Son K.309/iii, 39	ct*
	Vn Conc K.218/iii, 46	ct
	Sym K.385/ii, 18	ct

## 18.507 [b + a a, b + a a]

ex 18.507a	SQ H.39/iv, 22	ct*0%
ex 6.1b	Pf Son K.457/i	ct
ex 19.5a	Vn Son K.296/i, 22	ct*
ex 17.4c	SQ K.465/i, 56	ct
	Pf Conc K.449/i, 121	ct*
	Pf Conc K.451/i, 35	ct
	Pf Conc K.467/i, 28	ct

## 18.508 [b a a a, b a a a]

	SQ H.45/i, 43	ct
	Sym H.82/i, 70	ct
ex 16.11a	Sym H.86/iv, 38	ct <sup>0</sup> %
ex 5.1a	Pf Son K.333/ii, 76	ct*

## 18.509 [b a + a, b a + a]

ex 18.509a	Sym H.99/iii	ct*0%
ex 12.223e	Vn Son K.303/i, 19	ct
ex 8.21b	Fl 4t K.285/i, 12	ct*
ex 12.4312a	Cl Trio K.498/i	ct

## 18.510 [a a a a, a a a a]

	Pf Conc K.271/iii	ct%* (on one interpretation)
ex 3.1f	Pf Conc K.466/i	ct%* (on one interpretation)
	<u>Entf</u> K.384/Ov, 65	ct

## 18.511 [b d d a, b d d a]

ex 12.223c	SQ H.42/i	ct
	SQ H.69/iii	ct*% (ignoring the echoes)
	Sym H.86/ii	ct*
ex 12.44f	Sym H.86/iv	ct
	Pf Son K.280/i, 27	ct
	Vn Son K.296/iii, 25	ct
	Vn Son K.301/i, 44	ct
	SQ K.499/iv	ct%*
	Fl-Hp Conc K.299/iii, 112	ct%
	Pf Conc K.482/i, 152	ct%
	Pf Conc K.537/i, 216	ct

18.512 Somewhat unexpectedly, there seem to be very few four-place limbs constructed with “singlets” on the left; that is, there are almost no four-place examples corresponding to the 2-place pattern [- a, - a] of §18.33. The plausible candidates are:

	Fl-Hp Conc K.299/i, 68	ct*
	[- + + a, - + + a] on one analysis	
	Pf Conc K.459/iii, 121	ct
	[b b + a <sup>o</sup> , - - + a <sup>o</sup> ]	
	Vn Conc K.219/i, 46	ct
	[- <sup>2</sup> b b a, b <sub>2</sub> b b a]	
ex 12.31b	Sym K.425/iv	ct
	[- - - a, - - - a] on one analysis; cf. §18.13	

These instances aside, there are virtually no 2x4 ct limbs with patterns in the first limb such as [- + + a, [- + a a, [- a + a, etc.

18.513 Listed below are all the ct themes with 2x4 limbs whose motivic structure contravenes the principles of §18.500 – that is, those in which the second limb, compared to the first, exhibits reconvergence, reshuffling, etc. Many of these are simply examples of “surface melodic variation”, in which the original pitch contour is retained, but filled up with more notes; or a simple change of cadential formula (as in §18.11); but some are genuine motivic anomalies:

ex 12.433a	Pf Son H.36/ii	ct*%
ex 8.24a	Pf Trio H.30/i, 16	ct*
	SQ H.39/iv	ct*%
	SQ H.60/i, 48	ct
	Sym H.92/ii	ct*%

ex 10.31d	Pf Son K.279/i	v+ct
ex 12.221a	Pf Son K.330/iii, 21	ct*
	Pf Fant K.394	ct*
ex 5.0f	Pf Son K.457/iii, 46	ct
	Pf Conc K.450/i, 104	ct
ex 3.1f	Pf Conc K.466/i	ct%* (on one interpretation)

### 18.6 CT themes with 2x6 and 2x7 limbs

Most 6-place limbs subdivide metrically and motivically into 2+2+2; a few are 3+3.

	Pf Trio H.14/i	ct
ex 17.72a	SQ H.39/i	ct
	SQ H.57/i	ct
	SQ H.69/iii	ct%* (including the echoes)
ex 17.2a	SQ H.72/iv, 75	ct
	+SQ H.75/iv	ct*
	SQ H.78/i	ct
ex 3.1a	Vn Son K.305/i, 24	ct
ex 17.71a	Vn Son K.481/i	ct
ex 18.6a	Pf Trio K.542/iii, 19	ct*
	+Cl Trio K.498/i, 25	ct%*
	WW Ser K.388/i, 42	ct
	Sym K.551/ii, 28	ct

These all repeat motives literally from one limb to the second, without singlets, and therefore without reshuffling or reconvergence, with the possible exceptions of the two themes marked (+) above.

There is just one 2x7 ct theme in our repertory; the second limb is extended:

Entf K.384/Ov	ct*
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### 18.7 CT themes with 2x8 limbs

The motivic description of these is altogether without singlets; that is, in no case below does the motivic pattern of the second limb diverge significantly from that of the first, except in a few cases of extension, elision, or truncation.

ex 19.10b	Pf Son H.52/iii	ct
	SQ H.48/iv	ct%*
	Sym H.93/iii, trio	ct*
	Pf Son K.283/iii, 41	ct
	Str 5t K.614/i	ct
ex 7.1b	Pf Trio K.548/i, 30	ct
ex 18.7a	Ob 4t K.370/i	ct
	Hn Conc K.447/i, 51	ct
	Pf Conc K.414/i, 32	ct

Pf Conc K.450/i	ct
Pf Conc K.456/i, 39	ct
Pf Conc K.503/i	ct

### 18.8 Long-limbed ct's

There are a few ct themes with limbs so long and/or motivically intricate in structure that description in more than eight metric units each seems called for:

ex 10.32a	SQ H.79/iv	ct*
	SQ H.81/iii, trio	ct%
	Vn Son K.379/i, 50	ct*
	Pf Conc K.543/iii, 171	ct (at 2x23 with an extended second limb, the largest of all; each limb is itself a ct)

18.9 It is perhaps worth mentioning that although at times the two limbs of a ct are so exactly identical that they could be written with repeat-signs:

Pf Son K.282/i, 9	ct
Pf Son K.545/i, 14	ct

Rather more often there is at least some minimal differentiation between the two limbs; some good examples are:

ex 16.12b	Pf Son K.279/i 20	ct
	Pf Son K.281/iii, 90	ct
ex 20.6a	Pf Son K.283/i, 23	ct
	Pf Son K.283/ii, 9	ct
ex 18.32b	Pf Son K.310/ii, 15	ct
ex 5.0b	Pf Son K.330/i	ct

## 19.0 The Structure of the CT tail

### 19.10 CT's with tails structured as ct/bars<sup>1</sup>

The most common structure for the tail of a ct is itself ct in cadential form with barform motivics. As several examples from the piano sonatas show, a ct-tail which is itself a ct can give rise in its tail to yet another identifiable scheme:

ex 12.223a	Pf Son H.49/i, 24	ct
ex 19.10a	Pf Son K.280/ii, 9	ct
ex 21.235a	Pf Son K.281/i, 17	ct

CT's as tails are naturally liable to the same accidents as ct's which form complete themes: shortened or lengthened tails or limbs, extra limbs, ambiguity in the limb/tail joint, etc. There is quite frequently a short motive, phrase, upbeat, or pause before the tail ct begins:

ex 19.10b	Pf Son H.52/iii	ct
ex 6.1b	Pf Son K.457/i	ct
	Pf Son K.457/ii, 24	ct*%

The one consistent principle that seems to apply to tail-component ct's is this: the limbs of the component ct are generally no longer than the limbs of the larger ct. They can be the same size; ct's structured [a a q q . . .] are not uncommon; but those structured [a a q + q + . . .] are quite rare. (I will, when possible, use "q" for the first motive of a ct tail.) The only exceptions to this principle in the roughly 185 ct's with tail-component ct's are:

ex 19.10c	Pf Trio H.16/iii, 112	ct*%
	Pf Trio H.21/i, 29	ct
ex 10.24f	SQ H.57/iii	ct%
	SQ H.59/iv, 45	ct

19.11 For inspection, and to give an idea of relative proportions in comparison to the tabulations of §19.22, §19.3, and §19.4, here are the Haydn and Mozart ct themes from just the piano sonatas whose tails are themselves constructed as ct/bars:

ex 17.6a	Pf Son H.34/ii	ct
	Pf Son H.40/i, 26	ct*%
ex 10.412a	Pf Son H.41/i, 20	pv+ct
ex 12.223a	Pf Son H.49/i, 24	ct
ex 18.14a	Pf Son H.51/i, 26	ct
	Pf Son H.52/i, 33	ct
ex 19.10b	Pf Son H.52/iii	ct
ex 16.11c	Pf Son K.279/i, 48	ct*
ex 19.10a	Pf Son K.280/ii, 9	ct
ex 21.235a	Pf Son K.281/i, 17	ct

<sup>1</sup> Cf. Schoenberg, *Fundamentals*, Chapter VIII, especially the discussion of the "liquidation of the motif", which is similar in principle to Lowinsky's ("On Mozart's Rhythm", *Musical Quarterly* 1956, pp 162-186) "principal of increasing animation....not only in increase of speed but in the lengthening of phrases..." (pp. 174-175). Schoenberg appears to believe the tail of a ct – in his terms the "completion of the sentence" – must necessarily bear a motivic relation to the limbs, but cf. §20.6 below.

	Pf Son K.282/ii	ct*0%
ex 20.1a	Pf Son K.283/i	ct
ex 7.01a	Pf Son K.283/iii	ct
	Pf Son K.283/iii, 41	ct
ex 18.506a	Pf Son K.309/i, 35	ct
	Pf Son K.309/ii, 33	ct
	Pf Son K.309/iii, 19	ct*0%
ex 10.31e	Pf Son K.311/i	v+ct*
ex 17.5b	Pf Son K.330/i, 42	ct0%
ex 12.4321a	Pf Son K.330/ii	ct*0%
ex 6.1a	Pf Son K.333/i	ct0%*
ex 7.031a	Pf Son K.333/i, 39	ct
ex 5.1a	Pf Son K.333/iii, 76	ct*
	Pf Fant K.394	ct*
ex 6.1b	Pf Son K.457/i	ct
	Pf Son K.457/i, 23	ct*
	Pf Son K.457/ii, 24	ct*0%
ex 5.0f	Pf Son K.457/iii, 46	ct (if tail begins in m 68)
ex 12.4314a	Pf Son K.545/ii, 17	ct
	Pf Son K.545/ii, 33	ct*
ex 11.3a	Pf Son K.570/i 23	ct*
	Pf Son K.570/ii, 33	ct*0%
	Pf Son K.570/iii, 22	ct*0%

19.20 The tail need have no standard cadential or motivic shape; this possibility is about as common as any other. I count roughly 140 ct's in the present corpus with such a "nonmotivic" tail; these are not literally without structure, of course, but are rather without one of the standard patterns:

ex 12.4314b	SQ H.82/iii	ct*0%
ex 10.1k	Str 5t K.593/iv	ct*0%

19.21 Some tails consist of or include the (single) repetition of such a nonstructured phrase; often the repetition is overlapped:

	Pf Son K.281/iii, 28	ct
	Pf Son K.283/ii, 9	ct
	Vn Son K.303/ii, 25	ct
ex 17.4a	Str 5t K.516/i, 29	ct*
	Hn Conc K.495/iii, 38	ct
	Sym K.385/ii, 18	ct

19.22 Here, again for comparative purposes, are all the ct themes in the piano sonatas whose tail-section does not use one of the standard motivic or cadential patterns. Many of these themes are, as a whole,

anaphoric (cf §20), and so are only internally “nonmotivic”:

ex 17.2d	Pf Son H.35/i, 36	ct
ex 8.24d	Pf Son H.35/ii	ct*0%
ex 12.21a	Pf Son H.35/ii, 9	ct
	Pf Son H.38/i	ct0%
ex 2.30a	Pf Son H.39/ii	ct0%*
	Pf Son H.41/ii	ct*0%
	Pf Son H.42/i, 40	ct*0%
	Pf Son H.43/i	ct0%
	Pf Son H.48/i	ct*0%
ex 18.502a	Pf Son H.49/i	ct
	Pf Son H.49/ii, 57	ct*0%
ex 18.22a	Pf Son K.279/i, 31	ct0%
ex 21.147a	Pf Son K.280/i, 43	ct0%
	Pf Son K.284/ii, 17	ct*
ex 18.32b	Pf Son K.310/ii, 15	ct
	Pf Son K.330/ii, 20	ct*0%
ex 17.72b	Pf Son K.332/i, 71	ct*
ex 12.41c	Pf Son K.333/ii, 14	ct

In many cases where the ct is repeated, the tail is on its second appearance extended by “chains” (cf. §19.3), and so it is really only the first time that the tail is truly “nonmotivic”.

19.23 There is a small group of ct’s in which the tail is structured motivically as [q r r s]:

ex 19.23e	Pf Son H.40/ii, 25	ct*0%
ex 17.72a	SQ H.39/i	ct
	SQ H.49/iii, trio	ct*0%
	SQ H.49/iv, 48	ct*0%
	Sym H.82/iv, 65	ct
	Sym H.89/i, 43	ct0%
	Pf Conc K.451/ii, 56	ct
	Pf Conc K.482/iii	ct0%
	Pf Conc K.491/iii	ct*0%

19.24 There are also a few themes in which such a pattern is expanded to [q r r s s . . .], [q r r s s t t . . .], etc.:

	Sym H.82/i, 70	ct
	Sym H.103/iii	ct*0%
	Cl Trio K.498/i, 25	ct0%
	Pf Conc K.453/i, 35	ct0%
	Zbfl K.620/Ov, 64	ct0%

19.30 Anaphors and chains are quite common in the tails of ct's; I count about 115 such in the ct repertory as a whole. The lists below again exhaust such examples in the piano sonatas.

