

Theorizing Conceptual Change in Music Scholarship

Karen Fournier, School of Music, Theatre, and Dance,
University of Michigan, Ann Arbor

Abstract

This study aims its critical eye towards a conceptual narrative that current music scholars have inherited from their “New Musicological” forebears to describe the growth and development of knowledge in music scholarship. The narrative traces its origins to Thomas Kuhn, whose treatise *The Structure of Scientific Revolutions* (1962) proposes that knowledge will only advance through a series of conceptual crises during which a research paradigm that dominates within a particular field of study will be proven to be ineffective in the face of new research problems and will be discarded in a kind of conceptual “coup d’état.” Kuhn’s narrative, and the critical descriptions of music scholarship that have ensued, is premised on an either/or perception of the practice of research according to which scholars will be required to choose between an established research paradigm and a replacement methodology in times of conceptual crisis. His narrative does not admit the possibility that methodologies can coexist peacefully for long periods of time or that an approach that appears at first to be unsuited to a new research problem might adapt itself to that problem by merging with the new approach that is supposed to take its place in the Kuhnian narrative. This study will dispel this conceptual narrative with a statistical examination of the research interests represented in 171 sample articles drawn from a twenty-year period in the history of the field of music theory, which will show that the methodologies in that field appear to be more fluid and adaptable than the Kuhnian conceptual narrative would admit. The data presented here tracks new research trends in the field (such as the burgeoning interest in popular music, cognition, and critical theory) and demonstrates the degree to which established research trends like Schenkerian and set-theoretic analysis have been able to adjust themselves to newer trends. What the data proves is that existing research paradigms have been largely successful in their quest to fit into the new conceptual environments within which they find themselves. These findings suggest that a better metaphor for conceptual change might lie in the process of evolution, whereby an organism will be required to modify itself to fit into an ever-changing habitat and to respond to the demands made upon it by that environment. This study therefore concludes that the “revolutionary” description of conceptual change should be replaced by an “evolutionary” description, and cites the work of the philosopher Stephen Toulmin to provide the basic plot of this new conceptual narrative.

1. Introduction

The interdisciplinary connections forged a generation ago between musicology and such scholarly arenas as cultural and gender studies, queer theory, philosophy, and sociology seemed at the time to suggest a new path for music scholarship that would open the field to the kinds of research questions that many existing analytical methodologies seemed ill-equipped to answer. The most outspoken critical observers of the time seemed to believe that music scholarship was poised to leave established modes of score analysis behind in favour of approaches that would engage more fully with issues pertaining to the historical and cultural circumstances under which musical objects were created by particular composers or experienced by individual listeners. And although many weighed into the debate through the late 1980s and into the 1990s, the reasons for the need for a shift from text to context as the locus of musical meaning were perhaps spelled out most clearly by Joseph Kerman, who has recently been characterized as having argued

for a disciplinary revolution in musicology, urging a focus on musical works and their meaning....[by diverting] musicology towards criticism and hermeneutics and away from composer biography, archival history, and strict formalism. (Abbate 2004: 506)

Kerman's critique seemed to have been leveled principally at North American music scholarship, where the boundaries between music history (as the study of "biographies" and "archives") and music theory (as the "formalist" analysis of musical score) have tended to be drawn more clearly in theory, if not in actual practice, than they are in Europe. Part of what Kerman proposed, beyond a "hermeneutic" future for music scholarship, was a realignment of the objectives of music history and music theory, which represented for American scholarship two seemingly separate subfields in music research prior to (and, as it has turned out, also after) his critique. Writing fifteen years after Kerman, Patrick McCreless illustrated the conceptual divide in America from the perspective of music theory when he wrote that "what has always distinguished us as theorists, what has enabled us to separate ourselves from musicology ... was precisely our ability to do without history: to deal

with music synchronically rather than diachronically, to deal with it as structure rather than style, to approach it more as an object of an analysis than one of criticism.” (McCreless 2000: paragraph 1) In some circles, the segregation of music theory from its sister discipline, music history, was seen as key to the preservation of former as something more than the mere “handmaiden of musicology (its role in European musicology).” Responding to Kerman’s call to revolution, Allen Forte went on to warn that in their quest to merge with music history, theorists might “weaken one of the major characteristics of American music theory that has drawn international attention [which has been] the rigor, precision, and logic of the more abstract studies in the field” and he asserts that, for this reason, “music theory needs to preserve its essential independence!” (Forte 2000: paragraph 11.3)

Despite its particular cultural and geographical perspective, and the music-theoretical bent that I have assumed in my description of its objective to unite what has been a divided field of scholarship, Kerman’s critique spawned a conceptual narrative that has been applied broadly across music scholarship to explain and hypothesize how knowledge in that field changes over time. This narrative, premised on the idea of a “disciplinary revolution,” quickly became the predominant lens through which any new development in North American music scholarship came to read by critical observers of the field, many of whom viewed the rise of the so-called “New Musicology” in the 1990s, where music theory and music history presumably reunited in a common pursuit of “hermeneutics,” as a decided break from an “archival,” “biographical,” or “formalist” past that it presumably ousted and replaced. However accurate that description of the apparent sea-change in the performance of music scholarship might have seemed at the time, an observer of musical research as it is practiced today would be left to wonder how this conceptual narrative could be used account for current research practices, which can only be viewed by those who subscribe to the revolutionary view as a curious and unexpected lapse into past practices. Further, a closer look at the way that scholarship has been practiced even in the immediate wake of Kerman’s call for a conceptual shift towards hermeneutics also throws the revolutionary narrative into question. In music theory, for instance, the

narrative can offer no rationale for the ongoing practices of “formalist” scholarship through the 1990s, nor can it explain the appearance of such newer “formalist” paradigms as transformational theory. More akin to such text-oriented precursors as Schenkerian and set-theoretic analysis than to the interdisciplinary approaches touted by critical theorists like Kerman and his critical cohort, this latest analytical trend in music theory appears to shift scholarly focus back to the score, where the meaning of a musical object continues to be constructed, as it has been for those who practice the kind of “strict formalism” that critics urged us to abandon, from close readings of musical motives and themes or elements of musical form. Likewise, proponents of a revolutionary conceptual view would be challenged to account for the ongoing practice of historiography in the discipline of music history, whose academic journals have never fully abandoned issues that pertain to “composer biography” and “archival history,” despite being urged to do so by critical scholars in the mid-1980s.

