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"How Does It Work?": Challenges to Analytic Explanation

JUDY LOCHHEAD

Charles Dodge's *Any Resemblance is Purely Coincidental* poses a challenge to a musical analyst seeking to explain "how it works." For piano and computer-generated tape, including a sample from the famed tenor Caruso singing Leoncavallo's "Vesti la giubba," Dodge's piece challenges notions of what counts as the work's structural elements and how the analyst gathers evidence about them. The article proposes an analysis of *Any Resemblance* that addresses these challenges.

Keywords: Charles Dodge, Enrico Caruso, Quotation/Sample, Historicism, Postmodern Philosophy

Charles Dodge's *Any Resemblance is Purely Coincidental* (1980) poses a serious challenge to a musical analyst who seeks to explain "how it works." The composition entails performance parts for an acoustic piano and tape, the latter consisting of electronic sounds and a computer-transformed sample of selected passages from a 1907 recording of the famed tenor Enrico Caruso singing the aria "Vesti la giubba" from Leoncavallo's *Pagliacci*. The analytic challenge has two dimensions. First, the score of *Any Resemblance* represents the sounds of the piece in several different ways. The written music exists as a performance part for the live performer and consists of standard notation indicating what the pianist should play. It also includes "cues" for music on the recorded part that range from standard notation for the quoted vocal and orchestral parts to linguistic descriptions of sounds heard on the tape, such as "voice with reverb and electronic sounds." Since the score does not represent all sounds of the piece as a potential sounding presence, the analyst can not rely on it alone as a record of sound design. Second, since *Any Resemblance* incorporates a quotation and manipulation of pre-existing music, an analytical focus on pitch and rhythm would lead in part to the compositional design not of Dodge but of Leoncavallo. Analysis could focus on Dodge's integration of original and borrowed pitch design, but this would require a prior aesthetic judgment that such integration is *the* or even *a* significant feature of musical design. The challenges posed by *Any Resemblance* are considerable but need not lead to an assessment that the work is un-analyzable.[1] In principle any piece of music—irrespective of how its score represents sound or whether it even has a score—should be a potential subject for analytic understanding.

The issue of *how it work*s, which I take here as defining very broadly the analytic project, comes from Ian Bent's extended essay on analysis that first appeared in the *New Grove Dictionary* in 1980.[2] Written for the purposes of an encyclopedia, Bent's essay is a good indicator of predominant

1 Cone 1967 comes close to declaring some music "un-analyzable" in "Beyond Analysis," where he argues that the determinism of serial music and the indeterminacy of chance music thwart the goals of analysis. And Stroppa 1984 declares that electro-acoustic music with no score may not be analyzed since no visual markers of compositional design exist.

2 Bent's essay was printed in book form in 1987 and then updated in the most recent edition of the *New Grove Dictionary of Music and Musicians*, including the online version, *Grove Music Online*, which was

attitudes in the late 20th and early 21st centuries toward the analytic project. These attitudes are revealed in the account of what constitutes an adequate explanation.[3] In the most recent version of the essay, the opening paragraph defines analysis as "the interpretation of structures in music, together with their resolution into relatively simpler constituent elements, and the investigation of the relevant functions of those elements."[4] "Structures" and their "constituent elements" are purposefully undefined since these will vary according to analytical method, but the analytic process itself depends on the "determination" and "comparison" of "structural elements."[5] Later discussion in the article suggests the kinds of things that both do and do not constitute "elements." On the positive side, elements are "phrase-units, harmonies, dynamic levels, measured time, bowings and tonguings, and other technical phenomena."[6] On the negative side, analysis deals with the musical "phenomenon itself rather than external factors (such as biographical facts, political events, social conditions, educational methods and all the other factors that make up the environment of that phenomenon)."[7]

The analytic challenge posed by *Any Resemblance* leads eventually to the question of what kinds of things constitute a structural or constituent element and to the issue of what is analytically excluded in Bent's formulation. An understanding of *how it works* would be incomplete, at the very least, without consideration of the musical functions of the Caruso/Leoncavallo quotation. But the quotation as a historically-marked sounding phenomenon encompasses more than features of pitch, rhythm, timbre, dynamics—it inhabits the excluded area considered *external* to the *music itself*. So, if we are to engage *Any Resemblance* in a dialogue of analytical understanding, the issue of what constitutes a structural element will need refiguring with respect to what is included and what excluded. The motivating question of analysis—*how does it work?*—remains viable in a very general way, but its underlying assumptions need interrogation and reforming. Specifically, I will focus on assumptions about what constitutes a structural element, what counts as evidence for it, how structure is represented, and for whom structure is manifest.

My interrogation and call for reformation are prompted by the sense that analytic practice devalues the music it cannot address, but it is not an indictment of analytic understanding generally. Music analysis has, of course, been the target of other sorts of challenges in the last 25 years. Since 1980 the practice of music analysis has been subject to a wide variety of criticisms: its a-historicism from Joseph Kerman, its inattention to phenomenological detail from Leo Treitler, its unacknowledged inscription of ideological and aesthetic preferences from both Kerman and Treitler, and its structuralist methodology from Gary Tomlinson and Susan McClary.[8] I offer a different sort of critique here, a critique motivated by the conceptual failure of analysis, as it has been defined and practiced in the last half-century, to address or illuminate a wide variety of post-war music which itself has challenged mid-century notions of musical structure. While not directly founded on these prior critiques, the one offered here has a philosophical kinship with them; my critique, like those of Treitler, Tomlinson, and McClary in particular, grows out of various late-20th century philosophies, including postmodern perspectives from post-structuralist and post-phenomenological thought.

co-authored with Anthony Pople. The phrase occurs in Bent 1987, 5 and in Bent/Pople 2004, I.2.

3 I do not consider Bent the "creator" of the analytic paradigm he formulates; however, it is also true that such formulations do play a role in shaping practice.

4 Bent/Pople 2004.

5 Bent/Pople 2004, I.2.

6 Bent/Pople 2004, I.1.

7 Bent/Pople 2004, I.2.

8 The pertinent articles are Kerman 1979, Treitler 1980, McClary 1988 and Tomlinson 1993.

My concerns are not unique and resonate with other scholars within the field of music theory for whom a concept of structure has chafed in various ways. For instance, while posing a distinction between structure and expression, authors employing a semiotic approach to analysis address questions of musical meaning. Attempting to get at a musical significance that transcends technical details of structure, authors such as Robert Hatten and Kofi Agawu understand their approach as more broadly interpretive.[9] From a somewhat different perspective, Kevin Korsyn points out that analysis, in its focus on establishing the unity of a work through demonstration of its "grammar and logic," has typically failed to address "a plurality of events outside the text." Interested in qualities that transcend technique, Korsyn calls for a rethinking of the "objects" of analysis.[10] In a more explicit meditation on structure as conceptually problematic, Joseph Dubiel argues that the term directs attention to the "constructedness" of how a musical thing "sounds."[11] The word "sounds" in this context refers to the effects created by the musical details, and for Dubiel analysis of structure is a way to take account of those phenomenal characteristics.[12]

Like all of the authors discussed in the previous paragraph, I claim that analysis must address those effects or meanings that embody the musical details and give music its power. And, like Korsyn and Dubiel, I argue that a productive critique of analytic practice must be directed at notions of structure and the things that are the object of analytical scrutiny. So, I begin with the elemental—with what we often take as the irrefutable facts of musical reality. In his essay on analysis, Bent frames the idea of the basic element around technique—as quoted earlier these elements include "phrase-units, harmonies, dynamic levels, measured time. . . ."[13] The term "technique" refers to basic- or mid-level theoretical concepts, but in this context it has a wide range of meanings. It encompasses performance (e.g., the violinist's technique) as well as composition (e.g., orchestrational technique). Bent's list includes concepts that refer to the making of music (either performance or composition) and to fundamental aspects of musical understanding.[14] While in principle there is nothing that precludes the possibility of a *technical* understanding of how the quotation as historically marked works in *Any Resemblance*, the idea of such an understanding strains against what is typically included in the category of technical phenomena or what was earlier termed a structural element.