19.31 Some tails are uncomplicated anaphors: [q q q . . .]

ex 17.1a	Pf Son H.35/i, 45	ct%
ex 12.433a	Pf Son H.36/ii	ct*%
	Pf Son H.49/iii, 25	ct*%
	Pf Son K.280/i, 27	ct
ex 12.221a	Pf Son K.330/iii, 21	ct*

19.32 Some tails are chains of motives – that is, more than three in a row, usually in a sequence or scale:

	Pf Son H.33/ii	ct*%
	Pf Son H.41/ii, 30	ct*%
ex 17.1c	Pf Son H.49/i, 12	ct*
ex 16.12b	Pf Son K.279/i, 20	ct
	Pf Son K.309/iii, 39	ct*
ex 19.32a	Pf Son K.545/i	ct*

19.33 In a third group, some ambiguity makes it difficult to decide whether the tail is a ct with extra limbs, an anaphoric ct, a chain, etc.; but in all these cases the tail begins [q q q . . .]:

ex 18.32a	Pf Son H. 34/i, 30	ct%
	Pf Son K,279/ii	ct
	Pf Son K.310/i	ct%*
ex 12.4313c	Pf Son K.533/ii, 23	ct
	Pf Son K.545/i, 14	ct

19.40 It is not too uncommon (I count about 40 examples in the total ct repertory) for the tail to be structured as a small two-part melody, with an incomplete medial cadence and (usually) replicate motivics. The examples below, subdivided according to their harmony, again include all such examples from the piano sonatas.

19.41 CT's with tails structured as dec ac's:

	Pf Trio H.14/i	ct
ex 10.31d	Pf Son K.279/i	v+ct
	Pf Son K.281/ii, 28	ct
	Pf Son K.282/i, 9	ct
	Pf Son K.457/i, 36	ct
	Pf Son K.457/ii, 8	ct

19.42 CT's with tails structured as tc's:

	Pf Son H.33/i	ct
	Pf Son K.281/iii, 90	ct



ex 5.0b Pf Son K.330/i ct  
 ex 17.3a Pf Son K.330/iii, 33 ct

19.43 CT's with tails structured as ac's:

SQ H.37/i ct  
 Sym K.551/ii, 28 ct

19.44 CT's with tails structured as rx:

Sym H.90/iii, trio ct%  
 ex 20.6a Pf Son K.283/i, 23 ct

19.45 CT with tail structured as dx:

Sym K.543/iii ct\*%

19.46 CT tails may also be structured cadentially as a small two-part form, without replicate motivics:

SQ K.465/ii ct (tc tail-section)  
 Pf Conc K.459/iii, 121 ct (tc tail-section)  
 Pf Conc K.482/i, 77 ct (dec ac tail-section)

19.47 Conversely, replicate motivics in a ct tail need not automatically entail one of the common cadential schemes:

Pf Trio H.24/i, 30 ct\*

19.5 Somewhat similar are tails constructed of two quasi-independent units simply conjoined together:

ex 19.5a Vn Son K.296/i, 22 ct\*  
 Fl 4t K.285/i, 26 ct

## 20.0 Anaphoria

Anaphoria of one type or another is a common feature of ct themes. The examples below come only and exhaustively from the piano sonatas.

### 20.1 Most common are anaphoric upbeats to the limbs and tail of a ct:

ex 12.433a	Pf Son H.36/ii	ct*%
ex 19.10b	Pf Son H.52/iii	ct
ex 21.235a	Pf Son K.281/i, 17	ct
ex 20.1a	Pf Son K.283/i	ct
	(Here the upbeats continue into the tail, which thereby itself becomes anaphoric.)	
	Pf Son K.309/ii, 33	ct
	(Here an initial downbeat is displaced metrically to become an upbeat to the second limb and tail, where it is also anaphoric.)	
	Pf Son K.333/i	ct%*

### 20.2 Initial (downbeat) anaphoria is also common: the two limbs and the tail begin the same, or nearly so:

	Pf Son H.33/i	ct
ex 19.23e	Pf Son H.40/ii, 25	ct*%
	Pf Son H.41/ii	ct*%
	Pf Son H.48/i	ct*% (if the tail begins in m 6)
	Pf Son K.309/iii, 39	ct*
ex 12.4321a	Pf Son K.330/ii	ct*%
ex 12.41c	Pf Son K.333/ii, 14	ct
ex 12.4313a	Pf Son K.545/ii, 17	ct
	Pf Son K.545/ii, 33	ct*

### 20.3 In these examples we have full anaphoria – that is, the entire limb recurs at the opening of the tail:

ex 17.6a	Pf Son H.34/ii	ct
	Pf Son H.49/ii, 57	ct*%
ex 18.22a	Pf Son K.279/i, 31	ct%
ex 12.4313c	Pf Son K.533/ii, 23	ct

However, sometimes description as a three-limbed ct is more convincing:

ex 17.1a	Pf Son H.35/i, 45	ct%
ex 17.1c	Pf Son H.49/i, 12	ct*

### 20.4 Terminal anaphoria, in which only the end-motive of the limbs is carried into the tail, is occasional:

	Pf Son H.38/i	ct%
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20.5 Of course, ct components can be anaphoric as well; for example, in the tails of the following ct's:

ex 12.433a	Pf Son H.36/ii	ct*% (terminal anaphor)
ex 12.223a	Pf Son H.49/i, 24	ct

20.6 Anaphoria and the pivoting or elision of the limb terminal motive into the tail-section are the only systematic motivic relations that occur between the limbs and tail of these ct themes; one might say that otherwise the limbs and tail are motivically decoupled, in contrast to the halves of most two-part melodies. Other motivic correspondences between limbs and tail do occasionally occur:

An initial motive may recur in a recadencing epilog:

	SQ H.44/i	ct%
ex 20.6a	Pf Son K.283/i, 23	ct
	Str 5t K.516/ii, trio	ct*%

And a few further miscellaneous motivic correspondences between limbs and tail are found in:

	Pf Trio H.18/iii	ct*%
	SQ H.67/iv, 59	ct
	Sym H.94/i, 79	ct%
	Sym H.103/iii	ct*%
ex 17.4a	Str 5t K.516/i, 29	ct*

## 21.0 Conclusions and conjectures

Let us now briefly summarize what we have learned about the formal structure of classic melody from our survey of themes in the mature instrumental works of Haydn and Mozart.

When we look at this music on the formal level below that of the movement as a whole, and below that of its major subdivisions – that is, when we examine the phrases that combine to make up a sonata exposition, or a binary first strain, or the outer part of a *da capo* form – we find that simple two- and three-part forms predominate, and that these forms can be resolved into two aspects: first, the motivic patterns “replica”, “bar”, and “anaphor”; and second, the cadential schemes, subdivided into the three-part “ct” – a strictly articulatory designation – and the two-part schemes “ac”, “tc”, “rx”, and “dx”, which indicate an articulation and its associated harmony. These smaller schemes and plans dominate their landscape nearly as much as the sonata, the rondo, and all the rest predominate in the construction of movements as a whole, and they deserve to be as well-known. They represent the virtually automatic habits of thought of these composers, as the twelve-bar blues, or the tune and turn, or the sequence, do for other musicians at other places and times.

The two-part cadential patterns are generated by a few simple rules, and these rules also work reasonably well for the first two units – the “limbs” – of the ct. It seems useful further to subdivide the much-discussed two-part “period” into types according to harmony (the ac, tc, rx, and dx), since these types represent different applications of the cadencing rules, and in some respects – for example, how likely they are to have replicate motivic structure – are treated differently.

Two- and three-part melodies form categories whose boundaries are not absolutely sharp; there are overlaps and ambiguous cases. Nevertheless, most of the themes in this repertory are locatable somewhere along the two- to three-part continuum, and the preponderant majority are clearly the one or the other, in spite of the space we’ve spent discussing problem cases. There are, naturally, a few themes in this repertory (and of course many other in other repertories) that do not belong on this continuum (cf. §2.4 and §11.2). And the various two-part subtypes can similarly blur at the edges, when a theme’s harmony presents us with unisons, ♯ chords in structural positions, and other situations whose harmonic meaning is difficult to specify.

By looking at large numbers of such melodies, we have been able to establish a few more regularities in their cadential construction: that in a two-part theme, the second part (the “consequent”) may be longer, but is only rarely shorter than the first; in a three-part theme, the tail is usually as long as the combined length of the two limbs, but in an important minority of cases its length is that of a single limb; if the tail of a ct is itself a ct, its limbs are no longer than those of the parent ct; etc.

We have seen that a certain kind of rough motivic analysis, a metric “cookie-cutter”, reveals not only a few motivic plans used repeatedly – the bar, the replica, and the anaphor – but also a more general kind of orderliness in the use of motives, a non-syntactic serial order akin to the rhythms of visual ornamentation. We have noted that the main motivic characteristic of ct limbs is motivic *rhyme*, and that (again) these principles govern the large majority of instances, but by no means all of them.

The closest thing we have seen in these themes to what might loosely be termed a “syntactical function” – an element or event whose meaning for the rest of the structure is to some degree independent of position or context – is the  $I_k$  cadence, which acts as a kind of punctuating sign that a theme has

concluded; we have discussed the extent to which this can be relied upon: certain types of themes (rondo tunes, binary first strains, variation themes, deliberately simple or folkish melodies) frequently end in the tonic without the subdominant of the full  $I_k$ ; and a very few themes continue past such a cadence.

In trying to decide which phrases group with which, or where the large subdivisions of a theme are to be located, we have had to examine the factors that cause phrases to cohere or dissociate: there is a kind of “surface biology” about the way one phrase cadences and the next begins that can make a crucial difference in such grouping decisions. The internal character of the phrases, however, also plays a role: whether they share motives, whether one or both have the rhythmic variety and coherence we would identify as “melodic”, or instead the short repetitive phrases of the kind more often called “passagework”. We have also noticed that melodies are frequently, but by no means universally, componential: that melodic subdivisions themselves are often describable in terms of ct’s, tc’s, dx’s, etc. We have also noted that the beginnings of some kinds of themes, the “P-types” and “V-types”, can be built from small units whose rhythmic relationship to each other is unusually difficult to describe: the usual categories: “grouped with” or “away from”, “upbeat to” or “afterbeat of” – seem only imperfectly to apply.

It has not been our aim to discover systematic ways in which Haydn’s thematic construction differs from Mozart’s. Nevertheless, some distinctions do occasionally stand out: Haydn’s preference for V-type openings, and Mozart’s for P-types, especially in the concerti (§10.25, §10.31, §10.32); Haydn’s use of very short binary first strains (§11.10) and of motivic patterns such as [b a a c] and [b b d . . .], unusual in Mozart (§14.32 and §18.14); the much larger number of Haydn exceptions to the motivic rules proposed (§14.56 and §14.9); the greater likelihood that a Mozart theme will be thoroughly componential (§14.77) and that those components will exhibit one of the standard two-part forms (§15.1 and §19.4). In general, Haydn appears to be the more consciously motivic composer, willing to look back over the theme he’s written and re-introduce earlier motives in a later context; Mozart the composer of more architectural themes, melodies in broad structural forms whose parts relate to each other in clear ways: as consequent to antecedent, as tail to limb, etc.

Finally, I hope to have demonstrated some of the value of pursuing repertorial music theory. In trying to match our descriptions of whatever regularities we find against a repertory, we have had to put our statements in a form which is testable in some meaningful way; and in the process we are forced to revise definitions, discard ideas, sharpen distinctions, and in general submit ourselves to the discipline of a confrontation with musical reality on a fairly broad scale. The patterns that this repertory yields, when viewed synoptically, seem (to me) quite clear; but one of the important facts about that repertory is its tangled corners and blurred outlines; its occasional untidiness. Even though most of Mozart’s or Haydn’s themes are clearly and obviously ac, or ct, or rx, etc. in construction, they can both at times write a fine melody that seems to straddle the border between one of these types, or (more rarely) that resembles none of them at all. This reminds us, to borrow a metaphor from evolutionary biology, that the viability of the organism does not require the use of one of the standard body-plans, common though they are.

A melody’s viability presumably depends in large part upon the principles governing the course of the especially coherent and compelling voice, usually the uppermost, that bears what most musicians would identify as “the tune” itself. Aside from the details of motivic repetition, we have in this study spent little space discussing the details of melodic construction on the note-to-note level, because (as we implied in the introduction) such principles remain simply beyond us. But some speculation on the

general course of a melodic line may be in order, having spent twenty chapters discussing less refractory aspects of 1450 Classic themes.

21.10 We will undertake this speculation through the lens of the two most prominent bodies of music theory appearing to bear on a “theory of melody”: that associated with the work of Heinrich Schenker, and that with Leonard B. Meyer. Now, little of this work deals in any detail directly with the immediate melodic foreground, but rather, and to differing extents, treats an abstraction from it, what I will call here the “melodic middleground”. That is, the structures that these theorists and those of like mind hypothesize, or imply, to lie behind, or to control, or to organize melodies, are formed from the relationships between “structural tones”, notes which are abstracted from the melody as notated, and are considered to be in some way more important than the rest. The notion that some notes are more significant than others has been implicit in music theory in some fashion virtually as long as musicians have talked about music, but it was the first principle in the work of H. Schenker, who gave it new emphasis and new scope, so it is his work with which we begin.

21.11 It cannot be emphasized too strongly that Schenkerian analysis does not intend to be a theory of “melody” or of “themes” as separate entities. It is a theory of complete pieces; only when a “theme” and a complete form coincide, as in a *Lied* or the theme of a theme-and-variations movement, is the apparatus of *Ursatz* and *Urfinie* (fundamental structure and fundamental line) said necessarily to apply. Indeed, Schenker himself regarded the concepts of “melody”, “motive”, “theme”, “phrases”, “period”, etc., with some hostility, as superficial distractions from the analyst’s primary concern, those large motions within the fundamental structure that control the entire work<sup>1</sup>.

