<u>INTRODUCTORY</u>

Harmony is about *chords*. It discusses, that is, groups of pitches sounding, or conceived to sound, simultaneously. In some contemporary theory these groups are called "simultaneities", to avoid any connotation of consonance. But in traditional harmonic theory, chord means "consonant chord".

The theory of harmony pretends that tonal music is made of successive chords, much like counterpoint considers music to be made of superimposed melodic lines. Both viewpoints are obviously simplifications, and the degree to which either description of music is incomplete varies with the style. Harmony then proceeds to investigate how chords are to be formed, what counts as a chord, in what manner chords succeed one another, etc. "Traditional harmony" means harmony of the "common practice period" – Western music roughly from Bach to Brahms; more accurately perhaps from Corelli and Lully to Richard Strauss.

The content of a course like this has not really changed much since such courses were invented, in about 1800 in France, 1850 in Germany; in both cases associated with the founding of music conservatories. Before those dates, a musician's training consisted, to varying degrees, of counterpoint in the strict mode of Johann Joseph Fux (*Gradus ad Parnassum*, 1725 – this is what Haydn was supposed to teach Beethoven, and what Mozart taught his pupils), figured bass, and composition in various contemporary styles, plus of course instruction on one or several instruments. How much of what a musician was taught varied greatly from place to place and teacher to teacher. Most of the composition teaching before 1800 was exclusively by private instruction, except in Italy, where one usually went to the local *conservatorio*.

The theory and practice of figured bass forms the largest component of music theory to be integrated into the "harmony course". Figured bass, or *basso continuo*, or "thoroughbass", is the Baroque practice of putting numbers above or below the bass notes in the "continuo" (keyboard) part: the continuo was an indispensable element of the Baroque ensemble, and the continuous bass line an indispensable element in Baroque music. The numbers indicate the chord to be played in the keyboard, specifying it as intervals above the bass-note.

A great many treatises in the seventeenth and eighteenth centuries were written on the proper interpretation of figures at the keyboard – the meanings of the numbers, the way chords were to be connected, permissible ornamentations, special cases, etc. Figured bass was a supremely practical discipline, intended exclusively for performance. The last figured-bass treatise of significance was that of Daniel Gottlob Turk, in 1791, well after the style in which it had evolved had been superceded. Figured bass continued, nevertheless, to be a normal part of a musician's education (in varying degrees – more in Germany than elsewhere) until well into the twentieth century. It is from figured-bass theory that "traditional harmony" draws most of its terminology and its voice-leading rules; these rules were in their turn derived largely from those of strict counterpoint, modified by Baroque practice.

The other main stream of musical-theoretic thought, besides figured-bass practice, that merged into traditional harmony is that of abstract harmonic speculation. This kind of music theory has a venerable tradition going back well into the middle ages; at that time it usually dealt with the mathematical fundamentals upon which music theory was to be built, especially temperament and tuning, the relation of the musical consonances to natural acoustical phenomena like the overtone series, etc. Even most counterpoint manuals or figured-bass treaties opened with a section on the mathematics of music.

The great eighteenth-century representative of this type of philosophical, comprehensive, mathematical theorist is Jean-Philippe Rameau (1683-1764), who, as a composer, is considerably more in touch with the practical questions of music than most of his predecessors. The successors to Rameau in the nineteenth and early twentieth centuries, theorists who approached music in a spirit of rigorous intellectual enquiry, include, in France, Anton Reicha, Carl Czerny, Francois Joseph Fétis, and others; in Germany, Gottfried Weber, A.B. Marx, Hermann von Helmholtz, Hugo Riemann, Heinrich Schenker, and Arnold Schönberg, the last the most distinguished composer since Rameau seriously to engage himself with music theory.

The legacy of Rameau includes a number of controversies with respect to the theory of harmony, most of them relatively pointless. But surely his most enduring contribution was the idea of *root* – the notion that the way to categorize consonant chords is to consider them as collections of pitches related to a single tone, the root of the chord; and that the way to look at chord progression is by means of root movement. Before this chords had been treated, in figured-bass practice, as composed of intervals above the bass; consequently they came in a bewildering variety of forms. Rameau's doctrine of roots, and chord inversions, made a good deal of order from this chaos, and this is the way chords are conceived today – built upon a single root, coming in a variety of inversions. But we should emphasize here, since we won't have a chance to speak of it again for a while, that roots and chords are two different things; it is possible to believe in chords without believing in roots. In certain cases Rameau may have been wrong: there may be chords without roots, and aspects of harmonic motion that have nothing to do with root movement. Some of the more fruitless arguments in music theory classrooms result from asking the question "What is the root of this chord?", without considering what is to be gained (or lost) from assigning roots to chords.

These two kinds of harmonic theory – the speculative, abstract kind and the practical figured-bass discipline – begin to flow together already in the early nineteenth century. One of the very first harmony texts, as such, was written by the French composer Charles-Simon Catel in 1802, expressly for the newly-founded Paris Conservatoire. Catel's book is not that dissimilar in content from books used today. He uses continuo-figuring to mark chords – thus the roots are not indicated. He discusses many kinds of chords, and gives examples to illustrate voice-leading problems. There are no exercises. The book had a long life in France; Berlioz taught himself harmony from it.