Critical observations about the current state of music scholarship have been considerably fewer in number and notably less vitriolic in tone than those associated with the purported shift in North American scholarship to post-structuralism in the early-1990s, and recent trends like transformational theory have not been marked by the kind of critical fanfare that heralded the alleged demise of their “formalist” worldview a few decades ago. Perhaps this comparative critical silence should not be surprising, since any attempt to explain current research practices would require that we take a close look at the narrative upon which critics have tended to rely in their accounts of scholarly change. Some scholars have, admittedly, raised questions about Kerman’s conceptual model, which has recently been dismissed by one observer as a “heroic and self-serving narrative according to which our benighted “positivist” ancestors who limited themselves to collecting facts have been replaced (presumably after 1968 in Europe, or after 1985 in America) by our enlightened “hermeneutic” selves [that] is too much of a caricature to be illuminating. There was plenty of interpreting going on before 1968 ... and quite a few of our contemporaries continue to bring out critical editions in the morning even as they wildly speculate and interpret in the afternoon.” (Berger 2005: 492) If the bifurcation of the scholarly field into

“positivism” and “hermeneutics” is seen to be a misrepresentation of the practice of music scholarship, as this observer suggests, then the revolutionary view of conceptual change, which depends upon an assumed polarity between these conceptual positions, will be, by extension, a distortion of this change. The problem, however, is that while critical scholars may have begun to question whether the disciplinary transformations of the 1990s should be described as “revolutionary,” current scholars are left to wonder, in the wake of recent scholarly developments, how disciplinary change might *actually* work in the field of music. Without “revolution” as its plot, what conceptual narrative might explain where music scholars find themselves today, and how their work has come to be practiced in the ways that it is? This the central question to be explored in the current study.

With an appeal to a representative sampling of scholarly literature published since 1990, this study will demonstrate that critical observers of music scholarship in the 1980s bequeathed to us a narrative that was inherently flawed. The purpose of the current study will therefore be to propose an alternate narrative of conceptual change that is grounded in, and supported by, a statistical analysis of research drawn from the field of music theory, which is the author’s area of specialization. I recognize and acknowledge that my decision to focus on solely on music theoretical research will limit the extent to which I am able to comment upon conceptual change as it has taken place in such subfields as music history, ethnomusicology, cognition, and the burgeoning field of popular music studies, however a study of this size restricts the extent to which I can engage in these fields. Nonetheless, the conceptual model that I will propose, and for which I will advocate, here can be tested by others to see the degree to which it will “fit” in scholarly environments other than music theory. Before this model is described in detail, however, shortcomings in the revolutionary narrative must be highlighted, and illustrated with reference to music theory scholarship, in order to carve space for an alternate description of conceptual change.

2. Conceptual Change and the Metaphor of Revolution

As the foregoing characterization of Kerman's critical project reveals, those who sought to describe conceptual change in the 1990s often relied upon an analogy to political upheaval, and suggested that the seismic disciplinary shifts that music scholarship was purported to have experienced at that time find their parallel in the process of social or political revolution. The analogy requires that we accept a correspondence between music scholars who seek to change the course of their discipline and individuals who find themselves incited to rebel against a particular political regime, both of whom will come to question the ideological underpinnings of the establishment within which they exist and who will therefore advocate for a framework that will invite input from those who would otherwise feel excluded and disenfranchised. Similar to their political counterparts, those involved in a conceptual revolution will aim to establish a type of "new world order" that will embrace research objectives that differ from those of the immediate past and that will allow for new modes of participation in the construction of knowledge in a particular field of research. In the early 1990s, the analogy to political revolution appeared to make sense as a description of the state of music scholarship, given the apparent crisis brought about by the appearance of different kinds of research interests in the field. From her position as an observer of the field in 1991, for example, Susan McClary shows the extent to which critical scholars of her generation relied upon the analogy in their descriptions of musical scholarship when, in language that captures the critical *zeitgeist* of that time, she maintained that

cultural interpretation ... cannot be grafted on [to existing research programs] without transforming to a certain extent the field as a whole—bringing on, in short, a paradigm shift. And it seems as though our work is already calling into question many of the premises of earlier models of historiography and analysis. But if some degree of destabilization has occurred, the new questions and horizons that have been opened up more than compensate. (McClary 1991: xiv)

The extent to which this perspective has endured is evidenced in Abbate's description of the field, written thirteen years later and cited in the first section of this paper, which appeals to the idea of "revolution" to describe the way that music scholarship

needed to change in order to accommodate to hermeneutic approaches. The “revolutionary” narrative that is embraced in the foregoing quotation by McClary and that is reflected in the writings many of her critical contemporaries traces its origins to Thomas Kuhn’s theory of the “paradigm shift,” which asserts that

once it has achieved the status of paradigm, a scientific theory is declared invalid only if an alternate candidate is available to take its place. ...the decision to reject one paradigm is always simultaneously the decision to accept another, and the judgment leading to that decision involves the comparison of both paradigms with nature [i.e., with the object of study] *and* with each other. (Kuhn 1962: 77)

The term “paradigm” is used in Kuhn’s treatise to refer simultaneously to a philosophical perspective held in common by a group of scholars and to its embodiment as a methodology or as a set of methodologies. In using the term in two different ways, Kuhn conflates theory with practice, and we shall see that this becomes a stumbling-block in his theory. For the moment, however, and to avoid confusion, the former type of paradigm will be identified as a “conceptual framework,” to symbolize a shared set of hypotheses and beliefs about a given object of study, while the latter will be identified as a “methodological framework,” to denote a set of research tools that define how a group of practitioners will undertake their study of that object. In the Kuhnian model, the history of any scholarly discipline can be traced through periods that are dominated by a particular conceptual framework and by the research practices that support the perspective that lie behind this framework. Like their political counterparts, reigning conceptual frameworks are believed by proponents of the model to assist in defining questions and directions for researchers in a field, but they are also seen to become so entrenched over time that they eventually prove themselves incapable of adapting or responding to new research problems and discoveries that appear in the field. Kuhn suggests that the emergence of new challenges to the field will serve as the catalyst for conceptual change and will force the scholarly community to retool the methodologies associated with a reigning conceptual framework or to risk its invalidation and elimination from the field. In cases where the framework cannot adjust, and its methodologies fail to adapt to new

challenges, a competitor framework will seize control of the discipline in a kind of conceptual coup d'état, and will establish itself, and its research methodologies, as the new reigning perspective in the field. Kuhn explains that

the emergence of a new theory breaks with one tradition of scientific practice and introduces a new one conducted under different rules and within a different universe of discourse, [and] is likely to occur only when the first tradition is felt to have gone badly astray. ... The resulting transition to a new paradigm is scientific revolution. (Kuhn 1962: 85-86, 90)