But of course Schenkerian theory has something to say about shorter stretches of tonal music in general, and from this one can construct, very tentatively, at least a partial theory of “short very coherent tonal passages”, or “themes”, or whatever the term of preference. This theory would include, most importantly, the notion of “structural levels”: that not all the notes in a given passage are of equal significance, and their relative importance is determined to a high degree (but not exclusively) by their harmonic support; these more-important notes are only rarely directly adjacent to each other, but nevertheless relate to each other across intervening music to form in themselves some sort of recognizable high-level event, such as a conjunct line or an arpeggio. The intervening less-important notes will relate to the more-important ones as specifiable “diminutions”, familiar from 18<sup>th</sup>-century figured-bass theory: the passing-tone, the neighbor-tone, the consonant skip, etc.; and also as lines or arpeggios which “prolong” their uppermost note. Among the more-important notes thus abstracted, some are again more important than their neighbors, and will relate to them, as well as to equally-important but more distant notes, as before. The process of analysis is in this way “recursive”, and so produces a hierarchy of “structural levels”. In a moderately-interesting passage of any length, as one ascends up this hierarchy, one soon reaches a line that is the controlling feature of its passage, and this line, proceeds, together with a corresponding reduction of the bass-line, in accordance with the rules of 18<sup>th</sup>-century counterpoint. At less-abstract levels, too, “structural tones” in the upper voice and their corresponding principal bass notes mutually progress in accordance with figured-bass principles. Since *basso continuo* practice and theory both prefer conjunct motion, and require it in the case of dissonance-treatment, there is a certain “presumption of linearity” built into the analysis of relations between “structural tones”: the higher the level of the analysis, the more likely the surviving notes form conjunct relationships.

Parts of a line may, however, be obscured by octave-transposition, or by the inclusion of “virtual” notes (notes in some way represented by the diminutions, but not literally present in the foreground); and in some cases two lines (or even more) may be simultaneously represented by a single voice, so that, with the bass, we have in effect three-part counterpoint, still according to figured-bass principles: these are “compound melodies”. Lines usually take place, again virtually if not literally, within a single octave, and on more abstract levels are predominantly descending.

One may summarize by saying that behind every moderately coherent and relatively closed passage of tonal music stands a framework of quite strict two- or three-voiced counterpoint, with the upper voices primarily linear and primarily descending; notes not part of this line relate to it in specifiable and limited ways. It seems reasonable to add that for a theme which does not deflect, at least one line will terminate on the tonic at its close, and since lines usually descend, this is usually the lower tonic. (But this descending line is not itself the “fundamental line” of the movement, when we speak of themes drawn from a larger work; it is only its “reflection”.)

Now if, for all its neglect of nuance, this is one plausible version of a “Schenkerian view of thematic passages”, is it possible to test it against a repertory?

21.12 We need first to consider the object of application. At the level of the immediate foreground Schenkerian theory is, and intends to be, equivalent to the ordinary rules of harmony and voice-leading in the eighteenth century (insofar as those rules are accurate and complete). That is, Schenkerian theory makes no claims about immediate note-to-note foreground relationships that are not also included in those rules, and so it is not possible to imagine a theme written in accordance with those principles which Schenkerian theory would disallow. That theory is, to repeat, a theory of the middleground and background; a theory of structural tones (and “structural harmonies”, prolongations) and their interrelationships. We therefore need to find a middleground object to which it might apply.

I suggest for this purpose what Leonard Ratner (1980) calls “basic structural melodies” and what Allen Forte and Steven Gilbert (1982) call “rhythmic reductions”. Forte and Gilbert use such reductions throughout their book – they are passages, usually thematic, from which nonharmonic tones (and some others) have been removed – “omitting or, rather, absorbing the diminutions which are operative within the theme itself”<sup>2</sup> – but which are still notated in a rhythm which is as much like the original excerpt as possible, given that one is using fewer notes (cf. their reduction of Pf Son K.545/i in §21.152 below).

Ratner makes similar reductions for some of the music he discusses; the reductions are sometimes single-voiced, sometimes more; sometimes rhythmic, and at other times presented in notes all of one duration<sup>3</sup>. Ratner claims that such “simple melody”

served a more important purpose – to provide a framework for figured melody. Elaboration by means of divisions and *agréments* had for centuries been the principal means by which melody was given life and character. Classic composers built their elegant melodic lines in the same manner, by ornamenting a simple melodic skeleton<sup>4</sup>. [emphasis original]

Ratner goes on to cite Koch (1802), Portmann (1789), and Jones (1784) on the elaboration of a simple melody into a more complex one, and adds an example of Momigny (1806) analyzing a melody into a simplified version. Forte cites<sup>5</sup> Heinichen (1728) as making “reductions of a rudimentary kind”, and notice of seventeenth-century writers on the art of melodic “diminution” is common among Schenkerian theorists<sup>6</sup>.

Let us, then, for our test repertory use “rhythmic reductions” of the 128 themes found in the Mozart Piano Sonatas (as listed in the [Appendix](#)). I do not here propose to give rules or procedures for making such reductions; they are rather intuitive re-interpretations of the theme, a way of trying to re-write the melody in fewer notes while preserving as much its sound as possible<sup>7</sup>. It will therefore always be possible to disagree about the details of a given reduction, and systematic ways to resolve such disagreements are not to be found. The basic rules of thumb, of course, are familiar: eliminate most nonharmonic tones, consider the more important notes to be those in stronger metric positions, etc. And as a matter of fact, my feeling is that most of the time musicians will agree quite closely when making such reductions, at least of the themes in the repertory at hand. Most of the “rhythmic reductions” in Forte-Gilbert (1982), for example, seems to me quite plausible, as do those in Ratner (1980). If this is generally true – if most musicians can agree most of the time about most of the features in such a “rhythmic reduction” – then this is already some confirmation, if any is required, for the notion of (at least two) “structural levels” – evidently some notes are indeed more important for the basic sense of a theme than others, and they are presumably those remaining after a melody has been “lightly reduced” in this way.

Let us now ask some further questions of this repertory:

21.13 Is the soprano and bass counterpoint in these “rhythmic reductions” acceptable by the standards of 18<sup>th</sup>-century figured-bass theory? This is difficult to confirm, since the reductions will vary from analyst to analyst; nevertheless, I think the answer must be yes. That is, I am unable to find a theme or melody in the Mozart piano sonatas which, when plausibly reduced, exhibits anything other than perfectly good counterpoint, in the two-voiced framework. (For more than two voices, cf. [§21.154](#) below.) Since, however, we have by definition eliminated most nonharmonic tones, questions of dissonance treatment do not usually arise, and so “acceptable counterpoint” here means that the soprano and bass form neither parallel fifths nor octaves. Still, the principle seems to hold.

21.14 Let us now try to get at the “linearity presumption” by asking, to what extent and in what ways is the upper voice in these reductions linear or conjunct?

21.141 Some melodies are, exceptionally, reducible to but a single line, usually descending; or to a line interrupted at the midpoint of the form, renewing and concluding thereafter:

<a href="#">ex 13.35a</a>	Pf Son K.280/iii	ac (until its very end)
	Pf Son K.280/iii, 38	ac
<a href="#">ex 17.72b</a>	Pf Son K.332/i, 71	ct%
<a href="#">ex 5.1a</a>	Pf Son K.333/iii, 76	ct* (a rising line, on one interpretation)
	Pf Son K.457/i, 36	ct (an ascent, until its end)
	Pf Son K.545/i, 14	ct
<a href="#">ex 21.141a</a>	Pf Son K.545/iii	ac% (on one interpretation)
	Pf Son K.576/iii, 50	ac

Even in some of these cases, however, rather strenuous interpretation is required at times to produce a straightforward descending line. For example,

<a href="#">ex 21.143a</a>	Pf Son K.545/iii	ac
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would be “rhythmically reduced” by most musicians, I believe, somewhat as follows:



Forte-Gilbert (1982), however<sup>8</sup>, apparently considers the alto  $F\sharp$  in m 5 to be part of the main descending line, presumably to guarantee a straightforward descent from the initial  $G\sharp$ .

Consider now two further interpretations from Forte-Gilbert (1982): first,

ex 8.3b Pf Son K.332/ii, 8 tc

and (I hope) a reasonable “rhythmic reduction”:

An analysis from Forte-Gilbert (1982), p.315:

Here, in order to produce a  $5^\circ-4^\circ-3^\circ$  descent through the antecedent of the theme, the analysts must relegate everything in mm 10-11 to the status of secondary incident.

A second example:

ex 6.1a Pf Son K.333/i ct%\*

and a “rhythmic reduction”:

and its analysis in Forte-Gilbert (1982), p 146:

Here also, the first four measures are interpreted as a 5°-4°-3° line, and in the process, the oscillations between the upper and lower parts of the melodic register are diminished in importance, and so the extent to which the more genuinely linear themes listed above display a loose kinship, which this theme does not share, is obscured.

Now, analyses like those above cannot really be said to be wrong; to identify some notes as “more important”, and to draw lines between them, is to interpret, but to make no specific empirical claim about the music. Indeed, all three melodies above do, in some manner, proceed from 5° to 4° to 3°. If indeed an empirical claim is implied here, it is (as is sometimes expressed) that “we hear it that way”. Now this is a perceptual claim, and so would presumably have to be evaluated by psychological tests of a kind and sophistication well beyond my competence to envision. One of the complications such tests would need to deal with is the enormous power and flexibility of our perceptual machinery, such that we can attend to nearly anything, once we are called to it. I can, indeed, “hear it that way”, just as I can squint at a Vermeer, and see nothing but the pattern of the blue spots if I choose, whether or not this is pertinent to the organization of the painting. Such analyses and such claims would, I think, make sense only if it means that lines in themes are somehow repertorially privileged, and that they occur so often and so invariably that, in effect, we’ve learned (or are, more improbably, innately predisposed) to hear them, no matter what the luxuriance of surface ornament. Something like this is certainly true for the simple meters of Western tonal music, according to which we will try to interpret musical events in this style throughout all but the most violent disruptions. Probably the same is true for cadences: that because the Viennese Classical repertory has, in effect, taught us to hear cadential formulae as articulating the music into phrases, and because our expectations in this regard are so often reinforced in the repertory as a whole, they can at times occur fleetingly and inconspicuously, and we will nevertheless mark them, especially if they occur at the expected moments. Cadences are, in other words, perceptually privileged events in this style<sup>9</sup>.

If almost all the themes in the Classic repertory, then, were as straightforwardly linear as some of those we first listed in this section, interpretations like those of Forte and Gilbert of K.332/ii, 8 and K.333/i above might be unremarkable – the melodies themselves might indeed then sound simply like unusually melismatic scale-fragments. But since that is just not the case, such a strong presumption of linearity is, I feel, simply unwarranted, and tends to lead us away from aspects of melody which might eventually begin to explain it.

21.142 Now, since Western melodies usually occur within an octave, and since they tend to fill that space, some conjunct motion is to be expected in every theme in this repertory. To say that some linearity plays a role in almost every melody is therefore to say very little; it scarcely limits the possible configurations of “melodic reductions” or “melodic skeletons”. Nevertheless, most melodies under consideration here are to some extent linear. A few of our themes can be plausibly reduced to what we might call “curved lines” – lines moving in both directions, whose endpoints join:

ex 12.4313a	Pf Son K.545/ii, 17	ct
	Pf Son K.576/iii	ac

21.143 More common are melodies interpretable as “broken lines”, those whose endpoints do not join:

	Pf Son K.280/i, 27	ct (if conjunct dyads are a “line”)
ex 7.01a	Pf Son K.283/iii	ct (almost)

	Pf Son K.284/i, 22	rx (almost)
	Pf Son K.310/iii	ac
	Pf Son K.310/iii, 143	tc*%
	Pf Son K.330/iii	ac (on one interpretation)
	Pf Son K.332/iii	ac (after the opening)
	Rondo K.494, 95	seq*%
ex 21.161c	Pf Son K.570/iii, 45	tc*%

21.144 Other melodies can be considered combinations of a leap or an arpeggio plus a line, in either order:

	Pf Son K.279/ii	ct
	Pf Son K.281/ii, 28	ct (on one interpretation)
ex 20.6a	Pf Son K.283/i, 23	ct
	Pf Son K.284/ii	ac
ex 10.21c	Pf Son K.309/i	ptc%
	Pf Son K.309/iii, 19	ct*%
	Pf Son K.310/ii	ac
	Pf Son K.311/iii	ac
ex 2.17b	Pf Son K.331/ii	rx
ex 7.5c	Pf Son K.331/iii	dx*%
ex 13.34a	Pf Son K.332/ii	ac*
	Pf Son K.332/iii	ac (with the opening)
ex 5.1a	Pf Son K.333/iii, 76	ct* (on one interpretation)
ex 10.231c	Pf Son K.570/i	dx

21.145 Still others are built of a line plus (usually preceded by) a prolongation of or circulation around a single pitch:

ex 21.235a	Pf Son K.281/i, 17	ct
	Pf Son K.311/ii	ac%
ex 7.031a	Pf Son K.333/i, 39	ct
	Pf Son K.333/ii	ac
	Pf Son K.457/ii, 8	ct
ex 13.35b	Rondo K.494	ac
ex 19.32a	Pf Son K.545/i	ct*

21.146 Obviously, then, while a hypothetical requirement that melodic background structures be exclusively linear – a requirement nobody has proposed, to my knowledge – would be much too restrictive, linearity is a very common organizing principle at least for part, or parts, of a theme. As Ratner (1980) puts it:

Since simple or structural melodies tend to progress stepwise, often for three, four, or more degrees consecutively in one direction, a figured melody pegged to this motion will have a long-range sense of direction; hence it will possess a coherence based upon this rise or fall<sup>10</sup>.

21.147 Given the general pervasiveness of conjunct motion, in fact, one might ask, do completely disjunct notes appear in any of our “melodic skeletons”, apart from arpeggiations or “consonant skips”?

That is, one might propose a principle, that a skeleton note is disjunct in both directions only if it is a consonant skip or within an arpeggio, another member of which is conjunctly attached.