Within the dominant paradigm of music analysis, the kinds of things typically considered technical bear the traces of philosophical distinctions between primary and secondary qualities of objects. In this distinction, first clearly articulated by the 17th-century Empiricist philosopher John Locke, the only "real" properties of objects are their "solidity, extension, figure, motion or rest, and number." The secondary qualities are "not in the object themselves, but powers to produce various sensations in us. . . ."[15] In a musical context, the properties of sound that have typically been suitable for analysis are those technical features that not only have a strong visual presence in a musical score (giving the impression of a

9 See Hatten 1994 and Agawu 1992.

10 Korsyn 2001 [1999], 59 and 64.

11 Dubiel 2004, 173.

12 This paragraph mentions only a few of the authors who have participated in this critique of music analysis from within the field of music theory. A few of the others include Cook 2001, Cumming 2000, Guck 1994, Maus 2004, and Subotnik 1996.

13 I use the term "frame" here since the quoted passage occurs in a comparative discussion of analysis and criticism, not in a more generalized discussion. Nonetheless, the passage clearly indicates what kinds of things count as the "data definable elements"—to use Bent's terms. See Bent/Pople 2004, I.1.

14 In separating out understanding from composition or performance here, I do not mean that concepts of understanding play no role in creation or recreation or that ideas of production play no role in understanding. They are indeed closely intertwined. A full discussion of these issues would take me too far afield for present purposes. I have developed some of these issues in Lochhead 2002 and 1998.

15 Ihde 1976, 13, quoting Locke 1969, 67.

greater objectivity), but also point toward compositional technique. Those features that, in the dominant paradigm, have in practice been "unsuitable" for analysis are the *external* aspects, features that go beyond "the phenomenon itself."[16] These external features, like Locke's secondary qualities, are associated with sensation and subjective apprehension.

Beginning in the early years of the 20th century, the philosophical critique of the strong distinction between primary and secondary qualities and the correlated split between object and subject has been most forceful and productive since the 1970s. Some relevant examples in this context include Roland Barthes's essay "The Grain of the Voice," which meditates on the central significance of sonic qualities that fall within the domain of musical timbre. For Barthes, the *grain* of the voice *signifies* not conceptual meaning but a meaning associated with sensations of pleasure and of pain.[17] Don Ihde, in *Listening and Voice*, demonstrates how sonic quality plays a role in spatial awareness, noting how sound informs a sense, for instance, of room size and shape, surface texture, and directionality.[18] And Maurice Merleau-Ponty, articulating a theory of how the senses intercommunicate in perception, writes in *The Phenomenology of Perception* about the "hearing of colors" and the "sight of sounds."[19]

These authors articulate domains of musical and sonic significance that in the dominant paradigm of music analysis would be understood as external to the sonic event per se. For Hatten and Agawu, these are the "expressive" meanings of music, for Korsyn the "plurality of things outside the text," and for Dubiel the "sounds" of musical things. The opening of *Any Resemblance* makes explicit the need for a dismantling of the external/internal opposition. Imagine the opening 42 seconds of *Any Resemblance,* which the following sound description is meant to invoke:[20]

> A beating, noisy sound begins, reminding you of an old scratchy analog record in the few seconds before the music begins. Then, a muffled chord occurs, but it is hard to tell what instruments are producing the sound. The chord almost sounds like it is produced by an organ. Then, the voice comes in, recognizably that of Enrico Caruso, singing the famous opening recitative passage from "vesti la giubba." At the word "Eppur," the noisy background of the old recording vanishes, leaving a cleaner, less noisy background. Then a piano enters, playing a sequence of recitative-accompaniment chords based on Leoncavallo's music.

In some senses, the *music itself* of the opening of *Any Resemblance* may be accessed through Leoncavallo's score, as cited in Example 1. But the "facts" of this music include more than the chord progression or the melodic contour. The fundamental elements of the passage comprise, among other things, the scratchy record, the old recording quality, the fame of Enrico Caruso whose voice is enacted for contemporary audiences solely through recordings.

The historical facets of the *music itself* raise issues not only about what kinds of things constitute structural elements but also about how the analyst produces evidence for them if they have no visual presence in the score. Example 2 cites the opening five measures of *Any Resemblance*. While the title page of the piece indicates that it is "based on an old acoustic recording of the aria 'Vesti la giubba' by Ruggiero Leoncavallo," the notation of the *music itself* gives no visual signs of a scratchy recording, the identity of the singer, or the nostalgia associated with the sound of such historic recordings.[21] Evidence for these elements of the music lies solely

16 Bent/Pople 2004, I.2

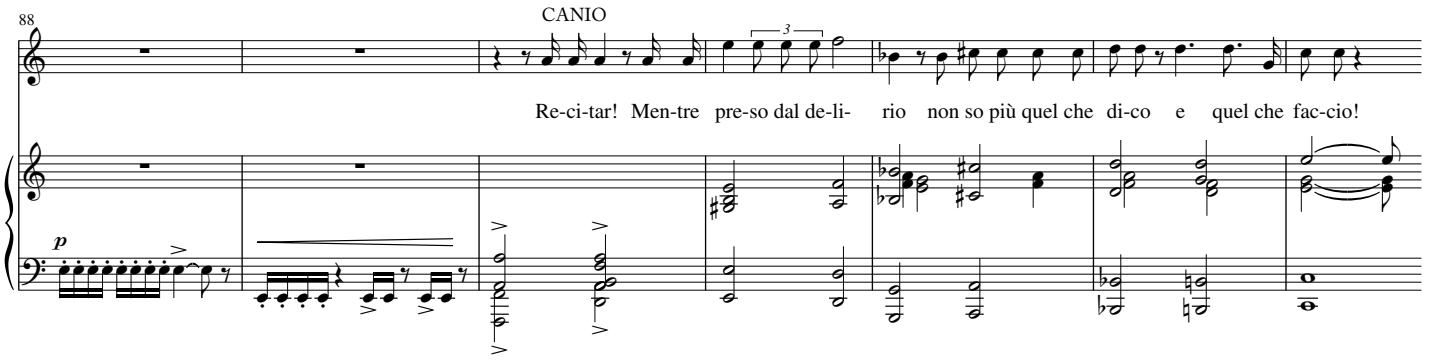
17 Barthes 1988 [1977].

18 Ihde 1976.

19 Merleau-Ponty 1978 [1962].

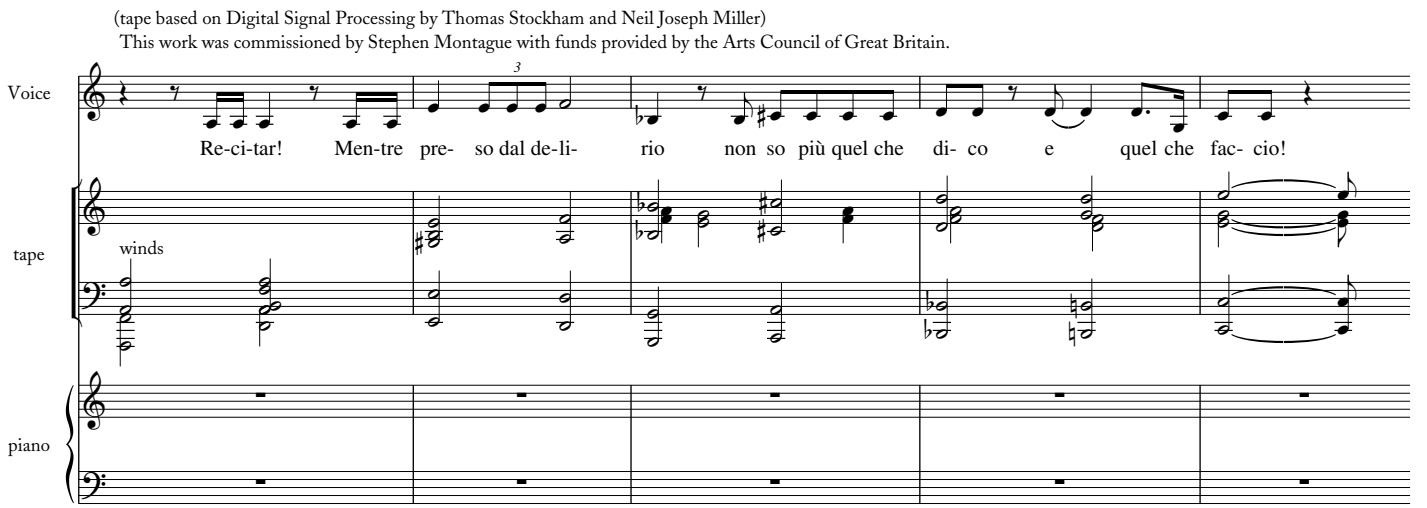
20 The analytic challenge of *Any Resemblance* is not only conceptual but also practical. Print journals are premised on the availability of a score. Here I use a sound description as a way to conjur up the sounding occurrence and hence address the practical problem. I urge the reader to listen to the opening 42 seconds of the piece. See Dodge 1992.