The “revolutionary” narrative played itself out in descriptions of musical scholarship in the 1990s in an alleged shift from the established “tradition” of “composer biography, archival history, and strict formalism” to the “new” analytical models that arose out of “criticism and hermeneutics.” At the level of the conceptual framework, this shift expressed itself in the move away from the musical text as the locus of music’s meaning and towards the cultural context of its creation or reception, and this description of the state of the field seems entirely accurate in light of the many studies undertaken at that time that explored issues of cultural and historical context. However, if we accept that musical scholarship experienced this kind of shift in orientation vis-à-vis meaning, Kuhn’s theory of scientific revolution would lead us to expect that this change would also be reflected in the adoption of new research methodologies that are, as Kuhn says, “conducted under different rules and within a different universe of discourse.” Specifically, we would assume that formalist methods designed for the analysis of the musical text, like Schenkerian and set-theory, would be replaced by approaches that are more suitable for interpretations that arise from a study of the relationship of musical objects to the cultural environment that produces and sustains them. But despite critical predictions, like McClary’s, that the field would emerge “transformed” after the “destabilization” of the 1990s, the enumeration and statistical study of research published during the past twenty years in the field of music theory that will appear later in this essay will reveal that our methodologies have tended to remain relatively consistent over the last several decades, suggesting that scholarship has not experienced the degree of change prophesied by critics a generation ago. For now, we might illustrate this conceptual

stability with the following description of the 2007 reissue of David Lewin's *Generalized Musical Intervals and Transformations*, which was timed to commemorate the twentieth anniversary of its original publication in 1987. Using terminology that is oddly reminiscent of Kuhn, Joseph Dubiel suggests that our renewed scholarly interest in Lewin-style formalist analysis represents yet another

shift in the discipline's conception of its methods, even its goals, to the point where imitation of the books (of their imitable aspects) could become a career path. In a renewed encounter with the originals, we are confronted once more by Lewin's intellectual probity, his intense concern with every construction's relation to hearing (which need not mean anything so simple as that every construction is heard), his fastidious eschewal of hype. With these tokens as exemplary, the field would change again. (Dubiel in Rings 2006: 111)

Dubiel is not alone in his praise for the book, and most scholars would agree with his description of its importance to the field of music theory. However, its popularity among current practitioners of music theory also poses an interesting problem for those who would ascribe to a Kuhnian model of conceptual change, because this model cannot account for a "shift in the discipline's conception of its methods [and] goals" that would continue assert formalism as its conceptual framework, particularly in light of predictions that this framework would be abandoned the apparent disciplinary "crisis" of the mid-1980s and the 1990s.

The inability of the Kuhnian model to account for the type of "shift-back" to an older conceptual framework described by Dubiel, and the ongoing interest in formalist research that will be illustrated in the ensuing discussion, forces current observers to rethink the analogy to political upheaval and to consider the possibility that

paradigm-switches are never as complete as the fully-fledged definition implies; [that] rival paradigms never really amount to entire world-views; [and that] intellectual discontinuities on the theoretical level of science conceal underlying continuities at a deeper, methodological level. ... we must ask ourselves whether the use of the term 'revolution' for such conceptual changes is not itself a rhetorical exaggeration. (Toulmin 1972: 106)

Indeed, it is Stephen Toulmin, himself, who provides a valuable alternative to the model that he critiques here and to the description of conceptual change that it has

spawned for those who have attempted to explain the growth and development of knowledge in the field of music theory.

3. Conceptual Change and the Metaphor of Evolution

A conceptual model that seems to hold more promise than one premised on the analogy to political upheaval is one that has tended to be overlooked by critical observers of music scholarship, likely because the narrative that it presents is less dramatic than the one just described and therefore fails to capture and to sensationalize the sense of crisis felt by those who observed the changes in music scholarship the 1990s. The proposed model draws an analogy between conceptual change and biological evolution, and posits a correspondence between the research methodologies that populate a given scholarly field and the species of living organisms that are native to a particular natural environment. Put differently, the embodiment of a given species by a group of individuals who share common and defining characteristics finds its equivalent in the embodiment of a conceptual species by a group of research projects that emanate from a common methodology. Implicit in this analogy is the further correlation between a natural environment, as the ecosystem that sustains various life-forms that are subject to change through evolution, and a conceptual framework, as the habitat of research methodologies that are likewise subject to change.

According to this theory, a natural or conceptual environment is, by definition, rich with various species of organisms that have found unique ways to adapt to their ever-changing surroundings. In this model, conceptual change, like its biological correlate, will occur when a species of research is faced with a problem that lies outside its immediate environment. Each new problem that presents itself to a given scholarly habitat, like each new change in a given natural environment, will alter that field, and, by extension, its methodologies, in subtle ways. These changes will tend to be gradual, ongoing, and often imperceptible to the observer or to those who inhabit the field. So while Kuhn might argue that methodologies exist solely as a reflection of

the philosophical positions that they are designed to support and that any change in these methodologies threatens the stability of an existing conceptual regime, an evolutionary approach to conceptual change conceives of methodologies as mutable in the face of the fluid environment that is believed to constitute a scholarly field. This model therefore embraces change as a necessary ingredient to the survival of a species of research in the field, and admits the possibility that, when faced with questions that arise from outside a given conceptual framework, scholars do not necessarily have to abandon a given research methodology if it can be made to adapt to the new environment within which it finds itself. The philosopher Stephen Toulmin, an early proponent of the analogy between conceptual and biological evolution, argues that

through most of intellectual history, the stability and universality of our fundamental forms of thought has been regarded as proper and natural: intellectual change has been the “phenomenon” needing to be explained, or explained away. Our present stance reverses the situation. Intellectual flux, not intellectual immutability, is now something to be expected: any continuous, stable or universal features to be found in men’s actual patterns of thought now become the “phenomenon” that call for explanation. (Toulmin 1972: 96)

