Musicology, §II: Disciplines of musicology
II. Disciplines of musicology

1. Historical method.

Historical method in musicology falls into two basic categories. The first is an empirical-positivistic one, with an emphasis on locating and studying documents and establishing objective (or would-be objective) facts about and from them. The second, a theoretical-philosophical one, itself has two aspects: one that addresses general historiographical problems such as change and causality, periodization and biography; and one that considers issues specific to the histories of the arts and literature, such as the forms and style, or the historical meaning or content of individual art works or repertories, whether from the perspective of style, aesthetics or socio-cultural contexts and functions. The literature on historical method has concentrated on the second category, perhaps because the first seems unproblematic and less interesting. It is or should be self-evident that serious historical scholarship of the second category, although it sometimes tends to deny the legitimacy of the first, depends on as accurate a historical record as the actual state of the discipline can provide (see also Historiography).

This essay will also emphasize theory, yet the continuing importance of positivism (which itself constitutes a philosophy of history) and empirical work should not be overlooked. In the 18th century, when a music historiography began to emerge, curiosity about ancient music for its ancientness (musical antiquarianism) was a principal motivation for empirical research, and philological interests were also strong. As the discipline developed, problems such as chronology and transmission, attribution, palaeography and textual authenticity became even more crucial, as the archives, libraries and private collections yielded ever more of their treasures.

Empirical interests were not, however, primary to the work of Hawkins, Burney and Forkel, whose histories are often considered to be the origin of ‘true’ historical thinking about music, but rather a (naive) vision of historical development – the Enlightenment idea of human progress embracing all cultural activity. In this universal-historical
perspective, the emphasis on human activity and perfectibility as the basis for historical change distinguishes ideas from earlier views of the past and development; yet their conclusions about the present state of music differed. Unlike Burney, Hawkins and Forkel viewed the music of their day with alarm, and their caution foreshadowed 19th-century perspectives: (i) a notion of ‘progress with limits’ that underlies conservative historical thinking well into the 20th century, and (ii) a historicism that replaced the principle of inevitable progress with that of historical relativism and validated early music.

It was historicism that provided the single greatest impulse to the development of music historiography in the 19th century. Despite Hegel's influence on historical thinking in Germany, continuing progress (or its necessity) in music was more a concern of journalists with historical perspectives – A.B. Marx, Schumann, Franz Brendel, Wagner and Hanslick (the latter two at cross-purposes) – than of most writers of formal music history. Marx and Brendel, who explicitly identified himself with Hegel, wrote histories from this perspective, and they have been usually associated with Hegelianism (as has Ambros), but their debts to Hegel must be precisely defined: their historical thinking is shaped by the liberal nationalism and metaphysical idealism that supported Hegel's concept of progress and his aesthetics, but the dialectical approach, the essential element in his theory of historical change, is largely absent in Marx's writing and not rigorously applied in Brendel's. The dialectic method is also foreign to the historical thinking of Fétis, whose importance as a historian has been overlooked. His rationalistic (as opposed to metaphysical) belief in progress is said to have been influenced by the enlightened universal historical approach of Jules Michelet.

All over Europe, most mid-19th-century music historians turned to music and musicians from a past that was generally and tacitly understood as ending with J.S. Bach. Several historians (e.g. Ambros) planned comprehensive histories but failed to complete them, perhaps because the empirical-positivistic work in the earlier historical stages exhausted their energies. The field of biography was less orientated to the distant past, largely because of Beethoven's celebrity, the continuing interest in Mozart and Haydn and, late in the century, the fascination with Wagner. Yet the great monuments in 19th-century biography also include biographies of Bach by Spitta and Handel by Chrysander, and
these are usually considered to be more important for the development of music historiography because their subject matter was more remote (see Biography).

Apart from the aesthetic impulses behind the first efforts to revive performance of Bach and Palestrina in the early 1800s, interest in old and new music as a historical phenomenon was nurtured by several strong intellectual and ideological currents in the 19th century. The deepest and broadest of them was the rise and dominance of historicism in all the humanistic disciplines and particularly the earlier emergence of the history of the visual arts. Aesthetics and theory, which had dominated music scholarship within and without the academy, began to yield room for history, a process that culminated in the establishment at the end of the century of the first university chairs explicitly assigned to music history. Surging nationalism, which in the wake of the Napoleonic period also underlay the rise of scholarly political and national history, stimulated investigations of national music traditions that sometimes assumed chauvinist character (Brendel), occasionally made use of the 18th-century advocacy of folk and popular culture associated with Rousseau and Herder, or stressed religious institutions and dogma. The identification of religion and nationalism was particularly strong in northern Germany. It led to an assertive identification of Germanness in music, coupling Lutheran tradition with an attempt to reinvigorate religious feeling through a discussion of art (Spitta). A nostalgically religious strain in Romanticism saw a purity in the arts preceding a ‘modern’ or ‘new’ time whose earlier or later beginning depended in large part on the personal aesthetics and degree of historicism in the thinking of the historian. (A ‘Heilige Tonkunst’ concluding in 1600 described the first of Carl von Winterfeld's two historical epochs in his Johannes Gabrielli und sein Zeitalter of 1834.) This attitude transcended national and denominational differences and helps to explain the widespread interest in Renaissance sacred music, in particular the Catholic repertories, which also extended into the 17th century.

Music historians struggled to impose order on the ever increasing body of music their archival work disclosed. Periodization, and the explanation of the historical developments underlying the periods, were their foremost tasks, whereby the former was often presented with disappointingly little concern for the latter. Epochs and periods based on leading figures provided a convenient mode of explanation: schools and styles grouped
themselves around the great artists, who produced their art through their own genius *sui generis*, or drew on the culture of their time, or (commonsensically enough) in some way combined the two. The idea of the artist in cultural context shares features with the *Zeitgeist* theory of history that was particularly strong in Germany. *Zeitgeist*, which owes as much to Herder as to Hegel, solved two historiographical problems: (i) progress – music proceeded with general culture, as history advanced from period to period so too did music; (ii) meaning – music acquired meaning through its participation in general culture because it shared general culture's character. Music history benefited from its late origins; it could draw on general history and art history, which presented it with resonant period names such as the Renaissance. But shortcomings to this approach emerged towards the end of the 19th century. Music historians concentrated too much on biography, did not integrate the technical discussion of individual works in their histories, and failed to recognize music's (semi-) autonomy and its ‘organic’ development on the basis of its own materials. The solution was the formalization of the concept of style drawing again on art history (Burkhardt and Wölfflin), which became the dominating historical idea in 20th-century musicology. The strength of the concept of ‘style’ can be judged from the fact that it was as essential to Riemann, the systematic scholar, as it was to the humanist Adler (who is most closely identified with the concept), although they are usually considered to represent opposing branches of the discipline.

‘Style’ was extremely useful. It was the alternative to *Zeitgeist* for the explication of periodization. It also provided the language for a discussion of individual works in inherently musical terms, yet still differed crucially from non-historical, ‘theoretical’ analysis in that it retained, refined and lent rigour to established musico-historical ideas such as periods, schools, national, regional and individual styles, and made possible a comparative critical approach. Moreover, it was equally applicable to all historical periods and genres; it could support either a teleological view of historical development or a relativistic one; it could even buttress a *Zeitgeist* approach or a hermeneutic explication of an individual work. Although style was conceived as a value-free, objective idea, it later even served national-socialist musicology in determining the racial and folk basis of national and ethnic styles and their relative merits.
The emergence of historical musicology as a mature discipline and the development of the concept of style are inextricable. Style was the basis for the multi-volume histories (Handbuch der Musikgeschichte, Oxford History of Music), single-volume period histories (Reese, Bukofzer), genre studies, and the works part of life-and-works biographies that before and after World War II have defined the field. Yet the concept of style has been criticized. Despite its flexibility, its major impact has been to separate musical historiography from general historiography, and to de-emphasize or even eliminate questions of meaning and function. In German musicology before the Nazi period, historians in the hermeneutic tradition advocated by Wilhelm Dilthey (1823–1911), in his day the leading German philosopher of the humanistic disciplines, recognized this danger. Arnold Schering (1877–1941), while recognizing its achievements, argued that a critical method designed to determine stylistic common denominators could not do justice to the unique structures and meanings of individual masterworks, and also perceived that the concept of style failed to explain the phenomenon of style change. In Anglo-American historical musicology the most recent major developments – the introduction of critical perspectives from linguistics and the literary disciplines, and their combination with a hermeneutics variously derived from the ‘new historicism’, Adornesque social theory, gender studies, reception theory and history, and anthropology – have sprung from a similar dissatisfaction with the concept of style, whereby its inability to address satisfactorily the problem of meaning has been the stronger impetus. (The problems of periodization and style change, actively pursued in the 1950s and 60s – as the reports from various international musicological congresses attest – have lost their urgency. The approach of structural history, which attempts to grasp the totality of a moment in historical time rather than presenting the dynamic of historical process, is more amenable to the critical interests of ‘new musicology’.) The rise of new critical perspectives in English-language music history also must be understood as a response to the challenges posed by the postwar vigour and status of two diametrically opposed branches of the discipline: the ‘hard’ analysis of ‘Theory’ as it became institutionalized in American and British university departments, and, within music history, grandly conceived philological-positivistic projects. The latter consisted of new critical editions of the ‘great’ composers and historical repertories (some of them
exhaustive reworkings of the great monuments of 19th-century editions); thematic catalogues; RISM in all its breadth; and manuscript studies of many different kinds that made important advances in method and technique and significant contributions and corrections to questions of chronology and transmission, authenticity and compositional process. In the USA after World War II philology helped support the rapid growth of musicology, offering virtually unlimited possibilities for dissertations and publications. Yet a saturation point seems to have been reached in the mid-1980s, when the call from scholars as dissimilar as Joseph Kerman and Leo Treitler in the USA, and Carl Dahlhaus in Germany, for a historically informed criticism (Kerman) or a critically inclined historiography (Treitler and Dahlhaus) began to bear fruit.