Testing such a rule must of course be provisional, when the skeleton melodies themselves are such free interpretations. And when exactly should an arpeggio be considered “conjunction attached”?

ex 21.147a Pf Son K.480/i, 43 ct%

ex 12.147b Pf Son K.284/iii ac\*%

See also

ex 6.0d Pf Son K.281/iii ac (is the arpeggio in m 2 conjunctly attached?)

Nevertheless, the principle has some promise; unequivocal counterinstances are difficult to find in our small sample corpus. They perhaps include:

ex 7.031a Pf Son K.333/i, 39 ct (the E $\flat$  in m 43?)  
 Pf Son K.570/ii, 33 ct\*% (the first C $\sharp$  in m 35?)  
 ex 21.161c Pf Son K.570/iii, 45 tc\*% (the C $\sharp$  in m 45?)

21.150 For melodies of a certain angularity and range, the claim is often made, especially by Schenkerian analysts, that the nonlinearity is only apparent, a result of the interweaving within a single strand of two separate and more conjunct melodies to form a “compound melody”. This analysis is so often attractive in the case of Baroque composers – J.S. Bach is the premiere example – because independent lines once suggested are so conscientiously carried through, and are given such consistent metric and motivic treatment, that the impression of multiple independent lines folded into one is unmistakable.

21.151 Classic composers are of course aware of this technique, and in the present small repertory there are passages where the suggestion of two upper voices represented by one is patent; for example

ex 7.01a Pf Son K.283/iii ct (mm 9-18)

There are other instances where analysis as a “compound melody” is at least plausible, although in an example like the following the degree to which the two implicit upper lines are connected by intervening notes begins to blur the illusion of independent voices:

ex 12.41c Pf Son K.333/ii, 14 ct<sup>11</sup>

21.152 But the range-filling behavior of melodies virtually guarantees that a pitch required to continue an ostensible implicit melodic line will be available if the analyst looks far enough ahead for it, and consequently it can become trivial to construct a compound melody every time a passage exhibits a gap or a leap which a presumption of linearity urges one to explain away. Consider four of the examples in Forte-Gilbert (1982):

ex 6.1b Pf Son K.457/i ct (mm 1-8)

EXAMPLE 76. Mozart, *Piano Sonata in C minor*, K. 457, I

Part a: *Allegro*. Treble clef:  $\text{C} \text{ minor}$ ,  $\text{C}$  time signature. Bass clef:  $\text{C} \text{ minor}$ ,  $\text{C}$  time signature. Annotations: *tr*, circled 5, circled 6, circled 3, *tr*.

Part b: Treble clef:  $\text{C} \text{ minor}$ . Annotations: *Arp*, *N*, *N*, *N*, *N*, 10, 10. Bass clef:  $\text{C} \text{ minor}$ .

ex 12.4321a Pf Son K.330/ii ct\*0%

ex 21.152a Pf Son K.283/ii ac

ex 19.32a Pf Son K.545/i ct\*

EXAMPLE 65. Mozart, *Piano Sonata in C major*, K. 545, I

Part a: *Allegro*. Treble clef:  $\text{C}$  major,  $\text{C}$  time signature. Bass clef:  $\text{C}$  major,  $\text{C}$  time signature. Annotations: circled 3, *tr*.

Part b: Treble clef:  $\text{C}$  major. Annotations: circled 3, *N*, *CS*, *P*. Bass clef:  $\text{C}$  major. Annotations: *N*, 4, 3, 6, 5, 4, 3, 6, 5.

The first of these interpretations, the K.457/i theme splitting into two strands in mm 3-4 and mm 7-8, seems to be quite unexceptionable, as far as it goes. The second and third themes listed above are not explicitly analyzed, but are given as “exercises for analysis” at the end of their chapter on compound melody (where the student is cautioned that the upper F $\sharp$  in the first bar of K.330/ii is not part of a compound melody). If these are to be considered compound, it seems to me that they are only partially so, the illusion in neither case being fully carried through. And in the case of the K.545/i analysis, a “compound melody” is produced only by moving pitches well away from their original metrical and/or registral position and by adding three (or four?) “virtual” or “implied” pitches (in parentheses). It seems clear from this kind of reading that unless concepts like octave displacement and implied notes are used with some care and some discipline, an idea like “compound melody” will, as it expands to cover every conceivable situation, attenuate to the point of evaporation.

21.153 When one of these themes does, for a time, clearly suggest a compound melody, are the lines necessarily carried to a conclusion of some sort? The answer seems to be, no:

ex 19.10a Pf Son K.280/ii, 9 ct

ex 8.22c Pf Son K.282/Men II rx\*%

ex 20.1a Pf Son K.283/i ct

among many other examples. Apparently a Classic composer feels free to drop, rather than conclude, implicit secondary lines, when convenient.

21.154 And finally, with respect to compound melodies, we might ask, do they, when so analyzed, follow the 18<sup>th</sup>-century rules for acceptable three-part counterpoint? This of course depends upon which passages are considered compound, but again, the answer seems to be, not necessarily:

ex 16.12b Pf Son K.279/i, 20 ct

ex 21.147a Pf Son K.280/i, 43 ct%

ex 10.1a Pf Son K.310/i, 22 tc (mm 27-29)

ex 21.154a Pf Son K.333/i, 23 ac (mm 27-28)

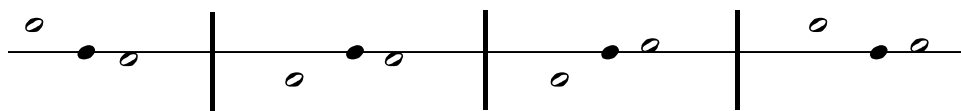
among many other examples. One might decide, of course, on some grounds independent of counterpoint, that these are not truly compound melodies. Alternatively, one might conclude that contrapuntal rules in this style apply to the foreground and possibly also to the “immediate melodic

“middleground” – the bass-line plus a single-voiced reduction of the upper part – but not necessarily further.

21.160 Another idea we might investigate about the melodic middleground is that the harmonic structure can be intelligibly reduced to a series of “prolongations” of single harmonies, and that middleground “structural tones” which, while consonant locally, do not belong to this more background harmony, and are therefore “dissonant” with it, are in effect treated according to the rules of strict figure-bass counterpoint. That is, they may be considered high-level, more abstract versions of neighbor-tones (NT), passing tones (PT), appoggiaturas (AP, here meaning a dissonance approached by skip), and perhaps others; and are therefore resolved by step. This principle of “midlevel dissonance treatment” is suggested by the practice in Schenkerian analyses of labelling such notes “N” or “NT”, and the concepts “consonant passing tone” and “consonant neighbor tone”<sup>12</sup>.

Assuming we can identify prolonged harmony and melody “structural tones” which do not belong to it, we can then ask, are these “upper-level dissonances” in fact treated according to figured-bass rules? We have already noted that very few of the notes in typical “rhythmic reductions” are completely disjunct; rather, most are attached to at least one of their neighbors by step. What we should look for then, is one of two situations:

21.161 The first is that of a high-level AP, which may be diagrammed



where ● represents the “nonharmonic tone”, dissonant with the prolonged background harmony.

Now, the AP is of course a legitimate dissonance in the foreground of highly-figured Baroque music, where the style can suggest several simultaneous melodic lines, one of which presents a conjunct approach to the dissonance. But in strict writing, the AP – a dissonance approached by leap, resolved by step – is virtually unknown: in the Bach *Chorales* I find just seven genuine examples of the AP among thousands of nonharmonic tones, plus nine more that are sevenths, part of a multiple-nonharmonic-tone configuration, and/or part of an ornamented suspension<sup>13</sup>. Thus if the melodic middleground in the Classic style moves in strict counterpoint with the prolonged harmony, the AP-configuration should not occur. But in fact, within our small sample repertory, it is easy to find examples of the upper voice skipping to a “local structural tone” which is not part of the larger harmony being prolonged at that point, insofar as that can be identified:

ex 21.161a Pf Son K.279/iii ac

I → IV V



ex 20.1a Pf Son K.283/i ct (reduction above in §21.153; skip to the A $\sharp$ , m 2, over I-prolongation)

ex 21.161b Pf Son K.330/i, 19

tc

I →

ex 21.161c Pf Son K.570/iii, 45

tc\*

I →

21.162 The reverse situation to the AP, a dissonance approached by step but then remaining unresolved (or quite remotely resolved) would, I suppose, be considered an “unresolved” or a “one-sided” PT or NT:

Once again, examples of “structural tones” standing in this relation to “prolonged harmony”, or else completely disjunct, are not difficult to find:

ex 8.4a Pf Son K.279/iii, 22

ac

I → V →

ex 8.3b Pf Son K.332/ii, 8

tc (reduction above in §21.141; E $\flat$  in mm 9 & 10 unresolved or very remotely resolved)

ex 21.162a Pf Son K.457/iii

ac

ex 21.162b Rondo K.494, 51

ac

If, then, our sample is at all representative of High-Classic instrumental melody as a whole, the conclusion seems inescapable that “structural tones” need not necessarily behave in accordance with strict figured-bass rules, with respect to “prolonged” harmony.

21.17 How can we summarize what Schenkerian theory might have to say about Classic themes? As we have noted, at the level of the immediate note-to-note foreground Schenkerian theory is equivalent to traditional harmony and counterpoint. Therefore, it’s in terms of the “melodic middleground” that we would expect help in understanding melodies. And here the basic notion of Schenkerians and others, that themes are built upon a two-part melody-bass framework moving in counterpoint, seems both valid and useful.

More detailed principles of melodic construction are difficult to derive in any testable form from Schenkerian theory (and if I have done so incorrectly, perhaps others will provide a remedy). The nature of Classic themes – the relative floridity of the principal voice compared to the slower harmonic rhythm, the frequent scales, arpeggios, and passage-work – means that there will always be notes between which it is possible to draw lines, especially given the rich Schenkerian interpretive apparatus of octave transfer, implied notes, the use of inconspicuous harmony parts as elements of lines, etc. But insofar as it can be given testable empirical content, the Schenkerian suggestion that a theme often represents multiple conjunct contrapuntal lines in strict counterpoint seems, in the music itself, to be true only intermittently and uncertainly.

Beyond that, the theory has little to say about the longer-range course of a tune. It does not mention range-filling behavior, nor does the fact that the tonic pitch is the goal of a non-deflecting theme find a place in the theory. Its treatment of cadential schemes is rudimentary. Thus a Schenkerian analysis of, for example, a second-violin harmony part in a string quartet theme, or the accidental right-hand part of a continuo realization, would reveal, at least within the scope of the passage itself, no essential difference between such constructions and a genuinely thematic passage.

Nor should we expect it to: we must repeat that what Schenkerian theory aims to describe is the long-range structure of complete pieces of tonal music; it is not about “melody”, “theme”, or “motive” as such; it has no special reason to be interested in such entities, except as they contribute to the structure of the work as a whole. Whatever that theory might have to say of the melodic foreground or middleground would be a welcome fringe benefit, but its relative neglect of these matters does not impinge on its larger claims to have uncovered the mechanisms of long-range tonal coherence.

But motives, local cadences, local goals, and the like are topics with which a theory of melody is required to deal. Even if, or when, a theme is to be construed as a composed-out version of strict linear polyphony, a local event in a grand plan, that local “composing-out” can be routine or inspired, clumsy or graceful, perhaps even right or wrong, still within the rules of harmony and counterpoint. Illusory or not, it seems inescapable that we hear, attend to, and respond to a melody’s rise and fall, its leaps and runs, its repetitions, its delays, its climaxes and conclusion. No writer on music has kept these aspects of melody so continuously in view as Leonard B. Meyer, so let us now turn to his work, and see what it has to say about our repertory.

21.20 Though elements of his theory of melodic “archetypes” can be found in earlier work<sup>14</sup>, Meyer’s most comprehensive statement on melody-types and their application comes in his 1973 *Explaining Music*, particularly in Chapter VII, “Melodic Structures”. Melodies, we there learn, exhibit three basic kinds of pattern: conjunct, disjunct, and symmetrical. Conjunct patterns include several varieties of “linear” melodies; disjunct patterns include “gap-fill” and “triadic” melody-types, and among the symmetrical patterns are listed “axial”, “complementary”, and “changing-note”<sup>15</sup>. The super-categories “conjunct”, “disjunct”, and “symmetrical” drop out of later discussions, so let us now define the individual melody-types more closely, drawing on Meyer’s later work where helpful.

21.21 Linear (LI) melodies include those built not only of a single line, or a single line repeated and extended (as in the sequence 5432°, 54321°), but also what we called above “curved” lines – those in opposing directions, whose endpoints join. Lines may thus ascend, descend, or both<sup>16</sup>; and a linear scheme may include “counter-directional” lines<sup>17</sup>. Meyer (1973) includes under this type “bilinear” melodies, in which two (or more) lines imply and may converge upon a single goal; and “bilevel” melodies, with two or more concurrent melodic strands, what are more often called “compound” melodies; in his later work, these two subtypes are not mentioned as such.

Gap-fill (GF) melodies “consist of two elements: a disjunct interval – the gap – and conjunct intervals which then fill the gap.”<sup>18</sup> Rising gaps are more common than descending ones, but the latter are by no means excluded. The gap may be as little as a third in Meyer (1973), but Meyer-Rosner (1986) says that gaps should be at least a fourth<sup>19</sup>. The requirement that these melodic “structural gaps” need to be filled is not absolute: “an upbeat interval of a perfect fourth, moving to the tonic, does not necessarily function as a gap, but may be understood as a rhythmic-harmonic event emphasizing the tonic on which the melody proper begins.”<sup>20</sup>

Triadic melodies are defined in Meyer (1973) primarily by example; they are apparently themes in which arpeggiation, over at least an octave, seems to dominate the course of the melody (cf. Meyer (1973), his exx 89-93). There are two subcategories: “linked triads” and “continuous triads”. In Meyer’s subsequent work on melody, the “triadic” melody-type does not re-appear.