The practice of indicating chords by Roman numerals plus continuo figures – still in use today – was established by the German theorist Gottfried Weber, in about 1820 (*Versuch einer geordneten Theorie der Tonsetzkunst*, 1817-21). This notation clearly indicates the root of the chord, as well as the inversion. The first German *text*-book closely resembling a current harmony text is also the first one written – published in 1853 by Ernst Richter, especially for the Leipzig Conservatory, founded ten years earlier by Mendelssohn (with Schumann on the faculty). The Richter text is remarkably complete by present standards, and is the prototype for most such efforts in German and English every since. Since the 1850's there has been a steady stream of harmony texts; the first definitive one in English was that of Ebenezer Prout, in 1889 – and he is already complaining of how many there are. Since the 1870's it has been customary to cite examples from the literature for various voice-leading and chord-usage principles; even today, though, some books do this and some don't.

There are basically two reasons to talk about harmony in music: one is to attempt a rational explanation

of certain features in tonal music; the other reason is to help the student composer write acceptable tonal music. These two purposes – the explanatory and the propaedeutic – correspond to the rough distinction we made between abstract philosophical treatises on music, and more practical textbooks and manuals. But it has been clear for several decades now that not many young composers aim to write music of the kind upon which traditional harmonic theory is based, and this seriously affects the rationale for teaching traditional harmony. On the one hand, it can be maintained that writing traditional harmony, like writing traditional counterpoint, is a secure craftsmanlike foundation for any kind of serious composition, much like perspective, or drawing still lifes or lumpy nudes is for a contemporary painter. But the main result that the eclipse of traditional tonal music as a European style has had on the teaching of harmony has been to focus much more attention on the explanatory, genuinely theoretical aspects of harmonic theory. And when subjected to this kind of scrutiny, traditional harmonic theory as a theory of music is found to be seriously incomplete. While it seems intuitively plausible that something about tonal music might be accounted for by referring to chords, it is still unclear exactly what it is that will be explained this way.

The most serious attack on traditional harmonic analysis as an explanatory mode was launched by the famous, polemical, and opaque German theorist, Heinrich Schenker. Whether Schenker's own theories are very credible in themselves is a question we won't take up in this class. But his basic objection to harmonic theory, that very often what happens in tonal music has little to do with "root motion", seems quite obviously true. This point of view has found its way into many textbooks of harmony today, to the extreme view in some cases that chords as such don't have much to do with tonal music, a view that seems to me just as mistaken as its opposite.

In any case, the philosophical problems with harmonic theory are coextensive with those of all music theory – simply that there isn't really any. There is no rational theory of tonal music that even begins to achieve a systematic explanation for the notes found on the page, which is the minimum requirement for a theory of Western classical music. Music theorists, including your teacher who is writing this book, don't really know much about music. We get confused about what a theory, properly so-called, is supposed to be, and about what counts as an explanation. And also (in our defense) music and one's perception of it are evidently phenomena of considerable and baffling complexity.

What we have instead of a theory, in harmony textbooks and harmony classes, is really a body of *lore* – guidelines, rules of thumb, incomplete principles with many exceptions, along with a few attempts at genuine explanation and systematic description. This collection of facts and attitudes, in spite of its deficiencies as an empirical theory, can often be quite illuminating, or useful, or at least entertaining. What exactly it has to do with tonal music is a question that for its answer awaits a fully-realized theory of that music.

What we aim to do in this course is to acquire, partly by osmosis, a fair understanding of common-practice harmony by (in order of emphasis)

> 1) learning to write a passable imitation of a Bach chorale harmonization
> 2) learning to "analyze", in more-or-less the traditional manner, examples of such harmonization
> 3) learning write out acceptable realizations of a few Baroque figured basses.

This requires some explanation. There are teachers of harmony and counterpoint, and authors of textbooks on these subjects, who feel that the part-writing practice of a rather wide range of tonal composers – typically from Bach to Brahms – can be described with a relatively small number of

principles that hold throughout the period, Baroque, Classic, and Romantic. I very much feel that such descriptions of harmonic style are greatly incomplete and misleading, and that the principles of even a small subgenre within that period – say the Schubert songs, Chopin mazurkas, Mozart quartets, whatever – are much more complicated, intricate, and just plain messy, than most textbooks allow for. Also, since most music courses survey a rather wide range of music, it is especially valuable at least once to look at a small, homogeneous corpus of music in depth. If we find that some of the simplest music we know is complicated, then we have some idea of how complex the rest of it is.

There are several reasons to pick the four-part chorales of J.S. Bach for this purpose. They are a small closed repertory, and so can be described with some accuracy. Virtually every one is a small masterpiece. They have been held up as models of four-part writing every since CPE Bach published them in the mid-eighteenth century, for that very purpose, and so have traditionally been used as such ever since.

It's also my feeling that – as in the visual arts – the most secure foundation for musical composition is to begin by explicitly imitating an illustrious model, rather than try to compose in a synthetic style composed of principles supposedly drawn from all the great masters at once. I don't know very many general principles of music, but for small regions of it I can hope to discover some. Once could continue this kind of study, of course, and after learning to write fair Palestrina and Bach, move on to the Mozart sonatas. But usually by this time the principle has been absorbed, that by application one can learn to write an imitation, and at this point most composition students feel, rightly, that it's time to write their own music. Like a visual artist who as mastered the principles of perspective and draftsmanship, then pushes them into a corner of his mind when painting an abstraction, trusting his hands to remember what his brain need not, a musician who has worked in strict harmony and counterpoint can set the rules aside when the time comes, trusting that he has absorbed their lessons and their integrity without necessarily feeling bound by their rules.