For West German musicology, as it regrouped after the war, positivistic approaches provided necessary safe alternatives to the ideologically indefensible nature of musicology under fascism, in whose wake cultural theory of any kind had become suspect, and to the Marxist historical and hermeneutic methodologies of the GDR and the socialist bloc. It also provided a haven to non-Marxist East German and Soviet-bloc musicologists, who concentrated on such areas rather than pursuing politically sensitive topics such as meaning and historical causality. But West German musicology did not ignore style criticism or abandon traditional ‘bourgeois’ historical topics such as philosophy and aesthetics or historical music theory (which were also favoured by non-Marxist scholars in the socialist countries). And it sometimes engaged in polemical debates about historical causality and determinism, progress, formalism and the social character and content of music with its neighbours to the East. The relative cautiousness of West German historical musicology, as well as the strength of its traditions, has made it less open to the most recent (‘new-musicological’) methodological innovations than its English-language counterpart. The important exception has been in the area of reception studies, which were stimulated by the work of the Germans Hans Gadamer (philosophy) and Robert Jauss (literature) and became established in German musicology well before it was embraced by musicologists writing in English. On the other hand, in the 1990s the writings of Theodor Adorno, whose thought stimulated and challenged some of the leading German postwar historians, have become more fashionable (although perhaps less well digested) abroad than in his native country. The nature of Adorno's influence in
Germany can perhaps best be measured by the work of Dahlhaus, who, despite his fascination with Adorno's ideas, rejected the sociological approach and yet fashioned his own formalist hermeneutics as a direct response to him. Historical method in musicology has always relied on its neighbouring disciplines. It has always been a semi-autonomous field, in part through its very nature as a historical discipline, in part because the materials of music are non-semantic and its forms and images are less tied to representations of material reality than those of the visual arts before the 20th century. As a consequence of this second condition, non-formalist historians concerned with the problem of musical meaning are almost forced to borrow. While important axioms such as style and historical periodization of the historical method still seem useful and entrenched, certain traditional emphases have been under attack in recent years, for example the notion of an authentic text, or the concept of the autonomous ‘work’, or the idea of a canonic repertory (this last is paradoxical in view of the preference for ‘masterpieces’ for the application of innovative interpretative strategies). As early as the 1970s, Dahlhaus voiced concerns about the disappearance of the historical method (in its second, theoretical category) from musicology; yet the discipline, in terms of its institutional bases – the academy, the professional journal and the published book – is thriving. Will the influx of new methodologies supplant music history or give it new life? One thing is certain: its own history is one of change and adaptation, and this process is a guarantee for its continued vitality.

Glenn Stanley

2. Theoretical and analytical method.

It is questionable whether it is possible to identify a single encompassing method for music theory and analysis. As an intellectual activity, Western music theory possesses an extensive and varied literature that extends virtually without interruption back to the ancient Greeks. At the same time, many non-Western cultures possess distinguished bodies of theoretical literature. Music analysis, with which theory is typically paired, has a more recent genealogy, although it too seems confoundingly diverse in practice. Defined simply, music theories may be said to offer generalized descriptions of musical structure and behaviour. Such descriptive theories may apply only to a single
composition, or they may attempt to account for and perhaps help define, a class of compositions grouped by historical style, genre or composer. From this perspective, then, it can be seen how analysis functions as a dialectical counterpart to theory. Analysis constitutes the detailed study of musical pieces from which theories may be inductively formulated, while at the same time serving to test the empirical validity and application of any theory.

Of course, the relation between theory and analysis is in reality far more complex. Many music theories, for example, are compositionally conceived and lack strong empirical verification in practice. That is to say, a given theory may arise not through induction from musical practice but be conceived a priori to guide composition. Other theories may make no empirical claims about particular compositions or historical styles and may concern themselves with more abstracted musical problems: the nature of consonance, concepts of time and metre or the ontology of tonality (to offer some contrasting examples). Still other theories may deal with aspects of musical perception by analysing compositions according to their affective qualities, or perhaps as possessing social or programmatic content.

To make sense of this diversity within the field of music theory, and perhaps to rescue the notion of music theory and analysis as constituting a coherent and discrete field of study, it is helpful to distinguish ‘traditions’ of music theory that have historically enjoyed varying degrees of pedigree. Based on suggestions made by Carl Dahlhaus (1984, p.9), three such traditions, or ‘paradigms’ might be identified: (i) Speculative, (ii) Regulative and (iii) Analytic. While the present article will not attempt to duplicate the broad historical surveys of theory and analysis found elsewhere (see Analysis, §I and Theory, theorists), it will be useful to consider individually the scope and methods historically associated with these disciplinary traditions.

(i) Speculative traditions.
Speculative music theory (or ‘harmonics’, as it was often termed) represents the oldest and in one sense the most authentic tradition of music theory. Traceable to the earliest surviving Greek and Hellenic writings, musical harmonics encompasses the abstracted study of musical elements – sounds, intervals, rhythmic proportions, scale systems and
modes – and often the place of these elements in the general cosmological order. The concern of the speculative theorist is not the application of musical material to praxis but rather the ontological essence of music – its nature and being. Aristotle characterized such knowledge as episteme theoretike, in contrast to the practical and poetic skills – praktike and poietike – of performance and composers.

In Greek thought two related branches of speculative harmonics may be distinguished: a Pythagorean tradition orientated towards mathematics and represented by Neoplatonists such as Ptolemy and Boethius, and an empirical tradition represented by theorists such as Aristoxenus. The Pythagoreans would emphasize the numerical basis of musical relations (for instance, that all musical consonances could be defined by simple ratios of integers) and see such musical relations as a model of cosmological order. The empiricists, however, were concerned with acoustical perception – the nature of musical sound and its organization into tonal systems. In neither case, though, were these theorists interested in practical music.

With varying degrees of emphasis, speculative music theory has been a continuous presence in the history of Western thought. The Pythagorean interest in the mathematical form of music was sustained within the medieval Quadrivium of numerical sciences, and found more concrete expression in various monochord and interval treatises. Most of the intricate tuning and temperament calculations found in Baroque treatises of musica theorica may also arguably be aligned with traditions of speculative harmonics. The empirical Aristoxenian tradition, however, found echo in the work of many natural scientists of the 17th and 18th centuries who studied the acoustical basis of consonance and tonality (Galileo, Descartes, Sauveur), as well as in 19th-century scientific work in the field of tone psychology (Helmholtz and Stumpf).

The more cosmological side of Pythagorean harmonics receded in the medieval West until its reinvigoration in the late 15th century under the influence of Neoplatonic thought (especially in the writings of Marsilio Ficino). Cosmological harmonics continued to hold fascination for a few individuals, although it was an interest largely motivated by esoteric or occult beliefs, as exemplified by writers such as the 17th-century German astronomer Johannes Kepler, the 19th-century French Masonic historian Fabre d'Olivet, and in the 20th-century Swiss mystic Hans Kayser (see also Music of the spheres).
In the 20th century, speculative music theory has continued to flourish, although under new names and using new tools of analysis. Much research, for example into tone psychology, timbral analysis and psychoacoustics (see §10, below), including work by James Mursell, R. Plomp, Wayne Slawson and Ernst Terhardt, can arguably be filiated to Aristoxenian traditions of empirical harmonics in that its practitioners attempt to understand the fundamental nature of discrete musical elements, albeit elements typically defined and analysed as isolated acoustical stimuli. Mathematical traditions of harmonics have also enjoyed renewed attention. Catalysed in large part by compositional problems posed by Schoenberg's method of composing with 12 notes, a number of composer-theorists, beginning in the 1950s, notably Milton Babbitt, have developed extraordinarily far-reaching mathematical theories that explore with systematic rigour possible serial relations and orderings within the equal-tempered universe of 12 pitch classes (see also Serialism and Set).

The group theoretical principles on which Babbitt based his research were found by several American music theorists to be useful in accounting for properties of – and relations between – unordered collections of pitch classes. For example, Allen Forte extended and generalized some of Babbitt's work in order to develop a theory of ‘pitch-class sets’ by which the pitch structure of a delimited repertory of pre-serial ‘atonal’ music may be accounted. David Lewin, on the other hand, worked out a number of mathematical models by which to describe the transformational mappings of isomorphically-discrete pitch collections, although the sophisticated transformational networks that he constructed may also usefully be applied to relations between chord function, key area and even metrical time points. Further research by American theorists such as John Clough on diatonic scale systems, Richard Cohn on symmetrical pitch cycles and Robert Morris on compositional spaces and contour has extended our understanding of potential pitch topographies. While much of this scholarship is intended to have practical applications for both composers and analysts, it is at heart ‘speculative’ in the most distinguished and venerable sense of the word – as an exploration of the properties and potential of musical materials. In the closing decades of the 20th century, the spectacular reinvigoration of mathematical harmonics constituted one of the most remarkable chapters in the long history of music theory.
(ii) Regulative and practical traditions.

If music theory in its oldest and most authentic sense was understood as the ontological speculation of musical material, undoubtedly its most consequential and resonant activities have concerned the regularization of this material into systems possessing practical applications for performers and composers. Such pedagogical writings, it is true, were not at first considered to be properly ‘theoretical’ (significantly, no practical treatise before the 18th century ever presented itself under the title of ‘music theory’). But increasingly, *musica theorica* and *musica practica* were recognized, and treated, as complementary domains of investigation.

The propadeutic tradition of music theory is first evident in the West in several Carolingian manuscripts dating from the 9th and 10th centuries that sought to answer the Church's growing need to systematize, codify and notate a burgeoning liturgical chant practice. Several intersecting problems were posed that have served as an agenda of music-theoretical research ever since: clarifying a tonal space in which this music was sung; devising an efficient notation for setting it down for practice and dissemination; establishing a vocabulary for segmenting and analysing the music's structure; and, finally, classifying the repertory of chant into categories of species or ‘modes’. Later, other conceptual problems with practical implications arose to which theorists turned their attention, particularly the need to develop an accurate means to notate rhythmic duration and proportion.

With the appearance of several treatises dealing with the singing of organum and discant in the early 12th century an entirely new kind of prescriptive theory is to be seen – one that attempts to regulate the compositional process of music (or in this case, an improvisational process). By laying down rules for singing with a given chant melody, regulating what dissonances may be introduced and prescribing the opening and closing formulae of the organal voice, the anonymous authors of one notable example (the *Ad organum faciendum*; ed. H.H. Eggebrecht and R. Zaminer, 1970) inaugurated a species of compositional theory that would soon dominate the discipline (*see also Organum*).