Complementary (CO) melodies are those in which the opening motive or phrase is succeeded by its (exact or approximate) inversion; among the examples cited in Meyer (1973) are<sup>21</sup>

SQ H.62/i  
 SQ K.464/ii  
 Sym K.425/i, 20

Changing-note (CN) melodies<sup>22</sup> are those in which the structural tones form the pattern of a main note embellished by its upper and lower NT, almost always supported by the harmonic pattern (I-V, V-I); the main melodic movement in Meyer’s (1973) example 103 (our [ex 18.7a](#)), Ob 4t K.370/i, is (1°2°, 7°1°). Later work makes it clear that the melody may also proceed (17, 21) or (12, 21), or (32,43) or (34, 23), etc.<sup>23</sup> Apparently an upper-voice pattern such as (17, 43), in which the pitches aren’t really “changing-notes” at all, can also be considered a member of this group (but cf. [note 34](#) below). Although usually harmonized (I-V, V-I), “surrogates for these harmonies are possible”<sup>24</sup>.

Axial melodies<sup>25</sup> consist of “a main or axis-tone embellished by neighbor-tones above and below”; but are distinguished from CN melodies in that they involve foreground motion, not background; they are mainly to be found in nineteenth-century music.<sup>26</sup>

And finally, another melody-type was added to this list after 1973, the *Adeste fidelis* (AF) type, first mentioned in Meyer (1979)<sup>27</sup>. Like the Christmas carol, it has the quite specific pitch and contour outline (5) 1 5 2 5 3, with the 5° usually on the weaker beats.

21.22 This completes the collection of Meyerian melodic archetypes so far in print. Some questions remain to be asked, before we try to put them to use:

First, what is their intended repertorial scope? It’s clear from Meyer’s examples that the melody-types are meant to apply in varying degrees to essentially the whole historical range of “common-practice” Western tonal art music. But within that, are the archetypes intended to cover most melodies, are just selected examples? Meyer in 1973 writes as though these “melodic processes” were merely a selection from a perhaps indefinite number of “melodic archetypes”: “I do not claim that the concepts developed in this study will be useful in the analysis of all melodies – even all tonal ones.”<sup>28</sup> However, in Meyer-Rosner (1986), we read that “Western tonal music seems constructed from a relatively small number of tonal processes, perhaps half a dozen. Melodic processes, then, represent the basic schemata of tonal melodic contours.”<sup>29</sup>

If this later view is correct, then, Meyer’s archetypes could be expected to portion out the melodies within a given tonal repertory fairly completely – there may be a few odd examples left over, and perhaps there is an archetype or two left to identify, but in general it appears that Meyer claims for his melodic archetypes what I have claimed above (within just the repertory of Haydn and Mozart instrumental themes) for certain “cadential schemes” – that these are the ways in which most of the melodies are written.

A second question that quickly arises when one tries to apply these archetypes to a repertory, is, to how much of a given theme does an archetype apply? Do we classify a melodic line by its behavior over its whole course, or its first half, or its first few measures? Meyer-Rosner (1982) addresses this problem indirectly, in the context of themes which exhibit multiple “archetypal” patterns on differing time-scales, by adopting the view that “melodic patterns are classified by listeners, as well as music theorists, in terms of the organization of the highest level on which significant closure is created by the parameters that shape musical relationships.”<sup>30</sup> This they illustrate (in their figure 2) with Ob 4t K.370/i (our [ex 18.7a](#)), which is classed as a CN melody because that’s the largest pattern – on the “highest structural level” – exhibited “when pattern closure occurs in measure 8. Had the closure that defines the limits of the whole melody (which lasts for 20 measures) been the basis for typology, then the pattern would have been classed as linear...” Similarly, Meyer-Rosner (1986) says that the passages used for their “Experiment 1” “started at a point of melodic initiation and terminated at a point of closure.”<sup>31</sup> Unfortunately, “closure” here is no further defined. To judge from the examples in Meyer-Rosner (1986) “Experiment One”, “closure” coincides with the first available tonic pause, unless that point is the very early midpoint of a tc-shaped doublet (as in SQ K.428/iv, the “2LI1” of Experiment One). But in their “Experiment Two”, five of the six “CO” excerpts end non-tonically. To judge from all their excerpts in their (1982) and (1986) articles, in fact, the portion of a melody which is said to be governed by one of the melody-types is defined by the salience of the melody-type itself, rather than by independent criteria.<sup>32</sup>

A related difficulty arises when a melody or melody-fragment exhibits different “archetypal patterns” not on different time-scales – on different “hierarchic levels” – but simultaneously over the same time-span. This is illustrated in Meyer-Rosner (1986) with their Figure 4, Sym K.551/ii (mm 1-4), which is at once an “LI” and a “CN” melody. In this case, the listener must “distinguish the two strands and discern which is the main one”. Here, the CN pattern wins out, because it ends (in m 4) on a note more stable tonally and metrically than that which ends the linear pattern.

21.230 What should we find, then, when we apply these categories to a small, homogenous, tonal repertory, such as the themes of the Mozart piano sonatas? Apparently we can anticipate few, if any, “axial” melodies, since these are evidently a nineteenth-century development. The concept of “triadic” melody seems to have been discarded. Therefore most, if not all, of these melodies should be, with varying degrees of clarity, LI, GF, CO, CN, or AF themes. Are they, and if so, is it significant? As far as possible, we will take up each type in turn.

21.231 Adeste fidelis (AF) melodies: There is one possible example of an AF theme among the melodies of the Mozart piano sonatas:

[ex 12.4313c](#) Pf Son K.533/ii, 23 ct

– if the left hand is “the melody” for the first five bars. A few other themes use the same principle, a repeated 5° intercalated with elements of a conjunct line:

[ex 10.31e](#) Pf Son K.311/i v+ct\* (mm 7 ff)

[ex 5.1a](#) Pf Son K.333/iii, 76 ct\*


21.232 Complementary (CO) melodies: Here there are three candidates:

[ex 3.0b](#) Pf Son K.281/iii, 28 ct (a clear instance)

Pf Son K.332/i ac (on the 8- or 12-bar level)

Pf Son K.457/i, 36 ct (because the interpolated bass-register echoes are

inversions of the main motive)

21.2330 Changing-note (CN) melodies: These are much easier to find; we need merely seek out themes that begin with reflex harmony (I-V, V-I; etc.) If the main melody-notes over this harmony form an S-shaped changing-note pattern –  or its inversion – then we have located a CN type. In the list below I've also included one instance of a V-shaped NT pattern (17, 71). The numbers in parentheses are the scale degrees of what I take to be the main melodic motion, although this can be a difficult determination to make. The harmony is indicated where it is other than the standard reflex (I-V, V-I).

	Pf Son K.282/ii	ct*% (17, 21)
ex 20.1a	Pf Son K.283/i	ct (17, 43)
	Pf Son K.309/ii, 33	ct (17, 43 or 17, #23)
ex 10.31e	Pf Son K.311/i	v+ct* (m 7 ff) (17, 21)
	Pf Son K. 311/iii	ac (32, 43 or 12, 23)
ex 21.161b	Pf Son K.330/i, 19	tc (56, 21 or 56, 51) (I-IV, V-I)
ex 12.221a	Pf Son K.330/iii, 21	ct* (32, 43 or 32, #23)
ex 13.34a	Pf Son K.332/ii	ac* (52, 85 or 12, 45) (I-V, IV-I)
ex 6.1a	Pf Son K.333/i	ct% (54, 23 or 14, 73) (I-ii, V-I)
ex 8.22b	Pf Son K.333/iii, 16	rx* (32, 43)
ex 6.1b	Pf Son K.457/i	ct (17, 71)
	Pf Son K.457/ii, 8	ct (32, 43 or 52, 53)
ex 21.162a	Pf Son K.457/iii	ac (17, 43)
ex 14.91c	Pf Fant K.475, 91	ac% (17, 21 or 37, 41)
ex 21.162b	Pf Rondo K.494, 51	ac (17, 21 or 52, 63)
	Pf Son K.533/i, 41	rx% (17, 21)
ex 12.4313a	Pf Son K.545/ii, 17	ct (17, 21 or 12, 23)
	Pf Son K.570/ii, 33	ct*% (32, 43)

This seems to be, then, a quite recognizable and common melody-type. Two considerations, however, unavoidably occur as one tries to identify CN themes in this repertory. The first is, that (as we mentioned in [note 32](#)) we seem to be comparing melodies on quite different time-scales. In Pf Son K.533/i, 41, for example, the CN pattern essentially constitutes the entire theme, disregarding its repetition. In the Rondo K.494, 51 example, however, the CN pattern lasts for two limbs of a ct, which is, with its tail, in turn the antecedent of a larger ac constituting the whole theme and cadencing in m 67. This is by no means a fatal objection, but if the point of such melodic archetypes is to help us understand the course of a melody, then in an instance like that of Rondo K.494, 51 we have left more than half the theme unaccounted for.

21.2331 A second, more important consideration, is this: the reason the CN melody-type is so easy to identify, is that it has a particularly common and characteristic harmonic scheme – the reflex, as we've named it – of a kind which is rediscovered every so often<sup>33</sup>. Why not then just identify this “melody-type” with its harmonic scheme? The following themes are remarkable similar to those just listed above – all begin with rx harmony – except that the pitches occurring at phrasal endpoints happen to form a line, rather than the “changing-note” pattern:

ex 10.31d	Pf Son K.279/i	v+ct	(mm 5-8) (12, 23)
	Pf Son K.280/i, 27	ct	(12, 23)
ex 6.0d	Pf Son K.281/iii	ac	(54, 43) (V/ii-ii, V-I)
	Pf Son K.283/iii, 41	ct	(5412, 4123)
	Pf Son K.284/ii, 17	ct*	(12, 23)
	Pf Son K.309/iii, 39	ct*	(54, 43)
			(12, 23 or 54, 45 or 52,
ex 12.41c	Pf Son K.333/ii, 14	ct	43)
	Pf Son K.457/i, 36	ct	(12, 23)
	Pf Son K.576/i	rx%	(32, 21)
	Pf Son K.576/iii	ac	(12, 23)

These would presumably all have to be considered “linear melodies, in spite of their similarity to the CN’s we listed in §21.2330. And this distinction often turns on a fine and equivocal discrimination: in

ex 12.4313a Pf Son K.545/ii, 17 ct

for example, does the melody proceed (17, 21) – as a CN – or (12, 23) – as an LI?

21.2332 For reasons not entirely clear, Meyer rejects the identification of the CN type with its underlying harmonic scheme<sup>34</sup>. Gjerdingen, whose 1988 study concerns the (17, 43) type, suggest that “the changing-note archetype is a complex network of associated schemata”<sup>35</sup> that share a Wittgensteinian family resemblance, but no single essentially-defining characteristic. That, however, depends upon whether examples like those listed just above are considered CN types or not. If they are, then reflex harmony is in fact the essential defining characteristic, and the “changing-note” pattern of the upper voice is incidental. If not, then the distinction between these purportedly fundamental archetypes turns on fine discriminations about the “real” course of a melody like K.545/i, 17 on grounds which have yet to be brought forward. This very point is implicit, I think, in Gjerdingen’s example<sup>36</sup> of (our ex 13.223c) Sym K.550/i, whose melodic outline is slightly altered in successive appearances in the course of the movement from (54, 43) to (32, 43) to (17, 43). Does its “archetype” thereby change from linear to changing-note to “sequential changing-note”?

There is no reason why we could not invent explicit means to distinguish themes that “really” proceed (32, 43)(CN) from those which, over the same harmonic plan, “really” run (12, 23)(LI), and this might be advisable if, for example, such a discrimination could be shown to have consequences for the course of the rest of the melody. In the meantime, the most sensible attitude again seems to be that of Leonard Ratner, who lists<sup>37</sup> a few of the possible melodic realizations – sequences of “structural tones” – that are possible over reflex harmony, and gives examples of instantiations of one of them, the “Jupiter Symphony” finale *cantus* (12, 43), from Mozart’s mature work. In other words, what we seem to have here is a common harmonic plan – the reflex cadential scheme – whose implications for the course of a melody, as determined by its “structural tones”, remain exclusively harmonic.

21.2340 Are the remaining 106 themes of the Mozart piano sonatas – that is, all of them except the ones listed in §21.231, §21.232, and §21.2330 above – then to be considered either LI or GF? The problem here is that these two “archetypes” are loosely-defined in themselves, and between them essentially exhaust the logical possibilities: either a melody has skips, or it does not, and thus a melody which exhibits none of the more explicit patterning of the AF, CO, and CN types can always be identified as either GF or LI. Perhaps a “melody” that noodled between two pitches a third apart would be neither an

either GF or LI. Perhaps a “melody” that noodled between two pitches a third apart would be neither an LI nor a GF archetype, but otherwise the progress of a melody is virtually unconstrained by these categories, which thereby risk becoming classificatory wastebaskets, without significant empirical content.

21.2341 We have already discussed about, in §21.14, the extent to which the themes in this small repertory are linear, or conjunct, and the fact that every melody here contains at least some conjunct motion. This means that the LI archetype does not readily disengage from the other melody-types: one strand of an AF melody is by definition linear; melodies which begin with a CO or CN pattern are likely to have a linear continuation, and some CN melodies (as in §23.2331) can just as plausibly be interpreted as linear from their opening. An initial “structural gap” in a GF melody tends to be succeeded by a conjunct “fill”. More to the point, almost every one of these themes is full of mixed steps and skips. Consider, as a typical case:

ex 21.2341a Pf Son K.281/i tc

On what grounds is one to consider this either LI or GF? If the initial line (mm 1-2) is, in the soprano, considered to be basically D-E $\flat$ -F, and in mm 3-4 it's G-F-E $\flat$ -D, then presumably it is (so far) linear. But if mm 1-2 is reduced to B $\flat$ -A-B $\flat$  or (the contrapuntally defective) B $\flat$ -C-D, then we have a gap into m 3, which is filled. Virtually every single theme in this repertory presents imponderables such as this.