21 The program notes accompanying the CD identify Caruso and the engineers responsible for extracting the vocal part from the recording of



EXAMPLE 1. *Mm. 88–94, Recitative to "Vesti la giubba," Pagliacci. Vocal Score.*

I Pagliacci by Ruggiero Leoncavallo
Edited by J. Machlis



EXAMPLE 2. *Mm. 1–5, Any Resemblance is Purely Coincidental. Permission granted by composer to reprint selections of the score.*

within the domain of experience—that of the analyst as subjective listener.[22]

The dismantling of the distinction between primary and secondary qualities in philosophical thought has been accompanied by reflection on the nature of experiential evidence and its relation to subjectivity. Joan Scott, writing from the perspective of historical epistemology in "The Evidence of Experience," argues that the experience of individuals provides not the "authoritative . . . evidence that grounds what is known, but rather that which we seek to explain, that about which knowledge is produced."[23] In the present analytic context, I take my experience of the historicism of the work as a significant constitutive element about which I produce knowledge of *Any Resemblance*, questioning not only how such experience arises and how it relates to that of others but also how the flow of musical sound shapes structural meaning. Several kinds of questions about the piece arise from such an epistemological stance: what kinds of musical and social significance does the historical figure Caruso have in early 21st-century musical culture? What kind of significance does the older technology of the opening have as a "subject" of the piece? What kind of effect does the recorded/live (in performance) or old recording/new recording (on CD) juxtaposition create when the piano enters with its recitative-accompaniment chord? These questions allude to the rudimentary features of the music—for instance, Caruso-as-famous-historical-singer, old-technology, old-recording/new-recording—that are the constitutive elements of the piece, the things on which analytic explanation will focus.

The received analytic tradition would typically exclude such features from its purview on the grounds that these are not in the *music itself* and not something about which one could determine technical phenomena. In other words, the historicism of the piece cannot be deemed one of its facts. The historian Mary Poovey provides some insight into what kinds of things may or may not be considered facts in her recent *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society*.[24] Poovey argues that the "modern fact" first arose in conjunction with the epistemological framework set in place during the scientific revolution and was articulated within Empiricist philosophy of the 17th and 18th centuries. In its various contemporary manifestations as "data" and "information," such facts are understood as "epistemological units" that do not bear the mark of theory or any kind of interpretation.[25] Poovey shows in particular how numbers have been taken in modern times as a transparent representation that "seem preinterpretive or even somehow noninterpretive."[26] Such transparent epistemological units then are interpreted by theory, which may be shown to be right or wrong depending on how well the theory captures the facts. She traces the emergence of the modern fact to the practice of double-entry bookkeeping in early modern Europe, in which credits and debts were depicted in different columns, in order to show systematically the order and profitability of mercantile trade, and were separated from any narrative interpretation. This mode of representation provided a perfect model for modern scientific and philosophical thought which posited a distinction between observable particulars and theoretical interpretation. Poovey's larger point is to demonstrate that facts and theory together produce knowledge and are co-constitutive. Further, she asserts that modes of representation not only "embody or artic-

the aria: "The computer extraction of the Caruso voice from its original setting was accomplished at the University of Utah by Professor Thomas Stockham and his student Neil Joseph Miller." See Dodge 1992.

22 Below I take up the issue of the analyst's engagement with musical notation, making the point that even more typical types of analytical work rely on experiential evidence gained from reading that notation.

23 Scott 1991, 779–80.

24 Poovey 1998.

25 Poovey refers to "facts" as "epistemological units" throughout her book.

26 Poovey 1998, xii.

ulate available ways of organizing and making sense of the world" but also "inform what we can know."[27]

While Poovey's focus is on "the sciences of wealth and society" in early modern Britain, her observations have a bearing on the practice of music scholarship. In a music analytic context, fact-like epistemological units arise through the "resolution" of the music "into relatively simpler constituent elements" that are "definable" in "technical" terms. The analyst then "investigates" the "function" of the fact-like units with respect to "structure."[28] In received analytical traditions, the fact-like elements have presence through visual apprehension of the score; their observation depends on and helps to articulate knowledge of music's technical creation. But, as Poovey would point out, the things that are constituted as musical facts already bear the marks of a prior theoretical context that determines the possibility of their observation as facts. In *Any Resemblance*, production of facts about the music that will lead to valid analytical observation is challenged both by the Caruso/Leoncavallo quotation and by the absence of visual representation of musical organization for the electronic sounds. In order to overcome this challenge, the analyst must turn to experiential evidence as "that about which we produce knowledge"—to use Joan Scott's phrase.[29]

The turn toward explicit reliance on experiential evidence for the facts of a piece of music raises an issue regarding the validity of such evidence that can be separated into two parts. One has to do with whether any experiential evidence can be deemed unbiased and hence valid, and the second with the question of whether the experience of one person—the analyst—can have any truth value for others.

Analytic observation of musical phenomena that have no visual referent in the score is often accused of subjective bias. Such charges have a basis in the hard distinction between objectivity and subjectivity that defines modern philosophical thought and is a centerpiece of the scientific method. A series of mid-twentieth century philosophers offered a forceful critique of the "very possibility of objectivity," as Hilary Lawson points out in *Dismantling the Truth*.[30] Staking out a postmodern position on the nature of truth (that does not rely on an independent, objective world), these philosophers claim that the world is accessible to us only through our bodily interactions. Thus, our understanding of it is always mediated by human intervention. Experience, as the site of such mediation, provides access to human understanding, which has validity and hence truth.

As Lawson argues, truth in this postmodern view does not refer to an objectively existing world, but rather to a framework of understanding whose validity is contingent on history, culture, training, and other such matters of context. Once we accept the validity of experiential evidence for analysis, another sort of question arises having to do with whose experience is authorized and for what purpose. If the stated goal of analysis is to explain *how does it work*, then we must ask: work for whom?

Stated more fully, the question of *for whom* is this: since an analysis is authored (typically) by a single person and records that person's hearing of how the piece works, what kind of relevance does the analyst's hearing have for others? Over the last 25 years, three main types of claims for authority have characterized music analysis. Treitler argues for a historicized analytical understanding for past music that attempts to reconstruct some of the conditions of musical creativity in which the composer worked, while recognizing the impossibility of complete reconstruction of the past.[31] The analyst crafts an analysis using tools and concepts forged in

27 Poovey 1998, xv.

28 In the preceding two sentences, the words in quotation are taken from the Bent/Pople article and are quoted in context on p. 2. In all instances I have retained the meaning of the terms in context.

29 Scott 1991, 779–80.

30 Lawson 1989, xi. Lawson identifies the work of Wittgenstein, Derrida, Foucault, and Rorty as central to the critique of modern philosophical notions of objectivity and subjectivity.