Throughout the late medieval and Renaissance periods, the primary concern of compositional theory was the regulation of dissonance within the increasingly dense
polyphonic textures written by composers or improvised by singers (see also Counterpoint and Musica ficta, §2). Another regulative problem addressed by theorists during this time concerned rhythm, and specifically the codification of a mensural system by which metrical time points could be plotted, subdivided and noted (see also Notation, §III and Rhythm, §II). For some Renaissance theorists, a particular empirical challenge was that of modal classification. The eight ecclesiastical modes inherited from monophonic chant practice (later expanded by Glarean and Zarlino to 12) could be made to accommodate expanding polyphonic and chromatic textures only with great ingenuity on the part of theorists (see also Mode, §III).

In the Baroque period, with a general stylistic evolution towards more homophonic textures and a sharper bass–soprano polarity, it was the classification of chords and an explanation of their succession that received the attention of theorists. Similarly challenging to explain and codify for theorists was a coalescing major-minor, transposable key system. Many treatises of thoroughbass from this time, though ostensibly aimed at training performers, can be seen as theoretical treatises that provided practical answers to these questions. It is thus not surprising that the first treatise to attempt a full theory of this tonal practice – Rameau’s Traité de l’harmonie of 1722 – was one that was conceived within the paradigm of thoroughbass pedagogy. Counterpoint remained important as a pedagogical discipline throughout the 18th century, although as seen in a work such as Fux’s Gradus ad Parnassum, this necessitated drawing sharp distinctions between ‘strict’ styles of composition codified within his five species and a ‘free’ style of dissonance use, characteristic of the seconda pratica.

As these various examples suggest regulative music theory is possible only when there is a relatively stabilized musical practice that can be circumscribed by which a particular compositional parameter may be analysed and codified. Some of these practices may be global and cut across specific compositional styles, historical period or genres (such as shared systems of harmonic tonality, metre or timbral juxtaposition), while others may be more stylistically focussed. For theorists of the late 18th century one such stylistic issue that required attention was the nature of melody – its components, construction and development (Riepel, Koch); for theorists of the 19th century, however, it was the increasingly subversive chromatic and modulatory practices of composers that demanded
explanation, as well as the more elaborate forms employed (Marx, Fétis, Reimann; see also Harmony, §4 and Form).

In the 20th century, regulative theory continued to play an important pedagogical function, although it was more typically applied in retrospect to delimited historical repertories or styles of music. (Schenker's theory of tonality is paradigmatic in this respect; Jeppesen's codification of Palestrinian ‘style’ of counterpoint and Lendvai's codification of Bartók's compositional practice are other good examples of retrospective regulative theories.) More common has been the development of original theories of composition to establish and regulate harmonic vocabulary, rhythmic structure or tonal syntax. Sometimes such theories may be rigorously formalized, as in the case of many serial theorists, such as Krenek, Eimert, Babbitt, Boulez and Perle. Other compositional theories may be more informally conceived, such as the ‘modes of limited transposition’ inventoried by Messiaen, or the theories of compositional ‘intonation’ and ‘modal rhythm’ conceived by the Russian theorists Boris Asaf'ev and Boleslav Yavorsky. Even Cage's aleatory theory and Xenakis's stochastic method of composition can be seen as belonging to this tradition of regulative theory, although both involve elements of chance and indeterminacy. But as compositional practice in the 20th century has fractured into a multitude of individual styles and syntaxes, such broadly prescriptive theorizing has more and more given way to a particularist kind of descriptive analysis.

(iii) Analytic traditions.

It is useful to distinguish music analysis as a subdiscipline in music theory from the regulative traditions just described, even though the two are interdependent. While a fuller history and taxonomy of music analysis is recounted elsewhere (see Analysis), it will be appropriate here to say something about the methods and claims of music analysis and its relation to be broader epistemology of music theory.

In music analysis one is primarily concerned with the structure and individuating features of a particular piece of music. Typically, this involves two tasks: (1) to inventory the components of a particular composition deemed significant by the analyst; and (2) to explain the particular disposition and relationship of those components. Of course, any kind of analysis presupposes a theoretical stance: that is to say, it is not possible to
undertake an analysis without theoretical presumptions, however informally conceived, that help determine the questions to pose and the kinds of language and method by which these questions may be answered. But unlike the systematic traditions of regulative theory described earlier, the goal of music analysis is normally an understanding and aesthetic appreciation of the musical piece itself as an ontologically unique artwork, not the exemplification of some broader norm of structure or syntax.

A good example of such particularist analysis is seen in E.T.A. Hoffmann's famous review of Beethoven's Fifth Symphony, published in 1810. Unlike many earlier examples of music ‘analysis’ that offered generalized taxonomies of particular pieces (often using rhetorical terminology) in order to illustrate classical norms of structure and process, Hoffman undertook his analysis to reveal what was distinguishing and unique in Beethoven's composition. For Hoffmann, much of this uniqueness stemmed from the music's particular motivic material and its ingenious development. Not surprisingly, such close analytic readings were indebted to Romantic ideologies of historicism and the cult of artistic genius; far from being models for compositional emulation, the musical objects of analysis tended to be drawn from a canon of irreproducible ‘masterworks’. Analysis revealed at once the singular features that made up a particular composition (these typically being unusual thematic and harmonic material or special deviations from formal conventions) as well as the means by which these features cohered as an organic whole, to cite a favourite metaphor of the 19th century. Of course, a more pragmatic tradition of analysis continued with the 19th-century pedagogical Kompositionslehre. That is, musical pieces might be analysed for the purpose of learning and testing norms of chordal succession or form. But by the 20th century, with the loss of a common grammar of tonality and received forms of organizational structure, music analysis was increasingly becoming piece-orientated.

Heinrich Schenker occupies a particularly important place in 20th-century music analysis, not simply because his ideas have enjoyed such unparalleled influence – especially in Anglo-American academic circles – but because his work so clearly reflects the dialectic relation of music analysis and theoretical systematization. Originating through an intensive study of a select canon of tonal masterworks (especially Beethoven), Schenker's mature theory of the Ursatz and its ‘prolongation’ through structural levels
emerged only after many years of struggle and thought. Although presented as an *a priori* systems of tonal logic, Schenker's theory also receives empirical validation – and indeed, can only be known – through practice, albeit a practice that is highly selective and arguably self-confirming. Schenker's theory presents itself as both a universal theory of tonality and a sophisticated tool of analysis by which an individual piece of tonal music may be opened up for inspection and its individuating features of harmony, form and thematic content delineated with unprecedented precision (see Schenker, Heinrich).

At the close of the 20th century, music theory and analysis seemed finally to have matured as intellectual disciplines. Particularly in North America, although increasingly elsewhere, many academic programmes of music theory were established in universities and music conservatories alongside more traditional programmes of historical musicology. At the same time, numerous academic journals and professional societies devoted to music theory and analysis were founded, including the *Journal of Music Theory* (1957), *Musical Analysis* (1981) and *Musiktheorie* (1986), and the publications of the Society for Music Theory (from 1977).

It is ironic that just as music theory seems to have become institutionally accepted, strong criticisms have been voiced within those institutions concerning its conservative domain and scientistic aspirations (Kerman, 1985). Most compellingly, perhaps, many music theorists and analysts have been criticized for their penchant for considering musical pieces and styles largely from a formalistic, autonomous point of view rather than within broader historical and cultural contexts. At the same time, theorists have been faulted for too often disregarding questions of affect, expression or meaning in musical pieces at the expense of structural description.

It is true that in the course of the 20th century, much scholarship in music theory could be characterized as highly formalistic. Logical positivism, in particular, was an obvious influence on the work of many theorists such as Babbitt, who famously demanded that all analytic statements about music should adhere to strictly scientific criteria of formulation and verification (Babbitt, 1961, p.3). Other potent influences on music analysis (particularly in the 1960s) were developments in literary theory and specifically the movements of ‘New Criticism’ and structuralism, by which texts were analysed as discrete and autonomous objects standing apart from questions of historical origin or
authorial intention. Certainly, a number of music theorists in their analytic work have tested a formidable array of tools and models borrowed from neighbouring disciplines that on the surface suggest positivist and structuralist pedigree, including mathematical group theory (David Lewin), cognitive psychology (Leonard Meyer, Eugene Narmour), information theory (Kraehenbuhl and Coons), generative linguistics (Lehrdahl and Jackendoff), and semiotics (Jean-Jacques Nattiez, Kofi Agawu and Robert Hatten). Probably little of this research would stand the test of Babbitt's strict rules for theoretical formulation and verification. As in many other scholarly disciplines, the explicitly positivistic and structuralist aspirations of music theory in the 1960s and 70s have considerably receded.

If in reality music theory and analysis were ever as uniformly conservative and narrow in scope as their critics have implied, it was certainly not true at the close of the 20th century. The repertories of music considered by analysts expanded dramatically to include virtually all historical periods, as well as much non-Western music and popular or vernacular musics. At the same time, many theorists showed increased sensitivity to problems of historical and social context, affective content and reception in their analyses. In particular, interpretative and critical modes of analysis (whose origins may be traced back to late 19th-century traditions of ‘hermeneutic’ analysis) are strongly evident in much recent musicological scholarship (Scott Burnham, Rose Subotnik, Brian Hyer), as are radically subjective ‘phenomenological’ modes of analysis (Thomas Clifton, Benjamin Boretz, Marion Guck) and post-Freudian theories of compositional influence and repression (Joseph Straus, Kevin Korsyn). Even issues regarding gender and sexuality so dominant in much ‘postmodern’ cultural criticism have been provocatively addressed by some recent musicologists (Susan McClary, Lawrence Kramer; see §II, below). Yet if music theory and analysis are to continue to retain identities as authentic intellectual traditions, it is perhaps desirable to maintain some degree of epistemological formalism and empirical rigour. Far from suggesting a weakness in the programme of music theory, a certain autonomy – and tension – in relation to historical musicology and cultural criticism may indeed be a healthy sign of its vitality and integrity.

Thomas Christensen
3. Textual scholarship.