21.235 The one substantive claim that we can evaluate in this two categorizations is embodied in the notion of “structural gap”: if this idea is more than a simple description of contour<sup>38</sup>, it must mean that the “fill” in a GF melody occurs because gaps in a theme require filling. We can therefore look to see whether melodies contain unfilled gaps. Now, the conjunct closing formula used in many Classic cadences (as in mm 7-8 of ex 21.2341 just above, K.281/i) will constitute a *de facto* fill of any gap that may have been left open to that point, especially if (as in K.281/i) we allow for the more reasonable cases of octave-transfer. Consequently one would expect most instances, if any, of unfilled gaps within a melody to occur just there, at the end. But this is in fact a commonplace: here are the themes in just two Mozart sonatas containing gaps which are not filled within the bounds of that melody – that is, before or at the I<sub>k</sub>. (Since deflected themes can be considered, in a sense, incomplete, I consider here only the non-deflecting ones.) Most of the gaps occur at or near the final cadence, and encompass an interval of at least a fourth:

ex 13.211d	Pf Son K.280/i	dx	(m 12)
ex 21.147a	Pf Son K.280/i, 43	ct%	(mm 54-56)
ex 19.10a	Pf Son K.280/ii, 9	ct	(m 16)
ex 13.35a	Pf Son K.280/iii	ac	(mm 15-16)
ex 21.235a	Pf Son K.281/i, 17	ct	(m 33)
	Pf Son K.281/ii, 28	ct	(mm 41-42)
ex 6.0d	Pf Son K.281/iii	ac	(m 7 - if arpeggios are gaps)
	Pf Son K.281/iii, 28	ct	(mm 30-31)
	Pf Son K.281/iii, 90	ct	(mm 99-100)

In some of these cases, the gap is “filled” in the recadence, or in the ensuing music. But a typical case is that of

ex 21.235a Pf Son K.281/i, 17 ct



If the gap in m 33 is filled in the recadence, one remains in mm 37-38; if that gap is filled in its little codetta, a gap is left in m 39.

Further examples of gaps opened up just at the cadence in non-deflecting themes can be found in

	Pf Son K.283/iii, 41	ct	(mm 69-73)
ex 6.0b	Pf Son K.309/ii	ac%	(mm 15-16)
	Pf Son K.310/iii	ac	(mm 18-20)
	Pf Son K.311/iii, 41	ac	(m 54)
ex 21.161b	Pf Son K.330/i, 19	tc	(m 33)
ex 14.70c	Pf Son K.331/i	ac%	(mm 17-18, at the end of the binary which is the theme of the ensuing theme-and variations movement; just the first 8 bars are the ac%)
ex 3.0b	Pf Son K.332/i	ac	(m 12)
ex 8.3b	Pf Son K.332/ii, 8	tc	(m 18)
	Pf Son K.457/ii	ac	(m 7)
	Pf Son K.533/i, 41	rx%	(m 48 - but the repetition is varied)
ex 10.231c	Pf Son K.570/i	dx	(mm 19-20)
	Pf Son K.576/i	rx%	(mm 7-8 and 15-16)

It seems clear, then, that gaps may occur within a theme that do not, within that theme, require to be filled. The fact that gaps occurring early in a melody are usually filled follows from the space-filling behavior of melodies: they define a range and fill it as completely as they can. In a theme which has defined its range early by a large leap, the remaining pitches will fall in the interval thus outlined due to the simple geometry of the situation. In a theme which has already filled its range, the pitches within a late leap need not be revisited, as the examples above demonstrate.

21.24 In summary, Meyer's "archetypes" seem not to apply to our repertory in a meaningful way. Unless the piano sonatas are wildly unrepresentative, the AF and CO types are occasional accidents, rather than common melody-plans. The CN types appears to collapse upon reflex harmony, which is indeed a common plan, but not a melodic one. As straightforward descriptions of contour, the LI and GF types – especially when the latter is restricted to a large upward leap or arpeggio, followed by a more conjunct descending return – can be made perfectly adequate, and quite possibly descriptive of the way a great many themes in this repertory and others progress. But the relevance of contour to the general attempt, to distinguish within a given style the ways in which a melody may proceed, from the ways in which it may not, is yet to be demonstrated.<sup>39</sup>

21.30 We began this discussion by noting that both Meyerian and Schenkerian theory were for the most part treatments of the melodic middleground – in the Schenkerian case, insofar as it discussed melody at all – and that therefore what we should seek from these theories is some idea of the ways in which that middleground – essentially, the two-part contrapuntal framework of "structural tones" and its associated bass-line support – may or may not proceed in a Classic melody, while setting aside for now the problem of just to produce or derive that framework from the melody as the composer wrote it. If we have interpreted those theories correctly, however, neither of them does much to limit the ways that

“skeleton melodies” may be chosen from among the immense field of logical possibilities. Let us then briefly return to these “rhythmic reductions”, and speculate on the principles behind their formulation. We have, following several authors, referred to them by a number of names, but we shall now find useful a single term, so I suggest – as a loose kind of acronym for “consonant rhythmic reduction” – that of “core melody”. What limits the way a core melody for a pre-Beethoven Classic instrumental theme may be shaped?

21.31 One kind of restriction is imposed by the cadencing rules and the resulting cadential schemes, which we have already spent considerable space discussing. This, of course, only limits the harmony at phrasal end-points, and the ways in which these phrases may be grouped together into larger units. It says very little about harmony internal to the phrase, and nothing about how long or short, how intricate or simple the phrases may be (considered just as successions of harmonies), nor the degree to which these phrases may be compounded into larger units. Nevertheless, it does imply that core melodies cannot be constructed from randomly-thrown-together units, which at least is something of a stipulation about their structure.

Non-deflecting themes can also be expected to cadence on the tonic pitch in the leading voice. It may also be a principle that this last tonic be approached, in the core, by step, either from above or below; but this principle would have to be more carefully defined before it could be tested against a wide repertory.<sup>40</sup> Within the piano sonata themes, however, it does seem generally to hold.

21.32 We have said several times that melodies define a range and fill it. Let us, with respect to the Mozart piano sonatas, examine this idea more closely: the conjecture is, that within this repertory each “core melody” will have a range of about an octave – usually from tonic to tonic or dominant to dominant; sometimes a few notes (and sometimes considerably more, in the case of themes that clearly use what we would want to identify as “registral transfer”, a kind of orchestration at the keyboard). Occasionally also this range is just a seventh, from leading-tone up to sixth degree; but in any case one can expect most of the time that each scale degree will appear as a “structural tone”. When we inspect the core melodies from the Mozart sonatas with this in view – suspending again the problem of exactly how to make such reductions – the results are as follows:

In these non-deflecting themes, the 7° fails to appear as a harmonized “structural tone”:

	Pf Son K.280/ii	rx
ex 6.0d	Pf Son K.281/iii	ac
ex 10.21c	Pf Son K.309/i	ptc% (7° occurs, but only upon the repetition)
	Pf Son K.330/i, 34	ac
	Pf Son K.457/ii	ac
	Pf Son K.570/ii	ac%

Other non-deflecting themes whose core melody is missing a pitch:

	Pf Son K.331/iii, 24	ac%	missing 4°
ex 12.4313c	Pf Son K.533/ii, 23	ct	missing 2°, and 4° is "masked" – occurring within a scale or arpeggio
ex 12.4313a	Pf Son K.545/ii, 17	ct	missing 6°, though it's a prominent nonharmonic tone

These themes are missing two pitches from the core:

ex 14.70c	Pf Son K.331/i	ac%	missing 6° and 7° (a binary first strain)
	Pf Son K.332/iii, 15	tc	missing 6° and 7°

Themes in which a certain pitch occurs as a “structural tone”, but “masked” only:

ex 18.22a	Pf Son K.279/i, 31	ct%	missing 5°
	Pf Son K.281/iii, 90	ct	missing 2°

I have only, for this small survey, been looking at non-deflected themes, since those that deflect can in a sense be said to be incomplete. I’ve also been considering a 4° that occurs harmonized with V<sup>7</sup> to be a potential “structural tone”, or member of a core melody, even though it requires resolution. If these should be disallowed, the following themes are missing the 4° from their core:

	Pf Son K.311/iii	ac	
	Pf Son K.332/iii, 15	tc	(also missing 6° and 7°)
	Pf Son K.457/ii, 8	ct	
ex 13.35b	Pf Rondo K.494	ac	
ex 12.4313c	Pf Son K.533/ii, 23	ct	(also missing 2°)

Setting aside the question of whether “masked” pitches should be eligible for inclusion in a core melody (or whether instead structural tones should occur with more prominence in the theme), and the question of whether the fourth degree harmonized with a dominant seventh should be considered “structural”, we can tentatively make our range-filling conjecture a bit more specific: themes in this repertory, or their core melodies, tend to present each diatonic pitch of the key in a “structural position” at least once, disposed within a continuous range of a seventh or an octave. Certain themes, however, of a special simple character we’ve discussed in §7.3 above – binary first strains (if they’re to be considered ‘the whole melody’), rondo themes, *semplice* tunes, closing themes, etc. – may define and fill a range of only a fifth, like K.331/i and K.332/iii, 15 above.

21.33 Obviously the ideas just expressed would have to be made more precise before we could construct and examine “core melodies” from a larger repertory. Were we to do so, it might develop that the principles restricting possible cores were really very few in number, and that nearly any kind of contrapuntally-adequate upper voice can serve as the core of a Classic theme, subject only to the few limitations we’ve mentioned. In that case, the cadential schemes themselves would be something like melodic archetypes, limiting the choice of pitches at phrasal endpoints, but little else. Or, just as likely, we would want to suggest other rules limiting the cores: for example, a stipulation that each core pitch be conjunct in a least one direction, or else a member of a “conjunctly-attached arpeggio”, as we suggested earlier. It might also be desirable to try to capture the ideas of parsimony and pattern in core melodies – in the first case, the thought that pitches, once presented, aren’t pointlessly revisited within a core melody; and in the second, that a core preferably proceeds through its range in some kind of patterned or partially-patterned way, although defining “pattern” in a way neither overly-restrictive nor vacuous might prove a challenge.

No matter what principles we might eventually devise to govern the derivation of melodic cores, the distribution of actual examples in our repertory within the realm of the permissible would probably resemble the distribution we saw for motivic patterns, in §14 and §18: there would be some quite

plausible patterns for a core melody that nevertheless went unrealized, or infrequently-realized, within a given repertory, while others – for example, the ascending leap or arpeggio plus conjunct descending continuation that we have seen frequently identified as “gap-fill” – might occur very much more often.

And like the motivic patterns, the range-filling behavior of melodies bears a suggestive resemblance to certain features of visual ornament; in this case, to the ways in which such things as decorative borders, ornamental designs and devices, arabesques, flourishes, and such framing constructions as the cartouche, the colophon, and the ornate picture-frame itself both define a space and fill it in a patterned but individual way.<sup>41</sup> The manner in which a theme uses all the pitches most of the time, and most of the pitches all of the time, is (if true) something like what we could expect if, for example, we superimposed a grid over a circular space, and then examined the various kinds of decorations and designs an artisan might use to occupy such a space – rosettes, tracteries (as in the example), or simple vegetative or floral motifs.

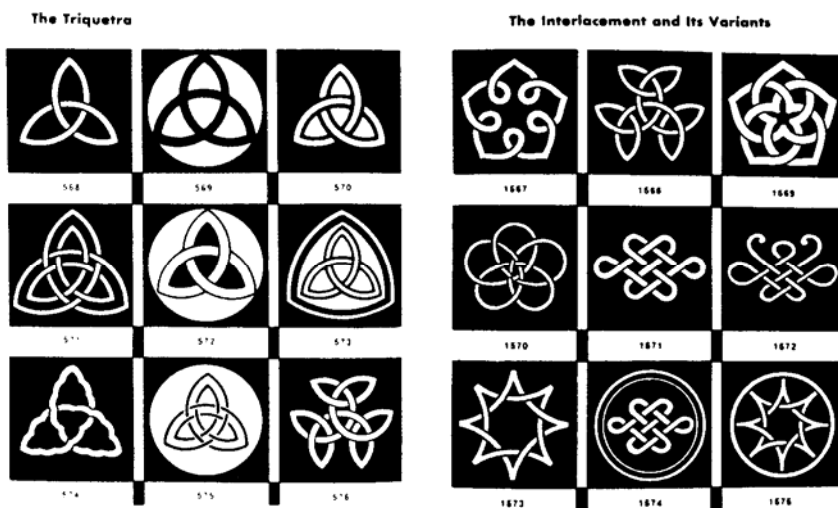
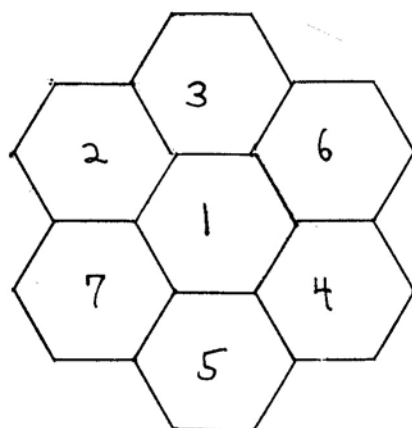


Fig. 80. From C. P. Hornung, *Handbook of Designs and Devices*, 1932

One would anticipate that most such designs will pass through each numbered sub-region on our grid, but some perfectly-satisfactory designs may miss a space, or even two. Some areas would be more likely than others to be left unoccupied, however; relatively few designs, we might predict, would successfully avoid altogether the central space numbered “1”. In a similar way, a melody might at times be able, without prominently using the 4° or 7°, to fill its tonal space in a satisfactory way – as pitches

occur in “structural” positions, we certainly don’t seem to consciously tick them off some internalized checklist – but few if any themes will omit the tonic.<sup>42</sup>

21.34 It remains to be emphasized, a final time, that “core melodies” or any similar kind of melodic reduction are interpretive creations, the products of (one hopes) an educated intuition, like a translation or a paraphrase; and we can argue for or against a particular interpretation only by producing alternatives for inspection, hoping that one will “sound more like the original” than another – some translations are, after all, better than others – but not by rational appeal to explicit principles. Such principles, other than the most general, do not yet exist.