31 Treitler 1982.

past practices, and the analyst's hearing is authorized by its claims to reconstruct partially the way others in the past, including the composer, may have heard the work. Contrary to this historicized notion, Lawrence Kramer adopts what he calls a "hermeneutical" strategy in which the analyst relies on relatively recent critical and analytical tools to fashion analytical interpretations of music—typically historical music.[32] By using tools and concepts forged in the present, the analyst posits a hearing relevant to contemporary listeners, sanctioning her/his analysis as a possible or even ideal hearing. This hearing assumes its authority as an instance of knowledge building in the present. Lerdahl and Jackendoff take another approach that is based in Chomskian notions of human cognition.[33] Their theory and its attendant analytical method claim to capture fundamental and hence absolute features of human hearing. Since an analysis reveals the way a piece of music conforms to the fundamental features of musical understanding, this hearing is authorized by the basic cognitive assumptions of the theory.

In these three instances, the analyst's hearing is authorized as part of the process of building knowledge about musical understanding no matter whether its import is historical, present, or absolute.[34] The model of analytical understanding I propose here is most similar to that of Kramer in that it builds knowledge about present-day musical practices using contemporary concepts. It differs in the degree to which my model takes musical experience as a source of analytical evidence, but the way it authorizes the analyst's hearing is not different.

In works such as *Any Resemblance*, for which the constituent elements lack an explicit visual referent, more attention is drawn to the "author" of analytical observation. Occurring either because there is no score, or because it incompletely denotes sound, or because the analyst chooses not to use it, the lack of a visual referent does not change the general conditions or goals of analytical understanding. However, that the lack of a visual referent in a music analytic context should create analytical anxiety is itself worthy of our critical attention. While music is an essentially aural phenomenon, visual signs have served various significant functions for music making and musical thought. Notation is for the most part a practical tool structured around the needs of performers and composers. Through its visual symbols, it makes material the conditions for the creation of particular musical occurrences. Music notation is also used by music analysts for the purposes of providing access to the *music itself*. In this context the notation makes material the organization of a musical work. And it plays a strong role in determining what counts as a *constituent element.* Like other representational systems, however, music notation does not completely reflect a musical reality. In its primary role as a tool for performers and composers, notation functions like a recipe: it specifies some things precisely, implies other things, and leaves some features open for interpretation. Music analysts read notation in ways similar to performers, but there is a tendency to restrict analytic observation to those musical things that have a specific visual correlate since they provide evidence which is understood as more objective.

If, as in the case of *Any Resemblance*, the things I want to count as the musical facts of the piece have no visual presence or trace in the notation, then an alternate representational practice must be employed to make them material in some way. Here I will exemplify a possible representation of *Any Resemblance* in the form of "maps." Such maps capture visually the significant sonic features of the piece as they

32 Kramer 1992. Christensen 1993 makes similar observations in his article "Music Theory and its Histories," distinguishing "historicist" from "presentist" approaches to the practice of music theory and analysis. Christensen suggests a "hermeneutic" approach as a corrective to these two conceptual poles, understanding hermeneutics in a slightly different way than Kramer.

33 Lerdahl and Jackendoff 1985 [1983].

34 While not central to the issue here, it is worth observing that analytical hearing is always mediated by some conceptual framework—whether musical or generally interpretive—which plays a role in shaping both what and how musical facts are observed.

occur in experience—my experience. The maps are meant neither to represent a single hearing of the work nor to determine a single way to hear the piece. Rather, they are exemplars of an analytical understanding of Dodge's piece from my perspective as a scholar who would address *how it works*. The maps are not so unlike Schenkerian graphs in their attempt to picture music through visual concepts. Unlike such graphs, these maps do not utilize any standard notational symbols since these are inadequate to the task of representing the historicism of the work. And while the maps do not reflect a prior theory or methodology that determines the observational outcomes, they are not the preinterpretive data of *Any Resemblance*. I'll return to the issue of a prior observational context in my concluding remarks.

REPRESENTING THE CONSTITUENT ELEMENTS OF *ANY RESEMBLANCE*

Example 3 is a descriptive map of the piece that I made using a recorded performance of it in conjunction with study of the performance score.[35] The map is descriptive in the sense that it represents what happens, but at the same time the task of visual representation requires an engagement with musical sound that is conceptual and hence analytic. In other words, the descriptive map actively constitutes the *elemental* layer of the analysis. As the *factual* layer of interpretation—the first epistemological layer—it does not offer exhaustive detail about what happens but already reflects analytical choice.

The bottom row of the Descriptive Map shows time in minutes and seconds, with temporal indications only at the beginning of significant events.[36] The six remaining rows show structural categories determined by the historical and timbral status of sonic events. These categories are event-layers that indicate strands of both continuity and difference. Example 4 gives brief descriptions of these structural event-layers, indicating the characteristic features of each.

Within each row of the Descriptive Map, events are labeled with terms that capture some defining aspect. For instance, "Scratchy Record" refers to the white noise hum and muffled quality of an old recording. "E duopo" refers to the words that Caruso sings from the Leoncavallo aria. "Recit chords" suggests that the piano chords function as in a recitative-like operatic passage. Example 10 cites the text and translation of the aria. "Laugh" at 0:30 refers to a sampled Caruso laugh and the following "Cad 1" refers to a cadence passage, the first such in the piece, whose closing characteristics are transposed to *Any Resemblance* as a stylized ending gesture. At 0:44 and 1:47 the phrases "Recitar Motive" and "Laugh Motive" indicate events in which motives from the Caruso sample—from the word "Recitar" and the "Laugh"—are developed in an extended passage. Most of the other event designations are similarly referential except perhaps the description of "Lisztian" accompaniment at 6:17. There the piano plays a Liszt-like piano passage as accompaniment, the stylistic descriptor taken from Dodge's score instructions for the pianist.[37]

The designation of events according to the historically and timbrally marked event-layers already bears the theoretical marks of a framework of understanding specific to *Any Resemblance*. The structural categories are empirical constructs that, together with the observed events within each, establish the factual level of analysis. These categories and their events constitute, in Paul Ricoeur's terms, a "first-order understanding" upon which "explanation" is built.[38] The categories of the Descriptive map of *Any Resemblance* constitute

35 It is also worth noting that I have heard and seen several live performances of the *Any Resemblance*. See Dodge 1992.

36 Timings are taken from the recorded performance.

37 The exact phrase from p. 15 of Dodge's score is: "ad lib (in the style of a Lisztian transcription)."

38 Ricoeur 1976, 367. The "explanatory" maps offer explanation in the sense that Ricoeur promotes in his work on interpretation. For Ricoeur, explanation is fundamentally an interpretive activity.

EXAMPLE 3. *Descriptive Map of Dodge, Any Resemblance is Purely Coincidental [part 1]*

Old Recording	Scratchy record–voice and orchestra
Old music: Caruso	é duopo Laugh Cad. 1 // Cad. 1 Laugh Cad. 1
Old music: Piano	Recit. Chords Cad.1 // Cad. 1 Cad. 1
Old music transformed: Caruso	Recitar Motive Laugh Motive
New music :piano	Recitar Motive Laugh Motive
Electronic Sounds	
Time	:00 :22 :30 :32 :44 :47 1:47 1:54 1:57 2:00 2:29

EXAMPLE 5. *Explanatory Map: Historical/New and Electronic/Acoustic Oppositions [part 1]*

Historical(H)/New(N)	H...+H...NN..............................HH..................NN..HH............................ ..
Electronic(EL)/Acoustic(AC)	EL...AC...ELAC..........................AC..................ACEL..AC...........................