Toulmin suggests that conceptual change, like its biological counterpart, is an ongoing process that arises in response to the ever-changing environment within which methodologies and their users exist. However, he also insinuates that species of research, like any other kind of species, face the possibility of extinction when faced with an environment to which they cannot adapt. A form of conceptual “revolution” therefore remains a possibility in an evolutionary explanation of scholarship, since the demise of an existing species (in this case, a species of research) will open the field to a new species that is better suited to the challenges posed by a given environment. Acknowledging the possibility of “revolution” without invoking the term, one of Kuhn’s harshest critics, Karl Popper, explains that

Error-elimination may proceed either by the complete elimination of unsuccessful forms (the killing-off of unsuccessful forms by natural selection) or by the (tentative) evolution of controls which modify or suppress unsuccessful organs or forms of behaviour, or hypotheses. (Popper 1972: 242)

The theory of “natural selection” to which Popper refers has been the most contentious Darwinian concept, and likely needs some explanation here. The idea

behind the theory is that species will inherit certain observable traits, or “phenotypes,” from their forebears, and that these traits will endure from one generation to another because they present advantages to the survival of the species. In a biological setting, for example, an organism might inherit a particular ocular structure from its forebears that has been proven to facilitate night-vision and to allow that organism to hunt and to be aware of its predators. The advantages presented by this trait would likely mean that it would endure from one generation to the next. On the flipside, organisms are also subject to mutation as they reproduce themselves over the course of many generations, to allow unfavorable or unnecessary characteristics to be bred out of the species. The progeny of the biological organism that possesses keen night-vision but whose skin color makes it visible to others with whom it coexists in a nocturnal setting, for example, might be predicted to darken in colour with each successive generation to ensure that the species is not hunted into extinction. In scholarship, the theory of “natural selection” can be used to explain how a conceptual species, or a species of research embodied in a particular methodology, behaves within the scholarly environment that it inhabits. Like its biological counterpart, a methodology possesses certain “phenotypes” that define the methodology for a set of practitioners and that differentiate it from other methodologies in the field. Some conceptual phenotypes will remain constant over time and will be retained because they have proven themselves able to respond adequately and effectively to the demands of the field in which they exist. For example, the species of research embodied as Schenkerian analysis defines itself by its retention of such phenotypes as its “background” structure and by the various graphic processes used by its practitioners to represent the functions of, and relationship between, pitches, motives, and harmonies that reside on the musical surface. However, like the natural environment that sustains biological species, the conceptual field is not static but, rather, poses ongoing challenges to the species that reside within it. In the case of Schenkerian analysis, for example, the appearance of new repertoire (most recently, popular music) and new kinds of research questions (like those that attempt to explain the cultural or social context of musical works) has tested the theory to see if it can

provide convincing solutions to the new research questions that have emerged in the field as a result of scholarly attention on new repertoire. The results of such a test will be that the species will either adapt (as this one has, according to the evidence presented below) or face extinction and replacement by a species that can respond more adequately to the new challenges in the field.

4. Evidence from the Field

The Kuhnian conceptual model of revolutionary change has been the subject of various criticisms over the years (notably in Lakatos 1970, Popper 1972, and Feyerabend 1975), and while my purpose here is neither to provide a comprehensive catalogue of its perceived failings nor to test or counter every charge leveled against it, I would like to focus upon a couple of particularly problematic aspects of the theory so that I might advocate in my concluding remarks for an evolutionary description of conceptual change in the field of music scholarship that follows the model proposed by Toulmin. While Kuhn attempts to prove his hypotheses about conceptual revolution with reference to such major scientific shifts as heliocentrism and atomic theory, he mistakenly concludes that any type of disciplinary change will echo the “seismic shifts” engendered by these rather extraordinary examples of conceptual change. However, in looking for further instances of revolutionary shifts, his theory obscures, and actually misrepresents, the everyday practice of research. Kuhn alleges that in day-to-day, “non-revolutionary,” research, any research undertaken within a particular field will aim to preserve the integrity of that field by directing itself towards a single goal and by reflecting a common conceptual framework. In other words, he would assert that while different methodologies can coexist within a shared conceptual space, they can only do so if they are directed towards a common research objective (as, for example, the Schenkerian and set-theoretic methodologies, which can presumably coexist because each is designed to cull musical meaning from the text and therefore represent different approaches to a broader formalist agenda). Second, Kuhn argues that the appearance in a conceptual

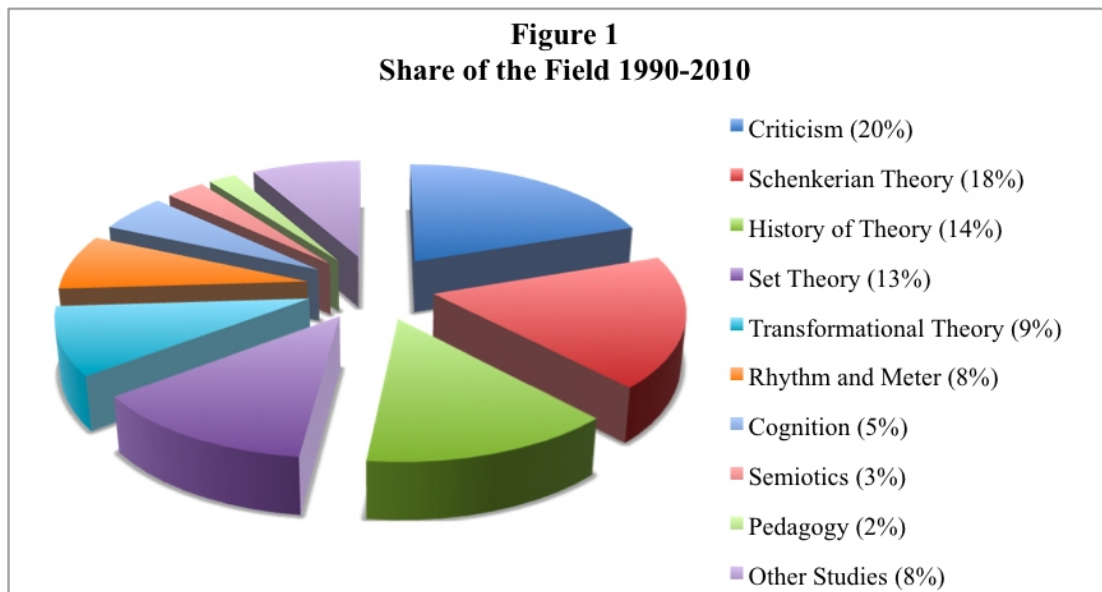
field of any alternative world view, embodied as a methodology whose perspective differs from that of the mainstream conceptual framework, will always represent a threat to the integrity of that field and will therefore spark a conceptual revolution. For example, the intrusion of “criticism and hermeneutics” in a field that was otherwise oriented towards “strict formalism” would represent a challenge by the former to the latter, the outcome of which would either be the replacement of formalist work by critical theory or the reassertion and reaffirmation of formalism as the dominant conceptual framework. In other words, research approaches whose objectives differ from each other cannot coexist peacefully in the revolutionary model.