Textual criticism embraces several central sciences: palaeography (the decipherment of handwritings), diplomatic and bibliography (the study of the formal make-up of manuscripts and printed books respectively), editorship and collation (the identification of errors in the text of a document and the reconciliation of variant readings). Ancillary to these are such sciences as the studies of printing techniques and processes, of paper manufacture, of binding, of illumination and of book illustration. All these bodies of knowledge contribute directly to the establishment of a critical text. The first five have venerable scholarly traditions extending back into the early 19th century; the rest have developed in the 20th, with such works as Charles Briquet’s *Les filigranes* (Geneva, 1907), Allan Stevenson’s *The Problem of the Missale speciale* (London, 1967) and Charlton Hinman’s *The Printing and Proof-Reading of the First Folio of Shakespeare* (Oxford, 1963) as landmarks.

In the context of music, the decipherment of notational systems (ekphonetic, neumatic, mensural, tablature etc.; see *Notation, §I*) forms an important part of musical palaeography – and also the decipherment of verbal text matter. The special demands of music on printing require study as processes; they carry their own peculiarities and tendencies to particular errors which must be known before the text can be fully elucidated (see *Printing and publishing of music*). The procedures of music writing, of the production and copying of the musical source, are again activities not yet fully appreciated in their own terms; to understand the ‘psychology’ of the producer of a text is half the battle in understanding the text itself (see *Sources, ms, §I*).

In the study of music printing the groundwork was laid by scholars such as Anton Schmid in his survey of the output of the Petrucci press (1845), by Robert Eitner, and by Emil Vogel in his *Bibliothek der gedruckten weltlichen Vocalmusik Italiens* (1892). Vogel’s work was carried on by Claudio Sartori in his *Bibliografia della musica strumentale italiana stampata in Italia fino al 1700* (1952–68) and by Howard Mayer Brown in *Instrumental Music Printed before 1600* (1965). Basic studies of early French music printers and publishers were made by François Lesure and Geneviève Thibault, of the early English by Charles Humphries and William C. Smith, and of the early Viennese...
by Alexander Weinmann. More recent work has concentrated on single issues in early publishing (such as Boorman’s work on the interpretation of features in madrigal publications) or individual publishers (Forney’s work on Susato, Jackson’s on Berg and Neuber, Lewis’s on Gardane).

In manuscript studies, much attention has been given in recent years to the 18th century. Studies involving stitching marks from original bindings (Dürr), paper-making and watermarks (Tyson, Wolf) and handwriting (Plath) have brought about important revisions in the chronology of the works of J.S. Bach, Haydn, Mozart and Beethoven. Moreover, a new understanding of the creative processes of composers – notably of Beethoven and Wagner – has developed as a result of close examination of preparatory materials such as sketchbooks, drafts and preliminary scores (see Sketch).

The principles of editing are another supporting science of musicology. They embrace not only the surface questions such as how to distinguish editorial emendation and interpretation from original readings and how to lay out suppressed readings in a critical commentary along with a description of sources (although these are matters on which no conformity has been reached among scholars), but also the much more fundamental issues of critical editing: how far editors should go in correcting and interpreting a text, and whether the variants of a particular text are separate entities or lead back hierarchically to an original exemplar – and thus whether the readings given in an edition of a work with many variant sources should seek to establish by reconstruction a hypothetical archetype, or simply present the best surviving text intact, or set out the variants or alternatives in several textual traditions (see Editing).

In music, the concepts of ‘Urtext’ and of critical edition are in principle distinct. Urtext represents an attempt to present the contents of an original source free of editorial additions (slurs, bowing marks, extra dynamics etc.): it is ‘pure’, yet is to some extent a translation into modern notation. The concept is now largely discredited, however, in that it precludes editorial interpretation or even correction. Further to the same end of the spectrum is the so-called diplomatic transcription – a hand facsimile of the original notation still much used in German dissertations but properly replaced by the photographic facsimile. The critical edition, at the other end of the spectrum, is a presentation of the text after it has been subjected to critical scrutiny and a certain
construction placed on it. The issues involved in editing from an earlier notation – ‘translating’ the music – are perceptively addressed by Bent (1994).

Many scholars at the beginning of the 20th century (e.g. Aubry and Beck) were trained as philologists before turning to musical scholarship. They brought a particular awareness of the problems of textual transmission, above all to the thorny field of medieval monophony. The series Paléographie Musicale (1889–) published by the monks of Solesmes exemplifies this dual approach to textual criticism which combines facsimiles of original sources with editions in more modern notation, later to be attempted systematically by Beck in his Corpus Cantilenarum Medii Aevi (1927–38) for all surviving troubadour and trouvère songs (never completed).

Textual criticism was itself a product of the search for authenticity which began in the 19th century and preoccupied 20th-century historical thought. In music this was manifested particularly in the production of critical editions of the works of leading composers. Following the foundation of the Bach Gesellschaft in 1850, European scholars started a series of Gesamtausgaben, definitive editions of the complete works of Beethoven, Mozart, Lassus, Palestrina, Schubert, Schumann, Schütz and Victoria, among others. Few of these sets reached the state of completeness envisaged by their editors, but they marked significant steps in the development of editorial techniques and in the bibliographical control of sources. Parallel to the Gesamtausgaben were the Denkmäler sets devoted to the publication of ‘monuments’ of national music. Among the earlier projects of this nature were Franz Commer’s Collectio Operum Musicorum Batavorum (1844–58), a pioneer edition of early Flemish music, and Robert Julien van Maldeghem’s Trésor musical (1865–93). These established a continuing pattern of critical editions of historically significant music originating in Germany, Austria, France, Italy, Belgium, the Netherlands, England and other countries. However, new discoveries and changing ideas of source and textual criticism led to increasing discontent with the 19th-century collected editions, and new editions of the work of many composers were begun in the years after World War II (including Bach, Handel, Mozart, Beethoven, Schütz and Josquin). The Mozart edition was completed in 1991: even before it was finished, some Mozart scholars were pointing to the need for yet another new edition. (See Editions, historical.)
An important adjunct to text-critical study is the compilation of inventories and cataloguing of primary source materials. The towering figure in this area was Robert Eitner (1832–1905) who published numerous music catalogues and inventories in *Monatshefte für Musikgeschichte* (1869–1904) and who brought the results of his vast knowledge of European archives into evidence in his ten-volume *Biographisch-bibliographisches Quellen-Lexikon der Musiker und Musikgelehrten der christlichen Zeitrechnung bis zur Mitte des 19. Jahrhunderts* (1900–04). The ideals that Eitner initiated in this great work have served musical scholarship for a century and are still alive in the form of an ‘International Inventory of Musical Sources’ (RISM) published under the auspices of the International Musicological Society and the International Association of Music Libraries. The catalogues of the works of individual composers – those by Köchel for Mozart, Schmieder for J.S. Bach, Baselt for Handel, Hoboken for Haydn, Zimmerman for Purcell, McCorkle for Brahms, Rufer for Schoenberg, for example – often give information on the textual transmission of each individual work, enabling the user to locate all primary material and know its status. The first part of Ludwig’s *Repertorium* (1910) was a model of another type of source catalogue: the *catalogue raisonné* of the materials of a repertory laid out according to stylistic dictates and explained as an evolutionary picture. (see Thematic catalogue).

Vincent Duckles/R

4. Archival research.

Archives are documents issued in the process of administration, whether it be of central government or a private business, a ducal household or a parish church (see also Archives and music). They are of interest to the historian for study of the institution to which the archives refer, or for study of people or objects or events associated with that institution. Their essential feature is that they are generated automatically in the process of administration, and this makes them in principle different from almost all other sources of history. Unlike a chronicle, a diary or a newspaper report, which are selective historical accounts, they record everyday detail as faithfully as the unusual. Often the recorder does not participate in the events recorded.
As the centralization of archives into principal depositories got underway during the early part of the 19th century and the science of archive keeping began to develop, historians, following Ranke, turned to them as objective truth. ‘Ultimate history’ (Acton, 1896) seemed only a generation or two away. National series of archive transcripts were begun: Monumenta Germaniae Historica (1826–), Collection de Documents Inédits sur l'Histoire de France (1850–), the British Rolls Series and Calendars (1856–) and others. Only slowly was it realized that the proper use of archives could be made only after painstaking study of how the documents were produced, and that even then, error and fabrication could be uncovered.

Early musicological studies included some transcripts, either of entire series of documents concerning musical administration (such as Edward Rimbault's *The Old Cheque-book, or Book of Remembrance of the Chapel Royal*, London, 1872) or of selected items pertaining to music from more general documents (such as those in Casimiri's periodical *Note d'archivio*, 1924–42, relating to the Cappella Sistina in Rome), but air travel and microfilm contributed to a postwar wave of comprehensive archival studies on composers and musical activities in city, court and church. More recent archival studies have drawn on the administrative records of music printers, publishers, orchestras, opera houses and of the media, and on a broader historiographical base.

Vincent Duckles (with Barbara H. Haggh)

5. Lexicography and terminology.

The lexicography of music is a form of applied scholarship the object of which is to condense, organize (normally in alphabetical order) and clarify the terms musicians use to communicate their ideas about and their experience of their art; it is commonly extended to include biographical material on individual musicians. This interest has given rise to a long tradition of dictionary-making beginning with Brossard in 1701 and extending through Walther, Rousseau, Grassineau and Koch to such distinguished modern representatives of the genre as Willi Apel's *Harvard Dictionary of Music* (1944, 2/1969), the subject volume (‘Sachteil’) of the *Riemann Musik Lexikon* (12/1967) and the first edition of *Die Musik in Geschichte und Gegenwart* (1948–68). After a decade described by Michael A. Keller as ‘the era of reprinters’, lexicography received a fresh impetus with the publication of *The New Grove Dictionary of Music and Musicians* in
1980. The present revision appears at a time when other major projects, including the second edition of *Die Musik in Geschichte und Gegenwart* (1994–) and *The Garland Encyclopedia of World Music* (1998–), are already underway, yet which may prove, for economic and practical reasons, to be the high-water mark in the history of printed reference works in general. (See *Dictionaries and encyclopedias of music* for a historical review of the genre and a comprehensive list of works.)