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EXAMPLE 3. *continued [part 2]*

Old Recording	
Old music:Caruso	Vesti la..............................
Old Music: Piano	Accmp.Chords // Pedal down* Accmp. Chords.......................................E se Arlecchin.. Cad .2
Old music transformed: Caruso	E se Arlecchin--Reverb Cad.2 Vesti la...-Reverb.................... Cad.2 Recitar Motive
New Music: piano	Recitar Motive
Electronic Sounds	High pitch/reverb .... High pitch/reverb..
Time	2:42 2:47 3:08 3:26 3:28 3:32 3:52 4:10 4:12 4:14

EXAMPLE 5. *continued [part 2]*

Historical/New	H..............+H...NN*...............................N..........HN...........HNN......................................HN.................................. HN...........NN...............................
Electronic/Acoustic	AC............AC...EL(*)......................... EL........ACEL........ACELEL..............................ACEL..............................ACEL........ACEL.......................

EXAMPLE 3. *continued [part 3]*

Old Recording												Scratchy Record-Coda
Old music:Caruso	. Tramuta...								Tramuta.....Ridi Pagliaccio		Cad. 4	
Old Music: Piano									Accomp	Lisztian Accp.	Cad.4	
Old music transformed: Caruso			Tramuta..Reverb.		Tramuta--Frag.		Laugh Motive--Fast→ Dying					
New Music:piano	Cad.3 Pedal down* Cad..3						Laugh Motive--Fast →Dying					
Electronic Sounds			High Pitch/reverb //									
Time:	5:11	5:13	5:22	5:24	5:33	5:35	5:43	5:46	5:55	6:17	6:41	6:48

EXAMPLE 5. *continued [part 3]*

Historical/New	N.....H*.....N.....NN..... N.....NN.....HH.....H.....
Electronic/Acoustic	AC.....AC*.....AC.....EL.....EL.....ELAC.....AC.....EL.....

****

EXAMPLE 3. *continued [part 4]*

Old Recording								
Old music: Caruso								
Old music: Piano	Lisztian chord Lisztian chord?							
Old music transformed: Caruso	Ridi Pagliaccio...-Reverb. .....Cad. 4.....//							
New music: piano			Accomp. Chord	Accmp. ,,		Accmp.....//		
Electronic Sounds	High Pitched/Reverb.....Fade.....//							
Time:	7:08	7:14	7:23	7:32	7:35	7:41	7:43	7:48	7:53

EXAMPLE 5. *continued [part 4]*

Historical/New	HNN.....NNN.....NN.....N.....
Electronic/Acoustic	ACELEL.....ELACEL.....ACEL.....EL

"Old" Recording	the white-noise hum and muffled quality of sound are timbral markers of an "old" analog recording
"Old" Music: Caruso	music that is "old" by virtue of the recognizability of Caruso's voice and of a well-known late-19th century opera aria
"Old" Music: Piano	music played by the "live" pianist which is based on the orchestral accompaniment of the opera aria.
"Old" music	"old" music from Caruso's aria which, through digital sound editing, has been modified and developed
"New" music: piano transformed: Caruso	" music played by the "live" pianist which sounds "new" or "present" within a post-tonal aesthetic of the late 20th century
"New" music: Electronic sounds	electronic sounds timbrally and motivically distinct electronic sounds that are marked as "new"

EXAMPLE 4. *Descriptions of Structural Event-Layers.*

such a first-order understanding, which then provides grounds for a more systematic and explicit explanation of *how it works*.

My analytic explanation of *Any Resemblance* builds upon the oppositions that are implicit in the distinctions between the categories.[39] Explanation of how the piece works proceeds by showing how the music articulates, dramatizes, and overwhelms the oppositions. The oppositions are indicated in the Explanatory Maps of Examples 5 (the shaded system below the Descriptive Map of Example 3), 6, and 7. The explanatory maps provide a more abstract type of understanding that moves into the speculative domain of analysis.

The Explanatory Map of Example 5 tracks the music of *Any Resemblance* by two pairs of oppositional features: "Historical" or "New" and "Electronic" or "Acoustic" (understanding "acoustic" to mean a sound originally produced by acoustic means). These oppositional pairs are already embedded in the Descriptive Map of Example 3 as such:

- Rows 1–3 "Historical" (H)
- Rows 1–4 "Acoustic" (AC)
- Rows 4–6 "New" (N)
- Rows 4 and 6 "Electronic" (EL)

The Explanatory Map of Example 5 extracts these implicit characteristics and schematizes them with shorthand letters. The map establishes these distinctions as musically significant and allows observation of those moments when the oppositions are dramatized or transformed in some significant way.

39 My observation of "oppositions" bears some similarity to the method of semiotic analysis; however, I am not engaging that method here. Rather, my engagement with categories owes debt to the work of Varela, Thompson, Rosch 1991 and Lakoff 1987. In my initial hearings of the piece, I was aware of the often extreme juxtaposition of old and new, acoustic and electronic, and so on. I use the term opposition to refer to the phenomenal character of these juxtapositions—not as categories in a semiotic analysis.

The shorthand notation of the Explanatory Map works this way. Reading left-to-right, the letters indicate either a change of type—such as "H . . . N"—or the addition of another event-layer—such as "H . . . +H." When two or more event-layers are present, the left-to-right succession corresponds to the high-to-low position of event-layers on the Descriptive Map. For instance, at 3:52 the "H" refers to the "Old music: Piano" row and "N" to the "Electronic Sounds" row. The addition of a "*" at 3:08 indicates that the piano assists the electronically-generated "reverberation" effect through the resonance of the unstopped strings (i.e., by putting the pedal down).

Music that is marked as "Historical" refers to past musical traditions. Such historical music may be either a quote (sampled or performed) of a historical performer or performance, as in the quotation of Caruso at the beginning of *Any Resemblance*, or a reference to a historical style or genre, as in the Lisztian chords after 6:17 or the Recitative Accompaniment chords at 2:42. Music marked as "New" either develops in a new way a motive from the "Historical" music, as in the Recitar and Laugh motives at 0:44, 1:57, 4:12, and 5:43, or projects a style associated with the Euro-American avant-garde of the last fifty years. Music marked as "Acoustic" includes sounds first produced by acoustic means—voices and traditional instruments—unless electronic mediation has presence in the sound. For instance, even though first produced by acoustic instruments and a tenor voice, I have designated the opening music as Electronic because the medium of reproduction present in the scratchy record sound is a musically significant sonic presence. Some more transparent instances of Acoustic music include the Caruso samples accompanied by the live piano, as for instance at 0:22, 2:42, and 5:55. Electronic sounds include those generated by electronic means as exemplified by all those in the Electronic Sounds event-layer. The map also shows several places when Electronic and Acoustic designations are mixed. Such mixtures occur when two (or more) event-layers have distinct types. For instance at 3:52 the live piano is Acoustic, playing music from the phrase "E se Arlecchin" and the electronic sound layer's "High Pitch/reverb" is obviously Electronic. In another instance, similar music is presented as both Acoustic and Electronic. At 0:44 a Caruso sample, the Recitar motive, is electronically transformed and developed. The same Recitar idea is developed by the live piano at 0:47, and the combined effect is designated Electronic and Acoustic (ELAC) on the Explanatory Map.

The oppositional features tracked in Example 5 speak to issues of overall form for *Any Resemblance*. Considering only the sequence of Historical/New oppositions, we may note that an "aesthetic of variety," rather than a strict repetition structure, controls musical form. Further, the sequence of oppositions suggests a vacillation, rather than a contest, between the two types, and only in a few instances are types combined, as for instance between 3:32 and 4:12. On the largest levels of form, we may note that *Any Resemblance* begins with Historical but ends with New music, an ordering that affirms the temporal present of contemporary listeners.[40]

The sequence of Electronic and Acoustic oppositions works much the same way as that between Historical and New: projecting a varied succession to the temporal flow of oppositions. The interaction between the Historical/New and Electronic/Acoustic oppositional types adds another facet to this kind of temporal texturing. Most significantly, historical and new do not simply map onto acoustic and electronic. For instance, the scratchy record sounds at the beginning of the work indicate historical music but the scratchy timbre is associated with electronic mediation of sound; and at 0:44 the motivic exchange between Old music transformed: Caruso and New Music: Piano is "orchestrated" by Electronic and Acoustic sounds. Example 8 shows those moments in *Any Resemblance* when the two opposition types are associated in natural, or expected ways. The example reveals

40 In as much as contemporaneity is a relative temporal distinction, future writers on *Any Resemblance* may well propose alternative analytic interpretations that will use different temporal categories.

a couple of structurally significant things. First, such association is not frequent but occurs often between 2:29 and 3:28 and also from 5:13–6:48, both coinciding with significant moments in the piece that shape overall form—a topic I'll address in a later discussion. Second, Example 8 also shows that the piece ends with the expected coordination of New and Electronic types, an ending that not only resolves the preceding "mixed" associations but also positions the music in the temporal now of contemporary listeners.