These basic Kuhnian assertions, and the “revolutionary” narrative that they support, can be summarily debunked by an examination of the practice of research in music theory. My critique is supported by data collected from a twenty-year period in the history of music theory, and in particular from a sample of 171 articles drawn from such preeminent publication venues as the *Journal of Music Theory* (hereafter, JMT), *Music Theory Spectrum* (MTS), *Music Theory Online* (MTO), and *Music Analysis* (MA). My sample comprises each feature article published in 1990, 1995, 2000, 2005, and 2010 (in the case of MTO, whose inaugural issue appeared in 1993, the sample will begin with the 1995 issue). One exception to my five-year cyclic approach to data-collection is MA, where I substitute the 2009 issue for the 2010 issue, which had not been released by the time that the data for this study was collected. These journals were chosen over others in the field of music scholarship because they have tended to define the subfield of music theory to its practitioners and because the musical focus of each of these journals is perhaps broader than such alternatives as *Popular Music* and *Perspectives of New Music*, where theorists have also published widely. A similar kind of study of the field could have culled its data from other sources – dissertations in the field, conference papers, or books – but each of these poses its own challenges to the researcher: dissertations are often hard to obtain and may not be as widely read as journal articles; conference papers are often ethereal, unattainable in hard copy, and subject to revision; and book-length projects

present the researcher with a substantial amount of reading before conclusions about the field can begin to be drawn.

Some of the articles collected for the current study have been categorized according to the analytical methodologies that predominate within (these include Schenkerian and set-theory, transformational analysis, studies of rhythm and meter, and semiotics). To give a couple of examples, an article like “ic1/ic5 Interaction in the Music of Shostakovich” (MA 2009) would represent a study that uses set theory as its analytical tool, whereas the article “The Cadential Six-Four as Support for Scale-Degree Three of the Fundamental Line (JMT 1990) would represent a Schenkerian study. In cases where the article is not music-analytical in scope, categories are proposed to embrace other types of scholarly pursuits, such as pedagogy, cognition, and the history of theory. Examples of each of these include, respectively, the articles entitled “Pedagogical Applications of the Video Game *Dance Dance Revolution* to Aural Skills Instruction” (MTO 2010), “Entropy as a Measure of Musical Style: The Influence of A Priori Assumptions” (MTS 1990), and “Rameau and Zarlino: Polemics in *Traité de l’harmonie*” (MTS 2000). Some analytical studies in the data-set claim no overt allegiance to an existing methodology but, rather, propose their own unique solutions to the problems that they raise for study. These are grouped together under the rubric of “other studies” and include such essays as “Tolling Time” (MTO 1995) or “A Calculus of Accent” (JMT 1995). The largest category of articles in this study of the field comprises essays of a critical nature that deal predominantly with philosophical issues, aesthetics, or critical studies of music scholarship. These articles share as their common objective the quest for musical meanings from the relationship of music to other cultural artifacts, and either propose methodologies designed to assist in this quest (as in the study entitled “Gendering the Semitone: Fourteenth-Century Music Theory and the Directed Progression,” MTS 2005), demonstrate how these methods might be used (for example, “Recursive/Discursive: Variation and Sonata in the Andante of Mozart’s String Quartet K. 590,” MTS 2010), or critique the field in order to advocate for extra-musical meaning (as in “Compromise, Conflation, and Contextualization in English Music(ology),” MA 2000).

Figure 1 illustrates the degree to which each type of study is represented as a percentage of the entire data-set of 171 articles. What is immediately apparent, and what challenges the Kuhnian notion of a single reigning conceptual framework, is that through the twenty-year period that spans 1990 to 2010, the field has been populated by many types of research approaches whose scholarly objectives may or may not overlap. On the one hand, fig. 1 demonstrates the strong presence of “formalist” methodologies in the data-set, where Schenkerian, set-, and transformational theory represent 45% of the 171 articles that comprise the survey. On the other hand, the figure also illustrates a sizeable representation by musical criticism, which contributes 20% of the articles to the data-set and which represents the largest single body of scholarly literature within the set. Fig. 1 thereby suggests a degree of peaceful coexistence among methodologies in the subfield of music theory, which would belie the idea of competition for hegemony between “hermeneutics” and “formalism” and the narrative of “conceptual revolution.”



Perhaps more telling than fig. 1, however, is the yearly break-down of some of the predominant approaches represented in the sample, which serves to demonstrate their growth or decline over time and relative to one another. In a narrative of “conceptual revolution,” we would expect that the rise of “criticism and hermeneutics” would be matched by the decline of “formalism,” however this does not prove to be the case in

the articles that comprise this survey. In fig. 2, the recent history of three of the most popular “formalist” approaches (based on their representation in fig. 1) are juxtaposed against the history of critical theory, and the historical trajectory of each approach is represented from 1990 (the lowest bar in each cluster) to 2010 (the highest bar in each cluster). The data presented in fig. 2 represents the annual percentage of published articles in each area, calculated from the number of articles that use each approach in relation to the number of articles published in a given year. For example, out of a total of 42 articles published in the 2010 issues of the four journals polled for this survey, analytical studies that used the Schenkerian methodology totaled 4, or 9.5% of the total yield of articles in that year (see below).