The history, purpose and practice of dictionary-making have been much discussed. According to Harold E. Samuel, ‘the lexicographer is expected to synthesize existing knowledge, not to undertake new research’. Indeed, the practice of lexicography has often been denigrated as mere compilation or popularization; yet all scholars use dictionaries, whether they acknowledge them or not. Speaking in 1969, H.H. Eggebrecht remarked that the interest and historical value of a dictionary resides more in the integrity of its conception than in the individual articles. At a practical level, ‘the art of lexicography consists largely in finding optimal compromises’. The quality of the result depends on finding contributors with the rare combination of specialist knowledge, enthusiasm for the task and a gift for dictionary style, combined with agreement on the classification and limits of topics. Jan LaRue has commented further on the natural inclination of scholars towards expansion rather than conciseness and their difficulty in committing to paper anything short of a definitive version; he suggested sending drafts of articles prepared in-house or by graduate students to consultants who would react quickly and gleefully to every error of fact and interpretation.

Among the constant problems faced by lexicographers are issues of accuracy, content, balance and bias. The derivative nature of dictionaries leads to many pitfalls; Nicolas Slonimsky has chronicled the amusing fate occasionally befalling such eminent figures as Percy Scholes, Eric Blom and Slonimsky himself, along with ‘Grove-diggers’ in general. Viorel Cosma has made numerous suggestions for overcoming discrepancies caused by questions of translation and transliteration, including the use of multilingual headwords and standardized abbreviations, together with more precise documentation of sources. Some degree of national bias in lexicography remains almost inevitable and in some ways desirable, but the general trend has been towards greater inclusiveness and objectivity. As early as 1768 Rousseau went beyond a purely eurocentric view of music,
and the terminological reference works of recent decades have offered enhanced coverage of non-Western and popular music. D.M. Randel drew attention to this tendency in his edition of *The New Harvard Dictionary of Music* (1986), although Apel's original had been regarded as a model in its day. Stanley Sadie has argued that any possible bias in favour of the music of English-speaking countries in *The New Grove* dictionaries is justified, indeed appropriate, on the practical grounds that those countries are where they would principally be used and about whose musical life fuller information would be sought. Defending the *Riemann Musik Lexikon* against the charge of European bias, Eggebrecht stated that the balance of art music to folk music reflected the quantity and quality of existing scholarship rather than any assumed value judgment as to their relative importance. Furthermore, non-Western music can be described only in its own terms and is not necessarily susceptible to analysis by the methods of Western musicology.

Dictionaries of music reflect the use of terms in all kinds of primary sources, musical, theoretical and documentary. At the same time, they themselves become historical phenomena furnishing primary evidence of the musical mentality of past eras. It is evident that terms often change their meanings over time, and may coalesce in groups or undergo mutations; logical classifications are constantly at risk of being upset by the march of history. The phenomenon of ‘term-families’ and their behaviour was of particular interest to Wilibald Gurlitt, who projected a *Handwörterbuch der musikalischen Terminologie* that would trace the lineage of the vocabulary of music in a manner similar to that used in the *Oxford English Dictionary*. Such a work would provide a historical analysis of musical terms according to their inherent relationships and family groupings. The first issue of a handbook under Gurlitt's title, edited by Eggebrecht, came out in 1972, and his scheme was still in the process of being realized in 2000. The loose-leaf format of this work allows constant revision and updating but condemns it to a state of perpetual incompleteness. A similar approach has been adopted in biographical dictionaries where currency is of prime importance, such as Hanns-Werner Heister's *Komponisten der Gegenwart*, begun in 1992.

The historical analysis of terms serves as a means to gaining an understanding of the development of concepts, but there is another aspect of the relationship between word
and music that confronts the musicologist with a fundamental dilemma – the need to apply verbal symbols to an art that conveys its meanings through the medium of sound. One can talk or write about music, but the experience of music itself can be known only through its own ‘language’, the language of sound. The effort to resolve the disparity between verbal and tonal discourse was a lifelong preoccupation for Charles Seeger, who saw little chance of bringing these two realms of meaning into complete coincidence. Until recently it was the inevitable fate of the musicologist to suffer what Seeger called the ‘linguocentric predicament’, from which the advent of multimedia technology now offers, in theory at least, the possibility of an escape. The CD-ROM *Microsoft Musical Instruments* (1992), for example, presents an introduction to the subject using text, pictures, maps and recordings to place individual instruments in their cultural and aural context. Most such products, however, are educational rather than scholarly, and sometimes openly commercial, in their objectives.

The compilation and presentation of electronic dictionaries on the World Wide Web overcomes at a stroke the limitations of space but raises more acutely the issues of content and editorial control. In the field of music, many such ventures are compiled by amateurs whose technological expertise surpasses their musicological credentials, and the results consist mainly of links to existing documents or of randomly-contributed material whose accuracy and objectivity cannot be guaranteed. Enthusiasts have created numerous terminological lists for particular musical styles, as well discographies inviting users to submit their own opinions. Among the few scholarly dictionaries of music available online is *The New Grove Dictionary of Opera*, a revision of the four-volume edition published in 1992. As compared with the printed version, this offers enhanced search facilities, factual updating and links to related sites and images, yet it remains essentially text-based and has barely begun to exploit the theoretical potential of the electronic world which it inhabits. The harnessing of that potential, in musicology as in other disciplines, will be among the foremost challenges to lexicographers of the 21st century.

Robert Balchin

6. Organology and iconography.

(i) Organology.
Organology, the study of musical instruments in terms of their history and social function, design, construction and relation to performance, has interested scholars since at least the 17th century. Michael Praetorius, in *Syntagma musicum* (ii, 1618–19), included an important section on instruments, including some non-Western types, with realistic illustrations drawn to scale. Other technical discussions appear in encyclopedic works of Mersenne (*Harmonie universelle*, 1636–7) and Kircher (*Musurgia universalis*, 1650). Modern organologists and reproducers of historical instruments (who might be called ‘applied organologists’) have benefited from the observations of such early scholars, particularly where well-preserved original instruments are rare or non-existent (see also Organology).

In addition to providing practical information useful to performers and instrument makers, organologists seek to elucidate the complex, ever-changing relationships among musical style, performing practices and evolution of instruments worldwide. This study involves authenticating and dating old instruments by scientific means, discerning the methods by which instruments of different cultures have been designed and produced, and investigating the many extra-musical influences – such as advances in technology and changing economic conditions – that lead to innovation and obsolescence. The symbolism and folklore of instruments are subjects that organology shares with music iconography and ethnomusicology.

Since the late 18th century, interest in instruments of all kinds has served an ethnomusicological purpose by providing a common avenue of approach to the music of diverse cultures. G.A. Villoteau (1759–1838) made the first scientific study of ancient Egyptian music largely on the basis of depictions of instruments in tombs and temples; later archaeological discoveries of actual if fragmentary Egyptian instruments allowed his conclusions to be refined and corrected. Organology as an academic discipline came into its own after the 19th-century development of large, permanent instrument collections in Europe and the USA. Once these repositories were established, organologists, who were often also museum curators, confronted the challenges of comprehensive classification and description. Curt Sachs's *Real-Lexikon der Musikinstrumente* (1913), a pioneering effort to systematize knowledge of instruments on a worldwide basis, and the widely-adopted classificatory scheme devised jointly by Sachs and Erich von Hornbostel, were
based on Victor-Charles Mahillon's research on instruments collected at the Brussels Conservatory beginning in the 1870s. Nicholas Bessaraboff, who in 1941 introduced the term ‘organology’ in the sense used here, applied a classification derived from those of Francis W. Galpin (1910, 1937) to the collection at the Museum of Fine Arts, Boston. The study of instruments per se became an important resource for comparative musicology (e.g. Hornbostel's adducing of panpipe tunings as evidence of a cultural connection between Brazil and Polynesia); but ethnomusicologists have tended to subordinate a purely object-orientated approach to a broader consideration of instruments' musical and social contexts. Especially in traditional and non-literate cultures, the shapes, materials and decoration of instruments, no less than their sounds, convey meaning essential to their functions; seeking to understand these features, organologists might collaborate in field research with ethnologists and native informants. Efforts to interpret ancient and prehistoric sound-producing implements have thus far usually proven inconclusive or unconvincing, in part because of the difficulty of faithfully reconstructing scattered fragmentary remains. Since primitive noisemakers often served multiple purposes, the sonic function of an excavated artefact might even go unrecognized. Recent studies of Western instruments have produced important though sometimes controversial results in such matters as pitch and tuning, historically appropriate string materials, and the origin and dissemination of various instrument types. Technological advances (e.g. in dendrochronology and computer-assisted tomography) have broadened the scope of organological investigation and helped raise standards of connoisseurship. During the last quarter of the 20th century, John Koster and G. Grant O'Brien contributed valuable new information concerning the construction and uses of early stringed keyboard instruments, and Peter Williams explicated the obscure history of organs. Karel Moens raised fundamental questions about the authentication of antique bowed string instruments, while Herbert Heyde, a specialist in the development of woodwind and brass instruments, demonstrated the relevance of geometric proportional schemes and local units of measure to instrument design. Such studies as these depend on close examination of extant instruments and primary documentary sources, including treatises, patent claims and musical compositions, as well as iconographic evidence.
One striking conclusion to emerge from analysis of a wide range of data is that, contrary to common belief, major advances in instrument design often precede rather than result from musical style shifts, as innovative instrument makers, responding to general market conditions, introduce novel types having expressive potentials that might take generations for musicians to explore. The history of the piano and of the saxophone exemplify instances where, so to speak, the medium anticipated the message. Observations such as this demonstrate the power of organology to shift perceptions of music history.

Vincent Duckles (with Laurence Libin)

(ii) Iconography.

The first generations of musicological scholars in the late 18th and early 19th centuries were acutely aware that their discipline differed from neighbouring ones in so far as the objects of their study were invisible and bound to process in time, and hence more ephemeral than the painted or the written ones. The lack of tangible evidence inevitably led scholars to explore secondary sources such as pictures and texts about music. Thus Martin Gerbert appended to his *De cantu et musica sacra* (1774) a few plates (xxiii–xxxiv) with pictures of medieval musical instruments from illuminated manuscripts. In the main text he discussed their shape, purpose and terms and sketched a history of the use of musical instruments in the Church (iii, chap.3). A similar approach to visual material was taken 50 years later in a study of non-Western music. G.A. Villoteau, as a member of the Napoleonic expedition to the upper Nile valley, collected pictorial material on the music life in ancient Egypt and compared it with the ethnic evidence of his own day in Egypt and the eastern Mediterranean. The results were extensive articles with illustrations published as a part of the *Description de l'Egypte* (1809–22).