SOLO/ACCOMPANIMENT OPPOSITIONS AND TRANSFORMATIONS

Example 6 traces the occurrences of the two textural types of Solo and Accompaniment and two transformations of these types that develop and dramatize some implicit features of their relation. While not appearing initially as such, the Solo and Accompaniment types emerge eventually as oppositional by means of their transformation into Competition and Fusion, transformations that either enhance or dissolve the opposition. As shown in Example 6, the three textural strands of the piece are: Caruso-Voice, Live Piano, and Electronic Sounds. The Example shows the textural status of each strand at moments of change according to the types of Solo or Accompaniment, or their transformation into Competition or Fusion.

Example 6 also indicates timbral variations occurring in the Solo Caruso-Voice at 3:28, 4:10, 5:24, 5:35, and 7:08. At these moments, the Caruso-Voice has a sonic reverberation shadow (indicated graphically by shadow text) that complicates a straightforward Solo/Accompaniment texture. The sonic reverberation of the Caruso-Voice draws attention both to the vocal timbre as transformed through electronic mediation and away from the verbal significance of the voice —in effect smudging the boundary between what is solo and what is accompaniment.

The transformations into Competition occur at 0:44, 1:54, 4:12, and 5:43—each instance involving a contest between the Caruso-Voice and the Live Piano. This agonic relation is enacted through the motivic development of two musical ideas based upon samples from Caruso's performance of Leoncavallo's music: the Recitar and Laugh motives in the maps. The Caruso-Voice and Live Piano engage in a competitive exchange entailing both an electronic and acoustic development of these two ideas. The last two occurrences (at 4:12 and 5:43) repeat the motives of the first two, but various complications to them play a role in the larger formal design of the piece.

For the first two occurrences (0:44 and 1:54), Competition comes after a straightforward Solo/Accompaniment texture (at 0:22 and 1:47). The emergence of a competitive disposition between the Caruso-Voice and Live Piano enhances the previous opposition and hierarchical distinction between solo and accompaniment—as if the upstart piano is challenging the supremacy of the voice. For the second two occurrences (4:12 and 5:43), the sense of competition is altered by preceding music.

For the Recitar passage at 4:12, a series of complications to the solo/accompaniment opposition, starting from 3:28, serves to blunt the sense of transformation into competition. In sequence these complications include: timbral variation of the Caruso-Voice and the dual Accompaniment role played by Live Piano and Electronic sounds at 3:28, the assumption of the Solo role by the Live Piano at 3:52, and then the dual Solo role played by both the Caruso-Voice and Live Piano at 4:10. Further, the Live Piano initiates the Competition at 4:12 (the Caruso-Voice initiates at 0:44), leading the Caruso-Voice through the agonic exchange and insinuating a further upheaval of the usual solo/accompaniment hierarchy between them.[41] These various changes ensure that the Competition passage here is heard more as varying the opposition of solo and accompaniment rather than as a distinctive transformation.

41 Notably, the pianist is instructed in the score to play "insistently" at this moment.

	Expository							Developmental									Climactic Conclusion			
Text/Motive	S R		Recitar		Laugh→	Vesti	E se	Vesti	E se	Cad 2	Recitar	Tramuta			Laugh	Tramuta	Ridi	S R	Ridi	Liszt
Caruso-Voice	c e r c	Solo	Comp	Solo	Comp	Solo	Fusion	***Solo***		***Solo***	Comp	Solo	Solo	***Solo***	Comp	Solo	Solo	c e r c	***Solo***	
Live Piano	t o	Accp	Comp	Accp	Comp	Accp	Fusion	Accp	Solo	Solo	Comp	*Ped Dwn			Comp	Accp	Ac→So	t o	So→Ac	Solo
Electronic Sounds	h r y d						Fusion	Accp	Accp				Accp					h r y d	Accp	Accp
Time	:00	:22	:44	1:47	1:54	2:29	3:08	3:28	3:52	4:10	4:12	5:13	5:24	5:35	5:43	5:55	6:17	6:41	7:08	7:23

EXAMPLE 6. *Explanatory Map: Solo/Accompaniment Opposition and the transformation into Competition and Fusion.*

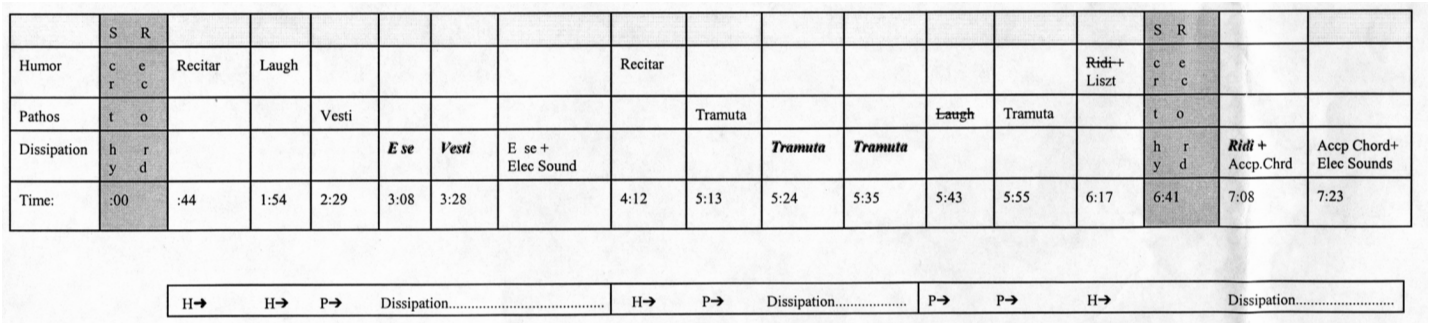
Another sort of complication occurs in the music of and preceding the second Laugh passage. Before it, three new variations of the solo/accompaniment texture occur:

- at 5:13, the Caruso-Voice is accompanied by piano resonance created the by the un-stopped strings, which hold the last chord of the Competition music
- at 5:24 the Electronic Sounds, for the first time without the Live Piano, play the accompaniment role for the Caruso-Voice
- at 5:35, the Caruso-Voice is unaccompanied, the only time this occurs in the piece.

The Laugh passage itself is significantly curtailed, lasting only 12" (in comparison to the earlier occurrence, which lasted 35"). Together these complications of the solo/accompaniment opposition and the abruptly short Laugh passage dissipate the sense of competition.

In a transformation contrary to that of the Competition passages, the one Fusion passage (at 3:08) serves not to heighten the distinction between textural components but to fuse them, creating a flat surface. Fusion comes after a straightforward alternation between Solo/Accompaniment and Competition, replacing a third occurrence of Competition. And formally, Fusion articulates the end of an initial expository section (the opening through 3:28) that gives way to a series of variations on both Solo/Accompaniment and Competition.