But it is possible to imagine such principles, and their most important component would unambiguously specify the relation between a melody and its reduction. This connection could take one (at least) of two forms. In the first case, “reduction rules” would formulate systematic procedures for removing some notes from a theme, possibly also replacing or shifting others, in order to arrive at a simpler “core melody”. Alternatively, the rules could proceed in the opposite direction: first build a “core melody” or some other simple structure with specified characteristics, then elaborate it according to specific rules or according to explicit criteria, in order to arrive at an acceptable melody.

In the first case, the apparatus for reducing, or analyzing, a theme would in fact constitute a genuine theory of melody just to the extent that every acceptable melody (including some not yet composed), and only such melodies, could be reduced to a properly-constructed core, and only to such cores; and further that for every properly-made core there existed (potentially, at least) an acceptable melody which reduced to it. This theory would amount to a claim that to be an acceptable melody is, at least in part, to be reducible to a certain kind of essential kernel, and it would then be attractive to go on to hypothesize that our own musical perception behaves according to similar reduction rules.

In the second case, the apparatus for constructing, or synthesizing, a theme, would constitute a genuine theory of melody just to the extent that every properly-constructed melodic core, and only those, could be elaborated according to the principles proposed to produce an acceptable melody, and only such melodies; and that every acceptable melody (including some not yet composed) could be so synthesized. (It is clear, I hope, that this kind of theory need claim nothing at all about actual human creativity in composing melodies.)<sup>43</sup>

The wisdom to propound such comprehensive principles of melody is unlikely soon to descend upon us. The above discussion, if correct, only again recalls to our attention the opening motif of this study, the thought that a rational discussion of melody will ultimately require some insight into the immediate melodic foreground, especially the most local relations in a theme’s first motive or two that mark the difference between the inspired, the routine, and the truly inane. We must, finally, confront the unanswered, and scarcely asked, question of why, when melodic openings such as these:

This page contains 24 staves of musical notation, arranged in two columns of 12 staves each. The music is written in treble clef with a key signature of three sharps (F#, C#, G#) and a common time signature (C). The notation includes various rhythmic values such as quarter notes, eighth notes, and sixteenth notes, along with rests and slurs. The piece concludes with a final double bar line on the 24th staff.

and a hundred similar possibilities are so self-evidently unpromising and even ludicrous ways to begin a Classic concerto, this, on the other hand, – and we know it in the first eight notes – is so perfectly, unmistakably, exactly right:

[ex 21.34a](#)      Cl Conc K.622/i      ac

## Chapter 21 endnotes

<sup>1</sup> In Schenker (1956/1979), the terms always appear in scare-quotes (§50, §308, §311); when he does wish to refer to what would customarily be called the “first theme” or “second theme” of a sonata exposition, Schenker prefers a phrase such as “diminution of the primary tone” (§313, speaking of Haydn sonata-forms).

<sup>2</sup> Forte-Gilbert (1982), p.10. This work, although, or perhaps because, designed as a textbook, is by far the most lucid and least tendentious exposition of basic Schenkerian principles, and I have relied on it in this discussion.

<sup>3</sup> Ratner (1980), pp 89, 204, 261, 264-66, 389.

<sup>4</sup> Ratner (1980), p 83.

<sup>5</sup> Forte (1977), pp 18-19.

<sup>6</sup> Yeston (1977), Forte-Gilbert (1982), Chapter 1; Morgan (1978).

<sup>7</sup> Cf. Forte-Gilbert (1982), p.26, where a proposed reduction is rejected because it “does not sound like the original at all.” For an attempt at such reduction rules, cf. [fn 43](#) below.

<sup>8</sup> Forte-Gilbert (1982), p 141.

<sup>9</sup> Cf. the discussion in Lerdahl-Jackendoff (1983), §6.3.

<sup>10</sup> Ratner (1980), p 103.

<sup>11</sup> Cf. the Forte-Gilbert (1982) discussion, p 319.

<sup>12</sup> Cf. Salzer (1959/62) p 79, ex 248; Forte-Gilbert (1982) p 29, ex 22, and p 190, ex 169a and 169b; Schenker (1956/1979) §168-174 (on the PT), and §196-202 (on the NT); and Rothgeb (1975).

<sup>13</sup> In the Breitkopf edition of the 389 Bach chorales, the “true” AP’s are to be found in #111, measure 8; #135, 16; #195, 5-6; #203, 15; #203, 11-12; #215, 31; and #220, 16. The others (sevenths, etc.) are in #5, 10; #13, 5; #35, 12; #38, 11-12; #143, 3-4; #178, 7-8; #203, 15; #203, 29; and #386, 3.

<sup>14</sup> Cf. especially Meyer (1956), Chapter IV, on the concept of “structural gap”.

<sup>15</sup> In what follows I will use “pattern”, “archetype”, “melody-type”, “schemata”, and similar terms loosely and interchangeably, but for a discussion that discriminates these concepts as they relate to Meyer’s work, cf. Gjerdingen (1988), Chapters 1-5, especially pp 46-54.

<sup>16</sup> Cf. Meyer (1973), exx 64-67.

<sup>17</sup> Meyer-Rosner (1986), p 2.

<sup>18</sup> Meyer (1973), p 145. Essentially the same definitions are found in Meyer-Rosner (1982), p 323, and in Meyer-Rosner (1986), p 18.

<sup>19</sup> Meyer-Rosner (1986), p 18.

<sup>20</sup> Meyer (1973), p 145. Meyer-Rosner (1982) implies (p 324) simply that all gaps need not be filled; but their example of such an instance (Mozart Fl 4t K.298/ii, mm 1-8; our [ex 7.02b](#)) would be covered by the upbeat-fourth



exclusion just cited. Meyer (1973) also states that “a gap consisting of structural tones may be embedded in conjunct foreground motion...” (p 148). This possibility is illustrated (in Meyer’s ex 77) with the d-minor fugue subject of Bach’s WTC II, and the first eight bars of Mozart’s *Se vuol ballare* (Meyer’s ex 78). But the idea of structural gaps implicit in foreground motion which is, nevertheless, conjunct, appears to drop from Meyer’s later work.

<sup>21</sup> Meyer (1973), exx 95-98.

<sup>22</sup> Meyer (1973), pp 191 ff.

<sup>23</sup> Meyer-Rosner (1982), p 325.

<sup>24</sup> Meyer-Rosner (1982), p 325.

<sup>25</sup> Meyer (1973), pp 183-184.

<sup>26</sup> Meyer (1973) p 184, note 30. Meyer (1985) adds (p 42) that in the nineteenth century, CN melodies, common in the previous century, were usually disguised in some way, while the proportion of axial melodies increased dramatically. For evidence that the incidence of something like a “CN melody” did peak in the later 18<sup>th</sup> century, and decline precipitously thereafter, cf. Gjerdingen (1988).

<sup>27</sup> Meyer (1979), p 15, note 29.

<sup>28</sup> Meyer (1973), p 110.

<sup>29</sup> Meyer-Rosner (1986), p 4. Cf. Ratner (1980): “Basic structural melodies” are “relatively few, simple, and neutral in expressive quality.” (p 89)

<sup>30</sup> Meyer-Rosner (1982), p 321.

<sup>31</sup> Cf. also Meyer (1979), where his example 1b, Pf 4t K.478/i, exhibits on the lowest level GF patterning, the next highest an AF pattern, and on a larger scale yet, the CN pattern lasting 8 measures (p 15, note 29). But it is ultimately classed as a CN melody, “because it is that relationship which creates the highest level of closure.”

<sup>32</sup> This leads to comparisons on quite different scales. Thus their “2CN4” of the 1986 Experiment One, Sym K.543/iii, trio, includes the whole of a small reflex theme (though not its repetition, if the excerpt is mm 45-53, not 45-63 as printed). But their “3AF12” of Experiment Four, the first four bars of the Allegro theme from Schubert’s *Zauberharfe* (*Rosamunde*) Overture, mm 48-51, presents the antecedent of a small tc (47-54), which is in turn the antecedent of a dx\* (47-63), which is in its turn the antecedent of a large ac with a shortened consequent (47-72), a quite extended thematic structure.

<sup>33</sup> For example, Schoenberg (1967), p 22; H. Beck (“Harmonische-melodische Modelle bei Mozart”, *Mozart Jahrbuch* 1967, pp 90-99); Ratner citation in note 37 below.

<sup>34</sup> Meyer-Rosner (1982) says (p 325): “It might be thought that the underlying regularity of a changing-note melody is harmonic rather than melodic. However, since the same harmonic, and even formal pattern may accompany other melodic processes – for instance, one that might be called a ‘sequential changing note pattern’ (see Meyer, 1980) – the parameters are at least partially independent.” In Meyer (1980), however, the “archetype” under discussion is one whose upper voice proceeds (17, 43), which, we there learn (note 16, p 202) is “a special case of a larger class – the class of changing-note melodies.”

<sup>35</sup> Gjerdingen (1988), p 59 ff.

<sup>36</sup> Gjerdingen (1988), p 221 (example 10-33).

<sup>37</sup> Ratner (1980), pp 89-90, exx 6-7 and 6-8.

<sup>38</sup> Meyer-Rosner (1986), p 2: “Meyer’s (1973) concept of melodic process, which differs from the idea of contour, offers an alternative theoretical approach to melody.”

<sup>39</sup> Two articles by Meyer and the psychologist Burton Rosner (1982 and 1986) describe experiments for whose results considerable importance has been claimed (e.g., by Gjerdingen (1988), p 9; Rosner (1988), p 161), and so deserve a closer look.

In “Part A” of Meyer-Rosner (1982), seventeen subjects – students from university music courses – were trained entirely by trial and error to respond “Type A” or “not Type A” to 16 taped melody-fragments, half of which the experiments considered “gap-fill” melodies (“Type A”), and half not. The subjects were judged to have “reached criterion” when they could make no more than two errors in two successive trials (of 16 selections each, whose order varied from trial to trial). Fourteen subjects completed their training in about eight or nine trials; three never “reached criterion”, but took part in the “generalization test” anyway.

This test was a single trial on another tape of 12 new melody-fragments, half “gap-fill” and half not, to which the subjects were to respond with “Type A” or “not Type A”. The results of this test, from Meyer and Rosner’s Table III, are as follows, which I here arrange in the order of how many “votes” (out of 17 total) each selection received for “Type A” (i.e., gap-fill):

Mozart	Vn Son K.301/ii, 1-6 (?)	15 votes (of 17)	G
Mozart	Sym K.112/ii, 1-5	14	G
Mozart	Sym K.182/ii, 1-8	12	G
Haydn	Sym H.79/ii, 61-68	11	G
Haydn	Sym H.77/iv, 72-80	11	G
Mozart	Sym K.385/iii, trio, 1-8	10	N
Mozart	SQ K.458/iii, 1-8 (?)	8	N
Haydn	Sym H.104/iv, 3-10	7	N
Haydn	SQ H.39/iv, 1-8	6	N
Mozart	Sym K.45a/iii, 1-8	6	N
Beethoven	SQ Op 18 #6, 1-8 (?? 44-52?)	6	G
Haydn	SQ H.66/iv, 1-4	5	N

(“G” stands for a “gap-fill” melody; “N” for “non-gap-fill”)

Rosner and Meyer characterize these results as follows: “In summary, subjects learned to put gap-fill and non-gap-fill melodies into different classes, without explicit academic training in musical analysis. They subsequently proved able to classify new instances of each type of melody in a generalization test.” (1982, p 334).

But the question here is, what concept did these subjects actually acquire? It seems likely from the results that the subjects learned to identify “Type A” themes as those beginning with an arpeggio or a prominent leap upwards, followed by a slow descent. The melodies on the upper part of the list above fit this description well; towards the middle the picture begins to blur, and at the bottom of the list the melody-fragments are dominated by rising motion. This revised concept, one of contour and direction, would also to some extent explain the results which Meyer and Rosner report for the training sessions: three of the fragments the subjects had considerable trouble identifying,

Beethoven	Pf Son Op 2#2/iii	(Type A, 46 errors)
Beethoven	SQ Op 18#4/i	(Type A, 53 errors)
Haydn	SQ H.42/iii	(Not Type A, 67 errors)

all contain a series of upward leaps, which, however, alternate with partial descents. Similarly, Mozart Pf Conc K.482/iii (Not Type A, 55 errors) consists of a series of upward leaps, but here the descent comes quickly, all at the end. And finally, Schubert SQ D87/ii (type A, 57 errors) is, in Meyer's terms clearly a gap-fill melody, but here the initial leap is downwards, followed by a rising "fill".

This seems to have been, then, an experiment not in the "perception of music", but in feature detection, without telling us very clearly which features were detected (although one suspects that simple contour predominates). If we were similarly to train students to discriminate sentences that begin with the sound of the letter "S" from those which do not, they might indeed be said to have acquired a certain "concept", but the significance of this concept for a theory of sentences would remain an open question.

"Part B" of Meyer-Rosner (1982) was a similar training and test sequence for "CN" as opposed to "non-CN" melodies. Here the problems seem to me similar to those we discussed above in §21.233: in their "generalization test" of 6 CN and 6 non-CN themes, all twelve fragments bear reflex harmony, and so the discrimination between these two types turns on the melodic details of phrasal endpoints in a way which is not clear and seems of secondary significance. At least four of the six CN melodies in this test, for example, have phrase endings that could as well be interpreted as forming a linear pattern; while the first of the non-CN types (from the Mozart "Musical Joke", K.522/iii, mm 1-4) displays the (17, 43) pattern which elsewhere (cf note 34 above) Meyer says is a special case of the CN pattern.