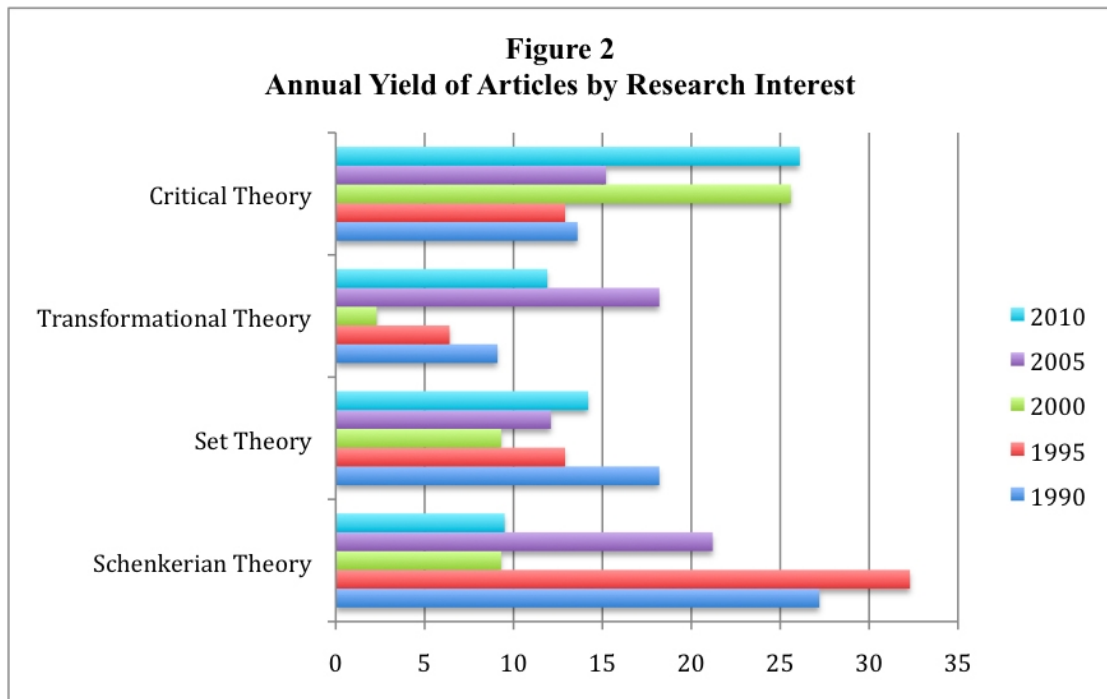
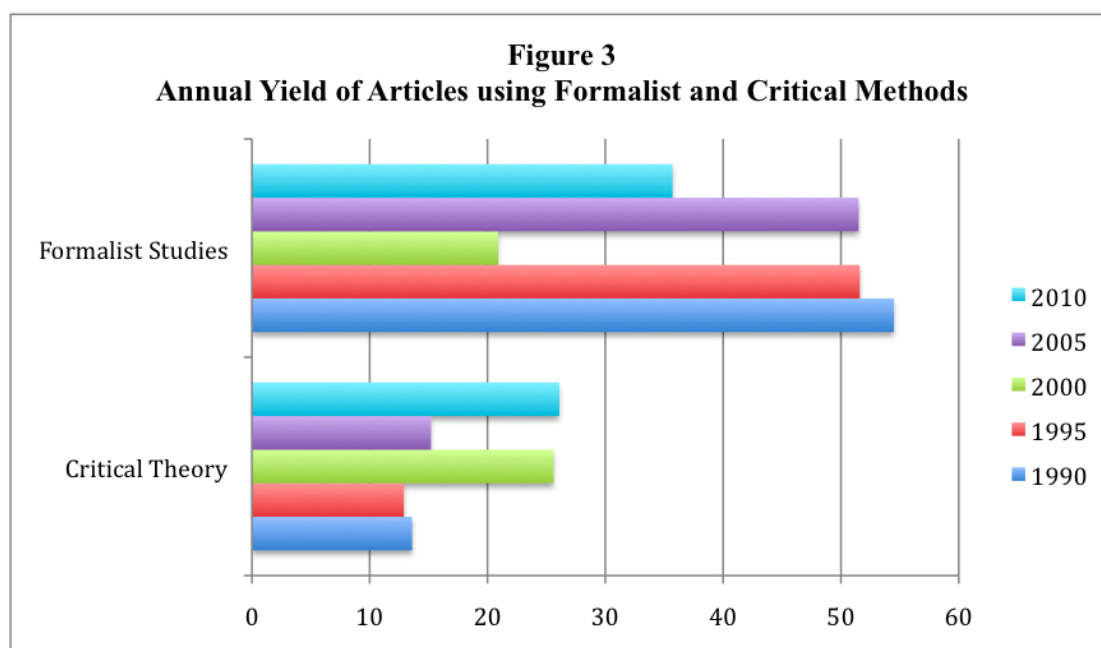


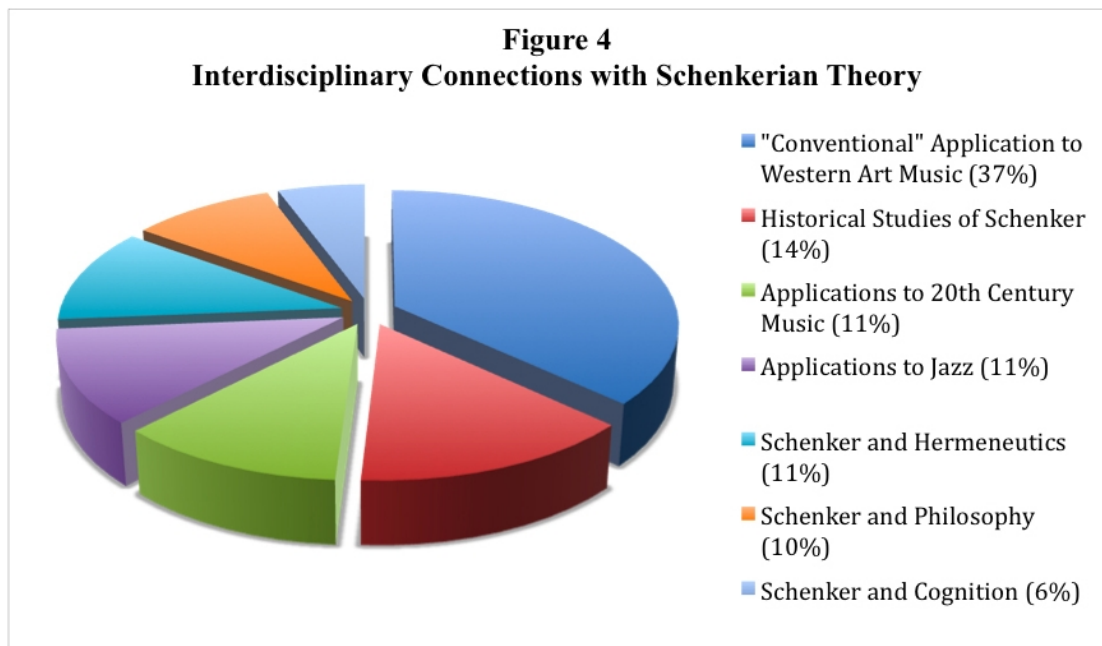
Fig. 2 demonstrates that while critical studies of music have gained ground steadily, rising from 13% of the data-set in 1990 to 26% by 2010, these advances have not led to the obliteration of “formalist” research, as a “revolutionary” narrative of conceptual change would lead us to expect. While it might be true, based on the current data, that the use of Schenkerian and set-theory appears to have waned in this survey of music-theoretical scholarship, these methodologies nonetheless continue to exert their influence over analytical research in certain circles and, when taken together, articles