Throughout the 19th century the motive for iconographical studies continued to be the interest in the tangible objects of past cultures (*Realienforschung*). Musicologists found themselves in the good company of cultural historians of various kinds. Particularly important promoters of this area of research were the antiquarian societies such as the Société Française des Antiquaires in Paris, which inspired the iconographical work on medieval music by Fétis, Coussemaker and Bottée de Toulmon published in the decade 1839–49. Since that time an interest in musical iconography, in tandem with organology
and performing practice, has been a hallmark of French scholarship. It bore fruit in the foundation of the Société pour la Musique d'Autrefois in the 1920s by Geneviève Thibault and in the doctoral dissertations of Evelyn Reuter (1938) and Claudie Marcel-Dubois (1941).

Given the close contacts between art history and musicology, which led, for instance, to the adoption in musicology of the art-historical terms Renaissance and Baroque from Jakob Burckhardt and Heinrich Wölfflin, one might have expected musical iconography to be a field of intense collaboration between art historians and musicologists. That, however, has rarely been the case. Emile Mâle, the most prominent art historian in France around the turn of the century, had little influence on French musical iconography despite his very influential work on themes in medieval art. Only after World War II did French scholarship enter a new era with the publications of Albert P. de Mirimonde.

For German, Spanish, Scandinavian and British musicological scholarship, too, the initial incentive for studying works of art was the interest in objects from past cultures, and so it remained until World War II. The first anthological collections of pictures with musical subject matter began to appear, culminating in Georg Kinsky's *Geschichte der Musik in Bildern* (1929, translated only a year later into English, French and Italian) and Heinrich Besseler's *Musikgeschichte des Mittelalters und der Renaissance* (1931), a historical survey with a superb selection of illustrative material. After the war, Besseler and Max F. Schneider, and later Besseler's student Werner Bachmann, published the multi-volume serial *Musikgeschichte in Bildern*. Before it came to a halt with the closure of the East German publishing house in 1990, it had produced 18 volumes of European and eight of extra-European material.

As early as 1914 Hugo Leichtentritt, in his article ‘Was lehren uns die Bildwerke …?’, voiced scepticism about the indiscriminate use of pictorial evidence for the reconstruction of instruments and performance. But it was another half-century before a methodological base was laid, by Steger (1961), Winternitz (1961), Hammerstein (1964), Seebass (1973) and Droysen (1976). Since then a number of British and American scholars, such as Mary Remnant, Ian Woodfield, Edward Ripin, Howard M. Brown, Keith Polk and Colin Slim, and in Italy Elena Ferrari Barassi, have provided models of cautious and successful scholarship; McKinnon also offered methodological reflections (1982). So, to the end of
the 20th century, the number of scholars using musical iconography as an auxiliary discipline is considerable. Without their efforts and those of others, successful reconstructions of musical instruments and the revival of performing practices no longer in use would not have been possible. These areas of interest have made a spectacular move forward and enabled the Early Music movement to be a serious force in the global music business. The role accorded to musical iconography in the study of performing practice and musical instruments is also acknowledged by editors of such journals as the *Galpin Society Journal*, *Early Music*, *Journal of the American Musical Instrument Society* and *Basler Jahrbuch für historische Musikpraxis*, who occasionally accept articles in this area.

Interest in the visual arts as a source *sui generis* for the study of intellectual and social concepts of music is of a more recent date. Like literary sources, pictures can provide information about the place that society accords to music, what it thinks about music and how it is moved by music. The beginnings go back to the studies of visual symbolism in the mid-19th century (see Piper, 1847–51/R; Pougnet, 1869–70), but serious scholarship began only through the activities of the Warburg circle. There, for the first time, interdisciplinary cooperation between art history and musicology (and also literature) was set in motion. Much of the movement lost its impetus through the dislocation of the leading figures during the Nazi period, but at least two articles (Schrade, 1929, and Gurlitt, 1938) established a methodological standard that could serve, after the war, as a basis for musical iconography and iconology (in the Panofskyan sense). By the end of the 1970s it had been definitely established with the publications of Hammerstein, Winternitz, Seebass and McKinnon. A different perspective that had its sources in Besseler's approach focussed on the sociological side. Bachmann and in particular Walter Salmen are its representatives, as to a degree is Richard Leppert, who combines it with gender critique.

Meanwhile the International Association of Music Libraries had put a bibliographical network in place and began to work on its series of *Répertoires*. In 1972, as a parallel music-iconographical undertaking, Geneviève Thibault-de Chambure, Barry S. Brook and Harald Heckmann founded the *Répertoire international d'iconographie musicale* (for reports of its activities see *Fontes artis musicae*). It spawned a number of cataloguing
centres in various countries, the publication of a bibliography (Crane, 1971), catalogues, a newsletter and a yearbook, *Imago musicae*. Several centres have developed software for the computerized cataloguing of pictures with musical subject matter.

The last two decades of the century brought a steady increase of scholarship that can partly be connected to the increased number of academic positions (in Italy in the early 1980s, in Spain in the 1990s). The activity in Italy surpasses that in any other country (see Barassi, 1996, and Seebass, 1994) with theses, academic courses, conferences, publications and regional cataloguing centres. Besides the traditional avenues of scholarship, such neglected fields as scenography and the iconography of folk music have attracted development there.

Research in synaesthetic questions is of relatively recent origin. It began in 1949 with Thomas Munro, who was followed by T.H. Greer (1969) and Edward Lockspeiser (1973); since then it has increased at a rapid pace. Distinguished scholarship has been produced about individual figures such as Schoenberg, Klee and Cage, but otherwise few steps have been taken beyond the collection of materials in lavish exhibition catalogues and their enumeration in surveys. The pluralism of style in the visual arts, the breakdown of traditional genres and the subjectivism of verbalizations by artists and art critics (which has also affected musicologists) have so far prevented the formation of a reliable terminology for historical analysis. Much remains for future scholars.

Research in folk music and the music of the other continents has been a stepchild of musical iconography. The model study by Jaap Kunst and Roelof Goris on Hindu-Javanese instruments (8th–15th centuries), had found no worthy successors by the end of the century. The most productive groups include the scholars interested in India and those formerly active at the Research Centre at the Kunitachi College of Tokyo. In the long run the volumes of *Musikgeschichte in Bildern* covering non-European countries should have their impact. In 1986 the International Council for Traditional Music established a Study Group for Musical Iconography that led to an intensification of research, with some of the results published in *Imago musicae*. Pluralistic methods of analysis are increasingly relevant for iconographical research in non-Western historical materials because they seem particularly apt for handling the emic-etic tensions that arise in interpretation.

*See also Iconography.*
7. Performing practice.

The study of the way music has been performed has been closely connected with the historical performance movement but is by no means identical with it (see Early music). Although ‘old’ music was performed in various circles in earlier times (Bach and Handel at Gottfried van Swieten's concerts in late 18th-century Vienna; Palestrina in the churches) performers used the then ‘modern’ style with which they were familiar. The discipline can thus hardly be said to have existed (save to an unimportant extent in a few 16th- and 17th-century treatises that deal with the music of the ancient Greeks and Romans, and in the interest of 18th-century writers such as Martini and Hawkins in the same music) until after the various revivals of earlier music began in the 19th century, for example, Mendelssohn's performances of music by J.S. Bach and the publication of historical editions of old music and editions of the works of Bach, Handel and others. Most performers in the 19th century and surprisingly many in the 20th assumed that older music must be improved by performing it, for instance, on modern instruments with their greater volume and brilliance, and even editors of medieval and Renaissance music have often followed the same idea in their own way, modernizing notation to resemble that to which their contemporaries were accustomed. Other musicians, however, began to think that unexpected meanings, and unexpected beauties, might be revealed if older works were performed in a manner close to that heard by the original audiences.

An important landmark in the history of performing practice was the publication in 1915 of Arnold Dolmetsch's book on the interpretation of music in the 17th and 18th centuries, and a number of other studies appeared about the same time or in the following few decades: Beyschlag on ornamentation (1908/R), F.T. Arnold on figured bass (1931/R) and Robert Haas on performing practice in general (1931/R). Much of this early work centred on the problems of performing music by J.S. Bach and his contemporaries, and was concerned with relearning obsolete instrumental techniques and conventions of performance: improvising embellishments, realizing keyboard parts from figured and unfigured basses, adding implied accidentals, inventing appropriate scoring where none is
indicated and so on. The usual sources of information were treatises, dictionaries and other contemporaneous accounts, and the notated music itself.

After World War II such scholars as Robert Donington, Thurston Dart, Frederick Neumann, Sol Babitz, Michael Collins and Putnam Aldrich refined pre-war ideas about performing Baroque music and advanced new ones; their ideas have not always been accepted by the musical world or even the scholarly community. From the 1950s the discipline enjoyed a gradual expansion: performing practices of both earlier and later periods were investigated and more sophisticated approaches were developed. Paul and Eva Badura-Skoda's study of performing conventions in Mozart's keyboard music (1957) moved research on performing practice forward from the Baroque era. The revival of medieval and Renaissance music was an active collaboration of makers, players and scholars: musical sources are often demonstrably incomplete, instruments survive only as depicted in iconographical sources and must be reconstructed, writings on *musica ficta* are difficult to interpret, and so on. An important figure in establishing this new style of research was Howard Mayer Brown. The investigation of the performing practices of all periods has since benefited from this type of collaboration: treatises, archival notices, literary works and works of art have been used by those investigating later practices, as well as by medieval and Renaissance scholars. Other techniques have also been added: paper analysis, for example, has been used to aid in determining the state of a manuscript at the time of a particular performance, and rigorous techniques of measurement and physical analysis have aided in the recovery of earlier techniques of instrument making, which in turn has helped in determining how instruments worked and what they sounded like.