Example 6 also indicates how form is articulated by the play of textural oppositions and transformations of *Any Resemblance*. The annotations at the top of the example show three phases of rhetorical design: exposition, development, and climactic conclusion. After the initial sample of the Caruso recording, the simple alternation between Solo/Accompaniment and Competition passages is broken by the Fusion passage at 3:28—these passages together functioning as expository. The developmental section consists of a series of variations on the expository textural types—from 3:28 until 6:17. The concluding section begins by articulating a dramatic high-point when the Caruso-Voice sings "Ridi Pagliacco" at 6:17. The pianist at this point plays Lisztian music which begins as accompaniment but then overwhelms the voice part through its dynamic and emotional extravagance, effectively taking over the solo role—schematized in Example 6 with the short-hand "Ac→So." After a brief but intrusive interruption by the scratchy record sample, with the concluding instrumental passage of the Leoncavallo aria, the process is reversed at 7:08 when the Live Piano's overwhelming of the Caruso-Voice eventually subsides as it again assumes, although extravagantly, the accompanying role. The Caruso-Voice resumes its solo role but transformed electronically with a high degree of reverberation. This Climactic Conclusion passage does not so much resolve the implicit or explicit agonic exchanges between the Caruso-Voice and



EXAMPLE 7. *Explanatory Map: Humor/Pathos Opposition and the transformation into Dissipation.*

Hist/New	HH	HH	HH	NN*	H*	N	HH	N
Elect/Acous	AC	AC	AC	EL*	AC*	EL	AC	EL
Time	0:22–0:44	1:47–57	2:29–3:08	3:08–28	5:13–22	5:24–43	5:55–6:48	7:48–53

EXAMPLE 8. *"Expected" Associations.*

Live Piano in both the Expository or Developmental passages of *Any Resemblance* but dissolves the relation through the interventions of the Electronic Sounds.

HUMOR/PATHOS AND TRANSFORMATION INTO NEGATION/DISPERSION

Example 7 schematizes another and simultaneous thread of oppositions throughout *Any Resemblance*, that of Humor and Pathos. The oppositional pairing of these two qualitative states is already inscribed in the melodrama of Leoncavallo's *Pagliacci*—that of a clown who must project a comedic demeanor while feeling hurt by a lover. *Any Resemblance* reinscribes the Humor/Pathos opposition but does not take it seriously, dissipating the operative distinction as part of its rhetorical form. Dodge's title itself tips us off to this rhetorical strategy: the piece depends on our recognition of Caruo's voice and resemblance is a given. Denial of the obvious in the title is another aspect of the work's ironic twists through humor and pathos.

The Humor of the Recitar (0:44) and Laugh (1:54) passages results from the playful competitiveness suggested by the motivic interaction between the Caruso-Voice and Live Piano, but this sense of play vanishes into Pathos at 2:42 when the piano begins plodding accompaniment chords that introduce the aria "Vesti la giubba," musically insinuating Pagliacci's despair. The opposition of Humor and Pathos in this opening passage is dissipated when the acoustic is over-

whelmed by the electronic—at 3:08 and 3:28. The new timbres of the Electronic Sounds and of the electronic transformation of the Caruso-voice effectively evaporate the opposition. The formal design of *Any Resemblance* plays with this opposition and its dissipation, using it to shape dramatic structure.

As the floating row below Example 7 shows, the piece is articulated into three large phases each entailing a Humor/Pathos opposition followed by Dissipation music. The first two passages move from Humor to Pathos to Dissipation, but the last one varies that progression. The concluding passage enacts a dramatic climax in this oppositional domain which depends on what we might think of as a transposition of affect.

Two passages undergo such a transposition of affect—from Humor to Pathos and vice versa. First, at 5:43 the character of the Laugh passage is transformed, as suggested in Example 7 by the graphic strikethrough (~~Laugh~~), a transformation that changes it from Humor to Pathos. Not only is this Laugh passage short but the motive itself is manipulated into a mawkishly surreal bark that responds to the doubly ironic character of the Laugh motive at the beginning of the piece (1:54). Within the context of Leoncavallo's opera, the Laugh is ironic. Canio, the Clown, is bitterly lamenting his status as the betrayed husband. In its first occurrence, the Laugh passage transforms that bitter irony into humor, through motivic fragmentation and competition between the Caruso-voice and piano. The pathos of the second Laugh passage enacts yet another ironic twist. The hiccupping transformation (starting at 5:47 within the passage) restores the pathetic character, reconnecting the musical affect to Canio's embittered response in the opera. Second, at 6:17 the Caruso-Voice sings "Ridi, Pagliaccio, sul tuo amore infranto. Ridi del duol, che t'avvelena il cor,"[42] while the Piano plays humorously extravagant Lisztian chords. The excess of the Lisztian chords combined with the melodrama of the text transform the passage into Humor, as suggested graphically as "~~Ridi~~." The dissipation of this inverted opposition is enacted, after a reminiscent intrusion of the scratchy record, by the electronic mediation of the Caruso-Voice's "Ridi" passage and the liquidation of the Lisztian gestures into slowly rolled chords in the Live Piano.

This concluding move toward Dissipation of the Humor/Pathos opposition plays a role in the ending processes of the piece and helps to shape the overall form of *Any Resemblance*. Together the transpositions of affect, the reminisicent interruption, and the final dissipation passage serve to evaporate the emotional content that typically attaches to much operatic music of the 19th century and certainly to Canio's melodrama in the "Vesti la giubba" aria.

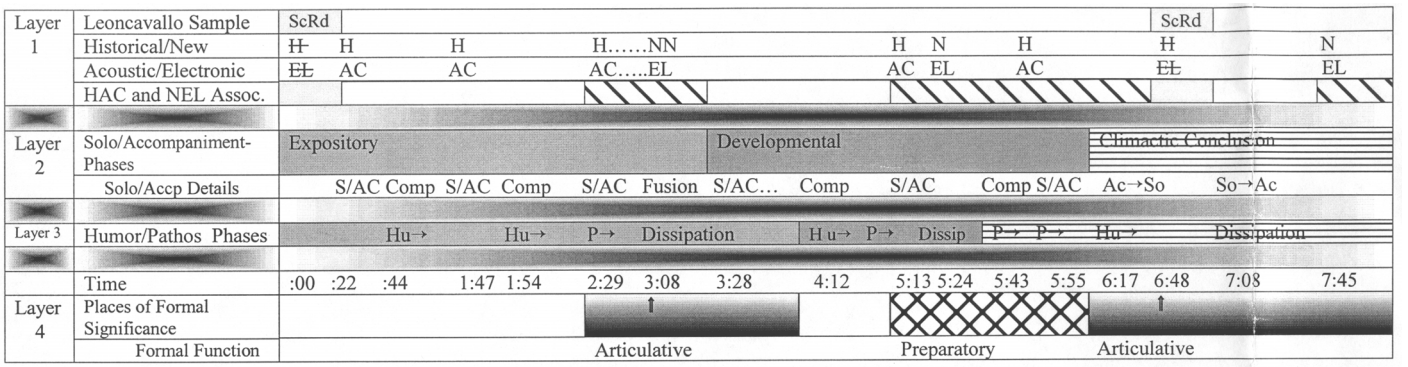
HOW IT WORKS: TAKE ONE

Discussion of the Descriptive and Explanatory Maps has traced the workings of *Any Resemblance* according to the structural categories defined in each. The categories do not, however, operate independently of one another, but rather contribute to overall musical design. Here I address larger issues of how *Any Resemblance* works from the perspective of these structural categories. The analysis is a "first take" in the sense that others are possible, using these or other structural categories, and it serves to contribute to the ongoing process of knowledge building about the nature of musical experience and our understanding of *Any Resemblance*.

Example 9 both coordinates the Explanatory Maps of Examples 5, 6, and 7 and provides another layer of explanation about overall formal process. The Example is divided into layers, corresponding to the Explanatory Maps and a new layer devoted to overall form:

- Layer 1: the Leoncavallo Samples, expected associations of Historical and Acoustic and New and Electronic, and

42 "Laugh, Pagliaccio, at your shattered love! Laugh at the sorrow that has broken your heart!"