that feature these two methodologies nonetheless represent 23% of the studies surveyed that were published in 2010. Moreover, one might speculate that transformational theory, a formalist approach to analysis that tends to lend itself to a similar repertoire as Schenkerian theory, has benefitted as much as critical theory from the apparent decline in the use of Schenkerian analysis, so that the weighting of formalist analysis within the sample can be said, in part, to have redistributed itself from one such methodology to another.

If we combine the three “formalist” methodologies represented in fig. 2 and compare their use in scholarly literature against “criticism and hermeneutics,” we discover that, as a conceptual framework, formalism continues to maintain a strong presence in the subfield of music theory, regardless of the methodology through which it expresses itself. In fig. 3, the proportional representation of Schenkerian, set-theoretical, and transformational studies are combined under the rubric of “formalism,” and their total numbers are compared to those of critical theory over the scope of twenty years. The figure shows that critical theory has yet to eclipse its formalist counterparts in terms of total representation within the field and, instead, appears to exist alongside the methodologies that it was meant to supersede, at least as Kerman and his followers predicted.



While the three foregoing charts provide a bird's-eye view of the coexistence of different conceptual frameworks in the field of music theory, and thereby disprove the Kuhnian assertion that the interests of scholarship are served best by the adoption of, and adherence to, one conceptual framework, I remain unconvinced that a disciplinary "split" like the one that I have artificially constructed for the purposes of argument truly captures the nuances of music scholarship as it is practiced "on the ground." One of the difficulties in the current study has been to categorize the many articles that appear to span two or more categories – in order to make these representative articles fit neatly into one of the categories of fig.1, I have taken the rather heavy-handed approach that I have merely looked at the methodology used in each case and categorized the essays from there. A more nuanced reading of the field would therefore require a closer look at that individual studies that comprise each category in fig. 1, both to determine what it means to practice scholarship under one of its ten rubrics and to show the variation of research that might emerge from each of these approaches. As a preliminary foray into what would admittedly be an immense undertaking, even with the limited studies examined here, fig. 4 looks more closely at one of the methodologies identified with music theory:



The sample features 35 articles that address Schenkerian theory, of which 31 are analytical (these have been used in fig. 1 to determine Schenker's 18% share of the data-set) and 4 of which are historical (and have therefore been added to the other studies that comprise the "history of theory" in fig. 1). As fig. 4 reveals, the essays that coalesce under the "Schenkerian" rubric are highly diverse, and the application of the methodology ranges widely in scope from Western art music (the repertoire for which it was "conventionally" designed) through jazz and modern music. Examples include such essays as "Modes, Scales, Functional Harmony, and Non-Functional Harmony in the Compositions of Herbie Hancock" (JMT 2005) and "Prolongation in the Music of Benjamin Britten," MTS 2010, respectively. Schenkerian theory has also yielded several hermeneutic essays, among which "Aspects of Sexuality and Structure in the Later Symphonies of Tchaikovsky" (MA 1995) and "Grief in 'Winterreise': A Schenkerian Perspective" (MA 1990) serve as examples, while other essays have examined the theory from a more historical perspective, as in the essay "Musical Form and Fundamental Line: An Investigation of Schenker's *Formenlehre*" (MA 1995). Other essays take a more philosophical view of Schenker, as in "Schenker's Value Judgements" (MTO 1995) or merge the methodology with cognition, for example the essay on "The Triad as Place and Action" (MTS 1995). What fig. 4 demonstrates more broadly is that the research approaches delineated in fig. 1 often overlap, so that while a study might invoke an analytical methodology that appears, on its surface, to derive from a particular conceptual framework, the degree to which this kind of characterization might be true requires us to look at each study in the data-set. The break-down of Schenkerian studies, for example, reveals that the assumed "formalist" mandate of the Schenkerian approach does not necessarily preclude fusion with approaches whose objectives may differ from those of Schenkerian analysis. The figure shows the versatility of the methodology in the face of research questions for which it was not originally designed, or, to use an evolutionary term, it shows the capacity of Schenkerian theory to "adapt" to, and to "fit," the ever-changing conceptual environment of music theory.

5. Making the “Shift” from a Revolutionary to an Evolutionary Conceptual Model

In the data examined here, it appears that “formalist” analytical approaches used in music theory scholarship, like Schenkerian theory, have adapted with relative ease to questions about the cultural context within which musical works are created and received, and also to questions about perception, pedagogy, and philosophy. This ability of a formalist method like Schenkerian theory to adapt to a changing disciplinary environment without recourse to the kind of upheaval associated with a conceptual revolution begs an observer of the field of music scholarship to consider the possibility that knowledge in the field has *evolved* during the time frame examined here, rather than to argue that the field has witnessed a “paradigm shift.” In other words, it challenges us to consider that a conceptual model premised on the principles of evolution might provide a better representation of conceptual change overall for the field of music scholarship. As Toulmin suggests,

[Kuhn’s theory assumes] the existence of discontinuities in scientific theory far more profound and far less explicable than any which ever in fact occur. (Toulmin 1970, 41)

Given the trends that emerge from the data-set presented in this study, it seems more reasonable to assert that conceptual change is incremental, rather than revolutionary, and that change arises out of subtle alterations to the disciplinary environments within which research methodologies exist. It might also be possible to show that an apparent change in a conceptual framework does not require scholars to discard existing methodologies if they can be made to adapt to their new and changing surroundings. And it might be likewise possible to imagine that the field of music scholarship, as the environment that sustains various species of research, is even variegated at the level of the conceptual framework, itself. In other words, we might consider that a field can be dominated by coexisting frameworks that complement each other, rather than cancel each other out, which is an idea that would be anathema to Kuhn.