The concept of **Authenticity** in performance exercised scholars in the 1980s especially: a prominent, if controversial, thinker in this area was Richard Taruskin. Studies of recordings (available only from the late 19th century; a few musical clocks and barrel organs have provided interesting evidence of earlier performing styles) have revealed, among other things, how quickly ideas of musical performance change. Investigation in the late 20th century, while continuing to treat technical aspects, also came to encompass cultural context, the acoustics of performance spaces, aesthetics, relationships between composers, and relationships between modern and old perceptions of performance.
8. Aesthetics and criticism.

Music aesthetics seeks to answer the questions: what is music? how does it carry meaning? what is its place in human life, culture and society? What is greatness in music? Answers have been provided by some of the world's greatest philosophers: Plato and Aristotle, St Augustine, Thomas Aquinas, Kepler, Leibniz, Descartes, Rousseau, Kant, Hegel, Schopenhauer, Nietzsche and Marx. Scholars in acoustics and psychology, such as Stumpf, Helmholtz and Seashore, have made a large contribution. In the 20th century the most significant contributions have been offered by Adorno, Dahlhaus, Ingarden, Langer, Meyer, Scruton and Zuckerkandl.

Aesthetic questions are present in almost all types of musicological writing. They arise when music historians discuss the role of music in a social milieu or the impact of personal environment on individual musical development, or liken music to other arts, or define the terms of a specific style; they are raised by acousticians who seek their bases in physical properties; they are invoked by analysts as foundations for theories and methods of operating, and underlie their attitudes towards musical material, the process of hearing and the function of performance; they appear constantly in the writings of music critics wherever the criteria for judgment of craftsmanship, imagination in composition, and technical skill and interpretative insight in performance come into play; they penetrate the works of iconographers and experts in performing practice, just as they do the deliberations of performers, when leaping the gap – imaginative, despite its historical conditioning – between evidence and statement or performance. They are thus expressed in many different styles of writing: scientific, scholarly, literary, philosophical. They also occur outside the literature of musicology, in systematic philosophical writings from Pythagoras to Leonard Meyer, and in general histories of art and culture.

Specialist writing in musical aesthetics extends back to the Middle Ages, above all in the speculative tradition which was inherited from classical Greek philosophy, and which extended through the Renaissance to the early Baroque period. It was with the theory of emotive meaning in music, the so-called theory of the Affect, that aesthetics took on a
sharply different character. Scheibe and Mattheson were the most important figures in the development of this theory. In the 19th century Hanslick’s theory of music as ‘tonally moving forms’ founded a line of aesthetic thought that rejected emotional and programmatic interpretations of music, a formalism that has been followed by Combarieu, Stravinsky, Langer and others. Kurth’s theory of music as a stream of tension, and as expression of the will (in the Schopenhauerian sense) belongs to the same line of thought. Kretzschmar, on the other hand, took the view that music had meaning and emotional state, and that these could be directly deduced. There is an influential body of Marxist aesthetic or critical theory in music, particularly in the work of Adorno, Bloch, Lissa and Supičić. Many composers have contributed to the theory of aesthetics, among them Wagner, Busoni, Schoenberg, Stravinsky, Hindemith, Sessions, Cage, Cowell, Schaeffer and Stockhausen.

In the last decades of the 20th century, the aesthetics of music has broadened in scope. Its arena of concerns has moved beyond the domain of classical or high music to incorporate more popular forms, diverse in social, ritualistic and cultural ramifications. Ethnomusicological research has contributed to this general broadening of scope. Feminist, semiological and more overtly political theorizing has entered into the field alongside the continuation of a formalism that dominated music theory and philosophy for a large part of the 20th century. The philosophy of music presupposed by all the areas of music has become more critical and self-aware as the tendency towards theory has predominated.

*See also* Criticism and Philosophy of music.

Vincent Duckles (with Lydia Goehr)


That music is a social activity and not just a collection of musical artefacts in organized sound was realized by the earliest writers in the Western intellectual canon. Both Plato and Aristotle stressed the importance of music as an activity in society and sought to establish criteria for its evaluation as a social phenomenon. In the subsequent development of musical thought a different tradition, emanating from Aristotle's pupil Aristothenes and centred on the investigation of music as a pure sounding phenomenon,
gained a supremacy which remained largely unchallenged until as late as the 18th century, when Charles Burney, avoiding the Aristoxenian tradition, discussed music as a phenomenon influenced by manners and social circumstances.

In the climate of an increased importance of social sciences, several 19th-century music historians, while still adhering to the idealist philosophical tradition (Winterfeld, Spitta, Jahn) sought to incorporate ideas about the social position of music and musicians into their biographical studies. However, though interested in music as a social phenomenon, Guido Adler thought of the study of musical institutions as only an ancillary musicological discipline. At the end of the 19th century and during the early 20th, advances in general sociology enabled, among others, Lalo, Combarieu, Bücher and Max Weber to formulate theories about the interdependence of musical and social phenomena.

All the major ideological currents of the 20th century left their mark on the study of music as a social phenomenon. The positivist tradition reflected itself in the fact that, on the simplest level, social phenomena relating to music were being explored quantitatively, employing statistics to determine popularity of works and authors, modes of transmission and audience response. Some adherents of the German philosophical tradition sought to establish social history of music as a critique of processes in a capitalist society, uncovering tensions arising from the confrontation of individual creativity and social dictates (e.g. T.W. Adorno). Leninist Marxists dominated the thought in the Communist bloc in the middle of the century with a rigid distinction between the ‘base’ (society, economy) and the ‘superstructure’ (cultural and artistic phenomena) – thus discrediting those aspects of Marxism that were otherwise capable of providing the social history of music with criteria by which to judge the subtle distinctions that arise between musical pursuits – either of producers or of consumer of art – and the forces of tradition and social responsibility which, consciously or subconsciously, shape attitudes and help create forms of musical life.

About the middle of the 20th century, a dilemma began to be felt about whether sociology of music and the social history of music (or, to broaden the term somewhat, sociomusicology) are a single discipline or two separate disciplines. A contention exists according to which the sociology of music is simply a narrowing of general sociological principles applied to music as an object of inquiry (approaching it ‘from the outside’),
whereas sociomusicology examines social roles of music, musicians and musical institutions ‘from within’. This is in practice difficult to establish, and the rich development in the last quarter of the 20th century of the study of ‘classical’ music as a form of cultural practice, as well as the claim of ethnomusicology that not just Western art music but all musics are essentially social phenomena, to be judged by the same criteria, confirm the lack of a clear distinction.

See also Sociology of music.

Bojan Bujic


The areas of musicology that have witnessed the strongest links with psychological studies of hearing are theory and analysis. Theories of musical organization and investigations of the human response to music have been associated since the time of classical Greek writings on music (see Barker, 1989), and music was the focus for one of the earliest contributions to modern psychology – Helmholtz's treatise of 1863, Die Lehre von den Tonempfindungen als physiologische Grundlage für die Theorie der Musik, which already took account of differences between a perceptual and a musicological outlook. While asserting the importance of a scientific approach to the issue of consonance and dissonance, Helmholtz nonetheless noted that the distinction ‘does not depend … on the nature of the intervals themselves but on the construction of the whole tonal system’ (Eng. trans., p.228).

In the development of new music theory and analytical method after World War II, psychological principles played an important role. Meyer (1956R), for example, made use of Gestalt principles of perceptual organization to account for the ways in which listeners' musical expectations might be generated and manipulated, and thus for a theory of musical affect and an analytic method which gave an account of melodic and rhythmic processes based on the same principles. He later (1967) took the idea of expectation and developed it into a theory of implication couched within the framework of information theory. Meyer was not alone in associating music with information theory, but while the more formal attempts to understand musical processes and listeners' responses to them in these terms fell by the wayside as information theory failed to live up to its rather heady
promises, Meyer's project, in which Gestalt and information-processing ideas were woven into music theory, continued to move forward both in another book of his own (1973) and in the work of Narmour (1977). Narmour's two subsequent volumes (1990, 1992) represent a culmination of this particular line of thought, presenting a painstaking investigation and classification of melodic processes still based very largely on Gestalt principles, but couched within the dominant paradigm of cognitive psychology.

An indication of the impetus to find common ground between psychological research and musicology was the founding in 1981 of the journal *Psychomusicology* (a term coined by Laske in a paper of 1977), whose position statement expressed the desire to bring together the perspectives of psychology and musicology in a consideration of music. A significant book in this domain is Lerdahl and Jackendoff's theory of tonal music (1983), which takes both the basic principles of generative theory from linguistics and perceptual principles from psychology to create a theory which states in its first sentence that the authors ‘take the goal of a theory of music to be a *formal description of the musical intuitions of a listener who is experienced in a musical idiom*’ (p.1). The interpenetration of listening and musicology can seldom have been more directly expressed. The form of the theory is a set of rules that generate hierarchical structural descriptions of musical surfaces, allowing for inevitable differences of interpretation and inherent structural ambiguities through the device of ‘preference rules’, which adjudicate between different interpretative possibilities in an interactive manner. Many of these preference rules are based on Gestalt principles, and the authors regard the theory as a contribution both to cognitive science and to music theory. The theory has been extended to tackle atonal music (Lerdahl, 1989), and has formed the basis of a cognitively based critique of compositional systems (Lerdahl, 1988).

From the perspective of the psychology of listening, musicology has made its mark in the recognition that empirical and modelling work should take account of the theoretical framework provided by musicology. An early example is Francès's wide-ranging treatment (1958), which considers a variety of issues, such as musical semantics and rhetoric, which have only recently made their way back into the perceptual literature. Krumhansl's research (1990) on the perception of tonal structure is another example, as is Parncutt, who has developed (1989) an explanation of harmonic function and harmonic
process based on a psychoacoustic principle first investigated by Terhardt (1974). Similarly, the perception of tonality has been tackled using empirical studies based on set-theoretic principles which themselves occupy the boundary between what would be called systematic musicology in some traditions, and formal modelling or cognitive science in others (Butler, 1988–9). Other meeting-points of this kind can be found in the edited collections by Howell, Cross and West (1985, 1991) and in Bigand (1993), who considers a variety of ways in which research in music perception has contributed to an understanding of auditory cognition more generally.