Meyer-Rosner (1986) reports on a series of experiments based not on the recognition of one "melody-type" at a time, but instead upon judgments of similarity between pairs of melodies. Their "Experiment 1" asked subjects to rate pairs of melodies on a 10-point scale for similarity/dissimilarity, with a total test repertory of 12 fragments, half of which the experimenters identified as CN melodies and the others as LI melodies. Altogether, therefore, each subject (apparently about 40 in all) had to make a total of 132 such judgments (12 x 11; each possible pair was presented in each possible order). "Judgments were to be based only on melodies, independent of tempo, dynamics, instrumentation, and composer." The results were then tabulated and subjected to "multi-dimensional scaling", displayed in a two-dimensional plot and its associated "dendrogram". Of the resulting diagrams for Experiment 1 (reproduced below from their Figure 2), the authors say:

The changing-note (CN) and linear (LI) passages are well separated. The linear stimuli occupy a central region of the space, with the changing-note passages forming an arc on the left. Stimulus 2CN1, however, is a maverick. (1986, p 8)

These results "suggest that the difference between changing-note and linear melodic processes affects the perception of music." (pp 9-10).


But what is displayed in their Figure 2 is simply a map of melodic "similarity" and "dissimilarity", as voted on by the subjects of the experiment. What establishes that these judgments were based on any consistent factors at all? That is, when we look at the melody-fragments in question (given on the following four pages), why could not most subjects have considered, for example,

2LI1 and 2LI3 fairly similar because they share prominent downbeat trochaic slurs;


2CN1 and 2LI2 fairly similar because they too have downbeat slurred groups with upbeats, and both are in triple meter;

2LI5 and 2LI6 and 2CN1 similar because of the triple meter, with upbeats;

2LI4 and 2LI5 similar because their contours match;

2LI6 has a similar contour, and shares with 2LI5 the background rhythm 

2CN4 and 2LI4 share the three falling conjunct quarters of their second and sixth measures

2CN4 and 2CN6 share the background rhythm 

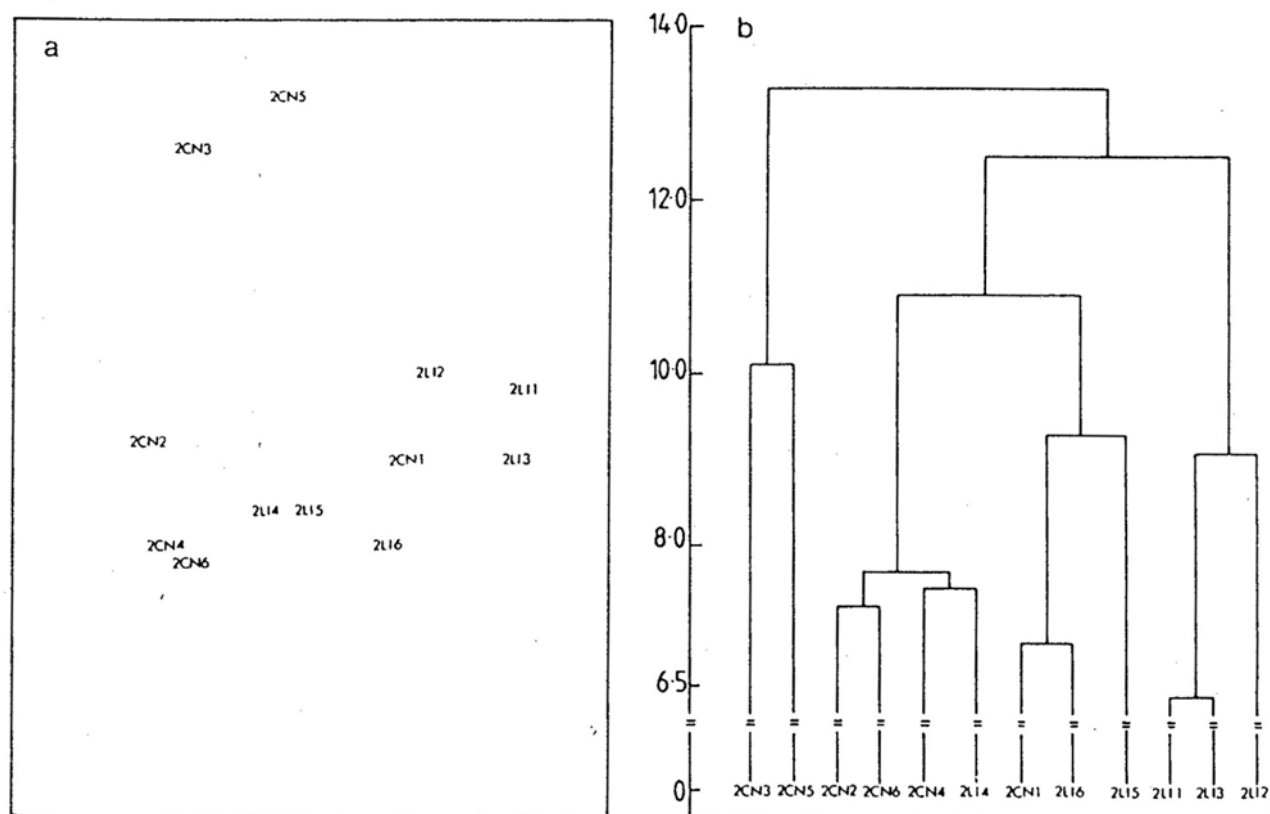


Fig 2. (a) SEMDS two-dimensional configuration for Experiment 1. (b) Hierarchical clustering dendrogram for Experiment 1. Scale at left indicates separation distance, normalized for number of subjects, at which clustering occurs.

2CN2 and 2CN4 share the reflex harmonic pattern

2CN3 and 2CN5, quite removed from the rest, both have complex ct limbs with reflex harmony; each limb is a “p-type”

In other words, the criteria influencing judgments about relative similarity could easily have varied with the presentation of each pair, as well as from subject to subject.

Meyer and Rosner discuss these possibilities to some extent: the fact that “2CN1” “behaved rather badly in the SEMDS space” is attributed to the fact that it shares strong upbeats with “2LI2”, “2LI5”, and “2LI6”, as well as “a briefly rising then falling contour”. The proximity of “2LI4” to “2CN6”, they feel, is due to the shared opening rhythmic figure. They hypothesize that contour organizes the vertical dimension of the SEMDS graph, and that “‘linear’ melodies do not form a single homogeneous category. Different subtypes of linear melodies may have

2LI1  
SQ K.428/iv

**Allegro vivace.**

2LI3  
Sym H.104/iv

**Allegro spiritoso**

Flauti

Oboi

Clarineti in  $\begin{matrix} A \\ La \end{matrix}$

Fagotti

Cori in  $\begin{matrix} D \\ Re \end{matrix}$

Trombe in  $\begin{matrix} D \\ Re \end{matrix}$

Timpani in  $\begin{matrix} D \\ A \\ Re \\ La \end{matrix}$

Violino I

Violino II

Viola

Violoncello

Contrabasso

5

1.

Ob.

Fg.

Cor.

Vi. I

Vi. II

Vla.

Vlc.

Cb.

10 *p* 15



2LI4

Sym K.385/iii

25 *Trio.*

Ob.  
Fl.  
Cor.  
Tr.  
Timp.  
Vi.  
Via.  
Vc.  
B.

30

Ob.  
Fl.  
Cor.  
Tr.  
Timp.  
Vi.  
Vc.

2CN4  
Sym K.543/iii

*Trio*

Fl.  
Cl.  
Fg.  
Cor.  
V.I.  
V.II.  
Via.  
Vlc.  
Cb.

50

Fl.  
Cl.  
Fg.  
Cor.  
V.I.  
V.II.  
Via.  
Vlc.  
Cb.

2CN6  
Sym H.46/ii

Poco adagio

2 Oboi

2 Cori in D/Re

Violino I  
con sordini  
*p* *staccato assai*

Violino II  
con sordini  
*p* *staccato*

Viola  
*p* *staccato*

Violoncello e Basso  
*p* *staccato [assai]*

2CN2  
Pf Fant K.397, 12 12

Adagio.

2CN3  
Beethoven  
Pf Son Op 10#1/i

Allegro molto e con brio. (♩ = 69)

M.T.  
*ten.*

*f* *p* *f* *p*

*ten.*

2CN5  
Pf 4t K.478/i

Allegro.

Violino.

Viola.

Violoncello.

Pianoforte.  
*f*



distinct contours.” (p 10; cf. Rosner (1988), 159 ff). Nevertheless they conclude (p 11) that “melodic processes do indeed influence the perception of music.” But I see no way from this experiment to tell what, of many available factors and features, influenced the subjects’ similarity judgments between any two given melodic fragments.

Their “Experiment 2” was a similar test of CN and CO melodies, but, in their words, “multidimensional scaling and hierarchical clustering did not support our expectation that the perception of melody would be differentially affected by changing-note as against complementary passages” (p 15); they eventually seek to explain the resulting SEMDS graph by “seeking contour features”.

“Experiment 3” tested “Gap-Fill” melodies against “*Adeste fidelis*” types, and here, in fact, the two types do indeed seem to separate well (their figure 8, p 21). But again, all the gap-fill examples share a contour: an initial leap or arpeggio upwards, followed by a slower descent. The “AF” scheme is, as we have noted, highly specific as to contour and pitch-content.

“Experiment 4” aims to test for “form”, that is, two-part as opposed to three-part melodic construction. Meyer and Rosner’s criteria for what constitutes each type are less than clear (and do not of course necessarily agree with those we’ve developed in the previous chapters). In any case, whatever separation “form” achieves in “Experiment 4” disappears in “Experiment 5”, which aims for a genuinely two-dimensional ordering of melodies: GF vs. AF in one dimension, and “two-part” vs “three-part” in the other. The GF and AF types separate well, as before, but the melodies do not seem to group into “formal” types.

In summary then, Meyer and Rosner’s subjects did seem systematically to judge the six AF-type melodies similar to each other, and perhaps also to hear a contrasting similarity among the GF types, though possibly on the basis of contour rather than the gap+fill configuration as such. Any other discrimination in these experiments appears dubious.

How, then, can the authors conclude that “On the whole, these findings show that melodic processes contribute importantly to organizing the perception of music”? Since there were no controls at all on which of indefinitely many features the subjects responded to in their similarity judgments, in effect each experiment tested all these features at once. Consider modality: the arc of the CN melodies plotted on the left side of their figure 2 of Experiment 1 (given above), for example, which the authors attribute to their “changing-note” schema, could just as well be due to the fact that four out of the five (and none of the others) are in the minor mode; and in this case, “2CN4” is the “maverick”, and “2CN1” is properly with its major-mode companions. On the other hand, in their Experiment 2, the only two minor-mode fragments, “2CN3” and “2CN6”, are widely separated on their graphs (their figures 4a and 4b); is this evidence that modality is irrelevant to the “perception of music”? Or consider tonal closure: in Experiment 2 five of the six “CO” excerpts end non-tonically; none of the others do. Should we interpret their rather wide separation on their figure 4a as evidence that tonal closure has no psychological reality? Or, since on figure 4b all the deflecting fragments are quite low on the graph, that it does?

This impossible situation results directly from the fact that even short fragments of melody are complex events, not simple stimuli like color chips or isolated tones, and trying to resolve differences between them into a mere two dimensions, as their graphs suggest, or even just one, as a single “similarity/dissimilarity” scale seems to imply – how one sympathizes with the subjects of these experiments! – is an idea occasioned, I think, only by the ready availability of “multi-dimensional scaling” apparatus.

<sup>40</sup> For example, the first cadence of *ex 5.1b*, Mozart Pf Son K.533/i (mm 7-8), does not seem aberrant or peculiar.

<sup>41</sup> Cf. E.H. Gombrich, *The Sense of Order* (Ithaca, NY 1979/84), especially on “framing, filling, and linking”, pp 75ff and *passim*.

<sup>42</sup> For one possible example, cf. Haydn SQ H.74/i, 54 (tc%)

<sup>43</sup> The most ambitious attempt so far to codify a reduction procedure for tonal music is that of Lerdahl and Jackendoff (1983). What they produce is not by any means an algorithm to produce reductions, but rather a set of “preference rules” for their two kinds of reduction (“time-span reduction” and “prolongational reduction”), in effect rules of thumb that identify some events as more important than others on such plausible grounds as metric position, harmonic support, registral prominence, etc. Conflicts between these rules, when they occur, are resolved on an ad hoc basis.

Lerdahl and Jackendoff make no empirical claims about the reductions and associated tree-diagrams thus produced, and so we do not learn, for example, in what ways the reduction of an unacceptable passage of tonal music might differ from that of an acceptable one. Simply as heuristic devices, their reduction methods seem to have some limitations: their “time-span” reductions, for example, would not allow us to propose a “core melody” in mixed note values. Their “prolongational reductions” represent a phrase as a single harmony, rather than as a move from one harmony to another, something we have found useful in, for example, discussing cadential schemes. In both kinds of reduction, claims about our musical intuitions quickly become, as one moves up the hierarchy to organize longer and longer passages, increasingly difficult to evaluate. This of course does not mean that the reductions are wrong; it’s just that before one enters into a debate about (for example) which event is truly the “structural dominant” (pp 140-141), one would want to know more about exactly what is, empirically, at stake in such a discussion.

In effect, Lerdahl and Jackendoff are sketching some reasonable features of the kind of reductionist-analytic theory we’ve just discussed; if they or others could go on to make the reduction principles rigorous and unambiguous, and then to show that all acceptable tonal pieces (or tonal passages, or musical themes, or whatever the unit of analysis) so reduced produced a certain specific result – presumably in this case a “core melody” that was a single tonic chord – and, moreover, that no unacceptable pieces (or passages, or melodies, etc.) were reducible in this way, it would be illuminating indeed. To criticize their work, therefore, because one of their “reduction trees”

does not show constituent structure. Instead, it portrays recursive selection from alternatives in an upward direction. Nothing is “reduced out” of the grammatical tree. Just the opposite is true for the music tree [depicted in Lerdahl-Jackendoff (1983), p 132]. (Rosner 1988, p 132)

or because the upper-level pitch or pitches that are the end-results of their reduction do not “entail or summarize the melody in question” (Gjerdingen 1988, p 20) is, I think, to accuse them of failing to provide a constructive/synthetic theory, an attempt they do not make.

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