To test these hypotheses about conceptual change, we might refer again to the data that I have presented in the preceding section of this essay. This discussion

accepts the basic premise that lies behind such critical comments as those offered by McClary when it proceeds from the assumption that the appearance of certain questions in the field that arise, in this case, from the desire to seek a cultural interpretation for musical works has had the effect of “transforming the field as a whole.” There can be little doubt that McClary’s work on gender, as one of many examples of interpretative research from the 1990s, has brought a perspective on musical scholarship to the field that did not exist prior to her arrival in that field, and we should not question or minimize the transformative significance of her work, or of the work performed by any of her critical contemporaries. Rather, it is the *nature* and *degree* of the transformation that I would like to address in these concluding comments.

McClary’s characterization of the critical observations of music scholarship in the 1990s “bringing on ... a paradigm shift,” and Abbate’s later claim that Kerman-style criticism aimed to trigger a “disciplinary revolution in musicology,” seems to be overstated in light of evidence drawn from the field of music theory. If we had, indeed, lived through a conceptual revolution of the magnitude, say, of the Copernican revolution presented by Kuhn as a typical example of conceptual change, we would have expected to see the abandonment of “strict formalism” in favour of “criticism and hermeneutics.” And if this was truly the case, an observer of research performed in from 1990 through 2010 would expect to see little (or no) effort devoted to the pursuit of meaning in the musical text and, rather, would anticipate that scholarship would construct musical meaning almost exclusively from the context of the composition or reception of that text. The data presented here foils such expectations because it demonstrates that scholars have relied, and continue to rely, upon analysis and interpretation for the readings that they construct for musical work, or, as Karol Berger has said there is “plenty of interpreting going on” by those who “continue to bring out critical editions” (or, in the case of music theory, who continue to appeal to formalist analytical methodologies). What the data suggests, then, is that like a natural environment to which it is compared in an evolutionary view of conceptual change, the field of music scholarship cannot be conceived

monochromatically as the expression of a single reigning conceptual framework, since this characterization of the field forces an either/or choice that cannot explain how anomalies might thrive in the field. Put differently, a field that is believed to be dominated by one world view (say, “formalism”) cannot explain the appearance of research that points to a different view (say, “hermeneutics and criticism”), particularly if the latter is used successfully to inform a reading that arises from the former (as we have seen in fig. 4). A more feasible explanation of the peaceful coexistence of analysis and interpretation arises from an evolutionary perspective. To draw the analogy to natural selection, we might argue that if two species of research merge and breed within a given conceptual habitat, the best characteristics of both will be retained by the next generation to ensure that each parent continues to survive vicariously through that offspring and to guarantee that the offspring will flourish in the field. The impulse felt by species of research to merge and to reproduce in this way will arise from the circumstances presented to these species in the field, whose challenges will force a methodology to adapt in any way possible or risk extinction. If, for example, a field that appears to lean towards a formalist perspective on musical meaning begins to entertain questions about the locus of meaning in the context of its reception, an existing methodology (say, a structural analysis of sonata form) can adapt to these questions by pairing with another methodology (say, literary analysis). Similarly, a field that appears to seek meaning in certain pitch structures (expressed, perhaps, as referential collections) can also posit broader cultural meanings for those structures (perhaps as they reflect the state of mind of a particular composer) through a merger with a methodology designed to facilitate that type of reading. If we accept that research practices are in a constant state of flux as they adapt to an ever-changing conceptual environment, we can finally bring the discussion full-circle to Dubiel’s remarks about the most recent trend towards analysis in music theory, in which he describes current and growing scholarly interest in transformational theory as a “shift in the discipline’s conception of its methods [and] goals.” Where a Kuhnian reading of the field would be at a loss to explain what he means by a “shift,” and could only account, albeit implausibly, for the appearance of transformational theory in the field

as a “shift back” to a conceptual framework that had presumably been abandoned during the supposed “disciplinary revolution” of the 1990s, a conceptual model based on evolutionary principles would never be required to admit a “shift back” because it perceives the field as fluid and ever-changing. The implication in Dubiel’s statement is not that we have “shifted back” but, rather, that the conditions that characterize the environment within which we currently perform research represent a shift in and of themselves. And this shift in the field has made conditions favourable for the methodologies that are currently adopted and employed for research in the field of music scholarship. At the same time, and once incorporated into the field, those methodologies will also be subject to modification as they are forced to adapt to changes in their conceptual environment.

References

- Abbate, C. (2004). “Music—Drastic or Gnostic?” *Critical Inquiry* 30, 505-536.
- Berger, K. (2005). “Musicology According to Don Giovanni, or: Should we Get Drastic?” *The Journal of Musicology* 22 (3), 490-501.
- Feyerabend, P. (1975). *Against Method: Outline of an Anarchistic Theory of Knowledge*. London: New Left Books.
- Forte, A. (2000) “Response to Patrick McCreless”. *Music Theory Online*. 6 (3).
- Goldenberg, Y. (2006) “*Journal of Music Theory* Over the Years”. *Journal of Music Theory* 50 (1), 25-63.
- Hanninen, D. (2009). “Species Concepts in Biology and Perspectives on Association in Music Analysis”. *Perspectives of New Music* 47 (1), 5-68.
- Kuhn, T. (1962). *The Structure of Scientific Revolutions*. 2nd edition. Chicago: University of Chicago Press.
- Lakatos, I. and Musgrave, A. (eds.). (1970). *Criticism and the Growth of Knowledge*. Cambridge: Cambridge University Press.
- McCreless, Patrick P. (2000) “Music Theory and Historical Awareness”. *Music Theory Online* 6 (3).
- McClary, S. (1991). *Feminine Endings: Music, Gender, and Sexuality*. Minneapolis: University of Minnesota Press.
- Popper, K. (1972). *Objective Knowledge: An Evolutionary Approach*. Oxford: Oxford University Press.

Rings, S. (2006). "Review: *Generalized Musical Intervals and Transformations* by David Lewin, *Musical Form and Transformation* by David Lewin, *Studies in Music with Text* by David Lewin," *Journal of Music Theory* 50 (1), 111-127.

Spitzer, M. (2005). "Tovey's Evolutionary Metaphors". *Music Analysis* 24 (3), 437-469.

Toulmin, S. (1972). *Human Understanding: The Collective Use and Evolution of Concepts*. Princeton: Princeton University Press.

Toulmin, S. (1970). "Does the Distinction between Normal and Revolutionary Science Hold Water?" In: Lakatos, I. and A. Musgrave (eds.), *Criticism and the Growth of Knowledge*, Cambridge: Cambridge University Press, 39-48.