A number of commentators have cautioned against a simplistic collapsing of musicological and psychological perspectives: musicology and psychology have rather different aims, and unsystematic leakage between the two can lead to shortcomings on either side being disguised and concealed (Clarke, 1989). Similarly, analysis offers a mythopoeic rather than scientific view of musical structure, and attempts to test analytical descriptions with empirical tasks are epistemologically confused (Cook, 1990); further, empirical work in the psychology of music has often been concerned with a kind of listening that is quite unrepresentative of spontaneous behaviour and is heavily influenced by the categories and concepts of musicology (Cook, 1994). Thus the attempt to compare musicological predictions or pronouncements with empirical results becomes a circular exercise with little relevance to the listening experiences of most people most of the time. While offering an optimistic view of the potential for interactions between music theory and cognitive science, Agmon (1989–90) points to misunderstandings that have resulted from confusing or collapsing different domains (physical, perceptual, cognitive) and different types of theory (‘competence’ and ‘performance’ theories).

Lastly, there have been attempts to make use of perceptual principles in constructing a theory of structure and meaning in electro-acoustic music – a development that is understandable given the inappropriateness of notation-based methods for this music. The relationship between different modes of listening has been explored (Smalley, 1992, based on those described by Schaeffer, 1966) and the dual capacity of sounds both to specify their sources and also to become bound up in the more abstract structural relationships that have been the primary focus of most theory and analysis. Windsor (1994) makes the link with perceptual theory more explicit, and opens the way for a more
thoroughly perceptual theory of electro-acoustic music. A significant and closely related body of work is that of Bregman (1990), whose approach to audition has been influential in perceptually motivated accounts of polyphonic structure, melodic and harmonic organization, and the whole matter of how listeners identify an ‘auditory scene’ in the complex context of the acoustical environment. If the relationship between perceptual studies and musicology has been uneasy and uncomfortable at times, and has seen its fair share of epistemological ‘ships in the night’, there is now at least a greater awareness within musicology of the contribution that psychology might make, and equally a more musicologically informed approach within the psychology of music.

See also Hearing and psychoacoustics, Information theory and Psychology of music.

Eric F. Clarke

11. Gender and sexual studies.

Until very recently musicologists rarely addressed issues related to gender or sexuality. The vast majority of the musicians examined by the field were male and assumed to be heterosexual. Because ‘male’ and ‘heterosexual’ count as unmarked categories (as opposed to ‘female’ and ‘homosexual’) within traditional epistemologies, they did not seem to require comment. Only with the rise of women's, feminist and gay and lesbian studies in the other humanities and social sciences have gender and sexuality become significant areas of research within musicology.

(i) Women in music.

The first venture within the discipline to focus on gender was the attempt begun in the 1970s to recover the history of women in music. Before that time very little was known – or at least remembered – about women in music history: their name rarely appeared in textbooks or journals, except for the occasional woman (e.g. Clara Wieck Schumann and Fanny Mendelssohn Hensel) noteworthy because she was related to a famous male composer. Since then, however, there has been an explosion of information concerning women composers, performers and patrons. The women who have received extensive attention in scholarship, recording and performances include Schumann and Hensel but also Hildegard of Bingen, Barbara Strozzi, Elisabeth-Claude Jacquet de La Guerre, Amy
Cheney Beach, Cécile Chaminade, Ethel Smyth, Florence Price and Ruth Crawford Seeger. Contemporary women composers have benefited from this increasing interest, and they too have received an unprecedented degree of attention from music historians, critics and performing organizations.

The first contributions in feminist musicology dealt with individual women or with specific historical contexts, but a number of pioneering books from the 1980s began piecing together more continuous accounts of women in music. Unlike the more traditional surveys that trace a succession of ‘masters’, these accounts tend to pay attention to many kinds of music-related activities besides formal composition, and they also observe far more closely the social conditions within which musicians have operated (see Bowers and Tick, 1986; Briscoe, 1987; Marshall, 1993; Neuls-Bates, 1982; Pendle, 1991; and Sadie and Samuel, *GroveW*).

As in other disciplines, the more musicologists have learnt about the women previously overlooked by the canon of accepted masterworks, the more they have realized the need to reassess the historical processes that had resulted in its formation – in whose interests canons operate, what gets included, what excluded, and by means of what criteria (see Citron, 1993; Bergeron and Bohlman, 1992). Similar projects have focussed on the histories of women in jazz and popular music and have altered received notions of those traditions as well (see Carby, 1990; Dahl, 1984; Davis, 1998; Gaar, 1992; Gourse, 1995; Harrison, 1988; Placksin, 1982; and Rose, 1994).

Just as many music historians have turned their attention to women musicians from earlier times, so ethnographers have come to incorporate questions concerning gender ideologies into studies of music culture, both Western and non-Western (see Herndon and Ziegler, 1991; Koskoff, 1987; and Sugarman, 1997). As ethnomusicologists have studied gender-based divisions of labour across cultures, they have helped to diminish the longstanding gap between the Western art tradition and cultures of ‘others’. For comparing structures and justifications for gendered hierarchies in different cultures sheds light not only on people in remote parts of the globe, but also on European and North American cultural practices and traditions, which have long claimed exemption from ethnographic analysis (see Bohlman, 1993, and Robertson, 1989).
Bringing women into music studies counts among the most remarkable contributions to musicology of the last 30 years of the 20th century. The number of institutions offering courses on women and music has increased dramatically, and most undergraduate music history surveys now include at least some music by women. See also Women in music.

(ii) Gender and music.

As soon as women became a focus for music research, the reinterpretation of male musicians as ‘gendered’ inevitably followed. Many dimensions of music study that had seemed objective began to appear in new lights, motivating innovative scholarship in several different directions.

The first cluster of publication on women in music concentrated on sources and biographical information. As musicologists turned to the music itself, however, they began reassessing the standards and analytical devices then brought to all music, without regard to intended content. This reassessment helped precipitate a move in the discipline towards criticism or interpretation. Two isolated yet influential studies of feminist-based music criticism, Rieger and Clément, appeared in the 1980s. Before their publication, musicologists had not even addressed representations of gender in the actual plots of operas, let alone the possibility of gender-encoding in non-theatrical music. Accordingly, feminist music criticism began with these pioneering volumes, which introduced into musicology the kinds of critique that had long since become familiar – almost de rigueur – in literary, art and film studies concerning cultural representations of women and men, masculinity and femininity.

The 1990s witnessed the development of several kinds of criticism focussed on gender. Some writers (e.g. Kramer and McClary) have brought a critical perspective to the study of music, often dealing in detail not only with plots or lyrics but also with the music itself. Nor do these studies usually concentrate on representations of gender alone, but they also treat class, race and exoticism, domains often mapped on to gender in operas. They also address how the music itself – its codes and more basic structural procedures – participates in the production of these representations and also predisposes listeners to certain points of view (Bellman, 1998; Lewin, 1992; and Locke, 1991).
This research has radically destabilized some of the assumptions that had sustained musicological narratives of music history. For instance, Kallberg (1992) has researched attitudes towards the genre of the nocturne and has found how ‘the feminine’ was projected on to that repertory, the composers who wrote such pieces and even the piano itself; Cusick (1993) has examined the gendered polemics of the Monteverdi–Artusi controversy; Austern (1989) and Leppert (1989) have investigated how gender has influenced musical production and performance at various moments in Western music history; McClary (1992) has been concerned with discerning how historically constituted ideas of gender, sexuality and the body have informed even the most basic of musical procedures from the 16th century to the present.

Many scholars involved in gender studies maintain strong allegiances with the music of the canon (see Abbate, 1991, 1993) and justify those allegiances by means of a variety of feminist theoretical strategies. The collections of feminist musicology of the 1990s (Blackmer and Smith, 1995; Cook and Tsou, 1993; Dunn and Jones, 1994; and Solie, 1993) offer a broad spectrum of political positions: there is no monolithic position within this area of musicology.

With the rise of gender-based criticism, other areas of music research have likewise opened up to questions of gender. Music education, for instance, long populated mostly by women under male supervision, has begun to rethink philosophical premises and revise curricular planning (see Lamb, 1987; and Green, 1997). Perhaps most surprising, given the separate nature of their discipline, a number of music theorists too have started developing ways of dealing with gender (see Guck, 1994; Hisama, 1995; Kielian-Gilbert, 1994; Lewin, 1992; Maus, 1993; Straus, 1995).

See also Feminism and Gender (i).

(iii) Sexuality.

In most humanities disciplines, the feminist research of the 1970s had already established itself before sexuality became a matter of widespread scholarly interest. But the Gay Liberation Movement that emerged after the Stonewall riots in 1968 and Foucault's theoretical rethinking of this and other aspects of subjectivity made serious research on the history of sexuality possible for the first time in history. As a consequence, the 1980s
saw the growth of scholarship focussed variously on social identities based on sexual preferences, structure of desire or erotic pleasure, histories of the body and subcultures organized around same-sex erotic inclinations.

Feminism appeared late in musicology, however, and research and theoretical work on gay and lesbian issues emerged concurrently with the growth of feminist music criticism. The individual most responsible for securing a space for such work within musicology is Philip Brett, whose work on Britten relates the relevance of the composer's homosexuality to his music. Wood and Cusick have been at the centre of lesbian work in musicology, because of both their work on women composers and their theoretical essays linking sexuality and the perception of music. The principal publication to date concerning sexuality and music is the collection edited by Brett, Wood and Gary Thomas, *Queering the Pitch: the New Gay and Lesbian Musicology* (1994). Some of the projects concerned with sexuality deal with specific artists (Thomas on Handel, 1994; Solomon, 1988–9, and McClary, 1993, on Schubert; see also Gill, 1995); others deal with lesbian and gay reception, especially of opera (see Blackmer and Smith, 1995; Koestenbaum, 1993; and Morris, in Solie, ed., 1993).

When research on gender and sexuality first began to appear, some musicologists objected that it would bring prurient concerns into the discipline. Far from diminishing or tainting the repertories it studies, this research has opened all music to important questions about cultural understandings of the body, gender and erotic experience as crucial aspects of subjectivity.

*See also* Gay and lesbian music and Sex, sexuality.

Susan McClary