Key

ScRd	Scratchy Record
H, N	Historical, New
EL, AC	Electronic, Acoustic
~~H, EL~~	Cross-Association
S, AC, Comp	Solo, Accompaniment, Competition
Ac→So	Accompaniment into Solo
Hu, P	Humor, Pathos

EXAMPLE 9. *Overall Form.*

a graphic showing places when the expected association occurs with greater frequency.[43]

- Layer 2: The Solo/Accompaniment Phases and the larger details of those phases
- Layer 3: The Pathos/Humor Phases
- Layer 4: Places of Formal Significance and Formal Function

Layer 4 indicates three places of formal significance that arise through the confluence of the structural categories shown as Layers 1–3. Two of these places are "articulative" in the sense that they entail music that carries a structural emphasis. These articulations are both spans of music and particular moments—as indicated by the shaded areas and the arrows at 3:08 and 6:48. The spans of articulation encompass significant events in Layers 1–3 and the moments mark either the coordination or disruption of processes in the Layers.

The beginning of the first Articulative passage (2:29–4:12) corresponds to the expected association between H/AC and N/EL shown in Layer 1, and its end to the conclusion of the Humor/Pathos Phase in Layer 3. The articulative moment at 3:08 arises through the confluence of the Fusion music of Layer 2, the Dissipation music of Layer 3 (both articulative moments in their structural layers), and the first association of N/EL in Layer 1.

The beginning of the second Articulative passage (6:17–end) corresponds to the beginning of the Climactic Conclu-

43 I use the term "Leoncavallo Sample" here since the concluding "Scratchy Record" occurrence does not include Caruso's voice.

Text Translation (from Dodge 1992)

Recitar! Mentre preso dal delirio, non so più quel che dico, e quel che faccio! Eppur è d'uopo, sforzati! Bah! sei tu forse un uom? Tu se' Pagliaccio!	Recite! When I am racked with grief, Not knowing what I am saying or what I am doing! And yet . . . I must . . . force myself! And yet it is necessary, force yourself! Bah! You are not a man! You are Pagliaccio!
Vesti la giubba, e la faccia in farina. La gente paga, e rider vuole qua. E se Arlecchin t'invola Colombina, ridi, Pagliaccio, e ognun applaudirà!	Put on the costume, the powder and the paint. The people pay and want to laugh. And if Harlequin steals away your Columbine, Laugh, Pagliaccio, and all will applaud you!
Tramuta in lazzi lo spasmo ed il pianto; in una smorfia il singhiozzo il dolor, Ridi, Pagliaccio, sul tuo amore infranto! Ridi del duol, che t'avvelena il cor!	Change all your tears and anguish into clowining: And into a grimace your sobbing and your pain . . . Laugh, Pagliaccio, at your shattered love! Laugh at the sorrow that has broken your heart!

EXAMPLE 10. *"Vesti la giubba," Canio's aria from Pagliacci.*

sion of Layer 2 and its end to the association of N/EL in Layer 1. The significance of the articulative moment at 6:48 arises not so much through the coordination of processes in different layers as through the force of the interruption of those processes enacted by the Leoncavallo sample. The preceding Preparatory passage initiates those processes and propels them forward. The passage begins with the expected associations of Layer 1 at 5:13; while in Layer 3 the inverted Humor/Pathos phase starts shortly afterwards (at 5:43) and in Layer 2 the series of variations on Solo/Accompaniment in the Developmental passage contribute to the sense of forward formal motion. The final Articulative phase begins more as a continuation of processes initiated in the Preparatory phase, its role as formal articulation gradually emerging. The interrupting reminiscence of the Leoncavallo sample becomes articulative because of what immediately precedes and follows it—the transposed Ridi music and its electronically-mediated dissipation—gathering together the force of the formal moment of disruption. This ending Articulative phase concludes when the processes of Layers 2 and 3 play out and in Layer 1 the N/EL association confirms the new as a contemporary temporal orientation.

Overall, the formal strategy of *Any Resemblance* depends on establishing a place of temporal coordination in the first Articulative passage and then disrupting it in the second. The first Articulative span, and in particular the moment at 3:08, arises as a time of coordination between the various structural processes, which is affirmed by the temporally "consonant" music of the New/Electronic association in Layer 1. The second span dramatizes the disruption of structural

processes with the temporally "dissonant" Leoncavallo sample—that is with its cross-association as ~~H/EL~~. The interruptive moment of the last Leoncavallo sample, in conjunction with the various processes of *Any Resemblance* that play upon distinctions between the historical and the new, reacts to the prior temporally consonant moment at 3:08. The interrupting Leoncavallo Sample, embedded in the final Articulative Span, suggests that the dissonance of the Historical/Electronic cross-association is a presence of contemporary experience, not something that needs resolution. And while *Any Resemblance* concludes with the temporal reorientation of N/EL, it does that through the Dissipation of Layer 3, not through any strong articulative moment. *Any Resemblance* not only reflects on how the historical world is present in the contemporary world in the advent of the electronic reproduction of sound but further it offers commentary on the emotional discourse of a particular music historical era—that of late 19th-century opera. Through its oppositions—of Historical/New, Electronic/Acoustic, Solo/Accompaniment, and Humor/Pathos, and their various transformations, inversions, and dramatizations—*Any Resemblance* also works by generating a musical awareness of the constructed-ness of late-Romantic tonal language and its links to heightened senses of subjectivity. This music-historical awareness arises in part from the quotations of historical music but mostly from the play of associations in the various oppositional categories.

CONCLUDING REMARKS

Nearly 30 years ago, Robert Morgan suggested that the analysis of recent music requires the development of unique theories for each piece—a position that effectively refigures the relation between theory and analysis.[44] In this relation, theory is less a prior general concept that explains the structure of individual works but more a specific concept generated to interpret specific pieces. In other words, in Morgan's reformulation theories are generated to serve the larger goals of interpretive analysis. My analysis of *Any Resemblance* serves such interpretive goals. As mentioned earlier, the descriptive and explanatory maps do not reflect a prior theory or methodology that determines the observational outcomes. Rather, the structural categories and graphic procedures are themselves theoretical constructs generated as part of the overall interpretive goals of analysis.

In order to address the analytic question *how does it work*? in the context of Morgan's notion of an interpretive analysis, I have had to rely on aural experience for evidence of the constituent elements of *Any Resemblance* since these elements often have no visual trace in the score. The experiential source for the factual level of analytic investigation redirects the goal from discovery of compositional technique and toward disclosures of broader epistemological questions of hearing that encompass compositional creation and listener apprehension. If the constituent elements of some recent music, of which *Any Resemblance* is an instance, have facticity only in aural experience, then in order, as Joan Scott suggests, to produce analytic knowledge about such music, explanation of *how it works* must lead to hearing as a category of musical understanding.

44 Morgan 1977.

WORKS CITED

Agawu, Kofi. 1991. *Playing With Signs: A Semiotic Interpretation of Classic Music.* Princeton: Princeton University Press.

Barthes, Roland. 1988 [1977]. *Image-Music-Tex*t, trans. Stephen Heath. New York: Noonday.

Bent, Ian. 1980. "Analysis." *New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie. London: Macmillan Publishers Limited.

Bent, Ian and William Drabkin. 1987. *Analysis*. New York: Norton.

Bent, Ian and Anthony Pople. 2004. "Analysis." *Grove Music Online.* Edited by L. Macy. Accessed 25 June 2005, http://www.grovemusic.com.

Cone, Edward. 1967. "Beyond Analysis." *Perspectives of New Music* 6.1 (Autumn): 33–51.

Christensen, Thomas. 1993. "Music Theory and its Histories." *Music Theory and the Exploration of the Past*, edited by Christopher Hatch and David W. Bernstein. Chicago: The University of Chicago Press, 9–39.

Dodge, Charles. 1980. *Any Resemblance is Purely Coincidental: For Piano and Tape.* Lebanon, New Hampshire: Frog Peak Music.

Dubiel, Joseph. 2004. "Uncertainty, Disorientation, and Loss as Responses to Music Structure." *Beyond Structural Listening: Postmodern Modes of Hearing*, edited by Andrew Dell'Antonio. Berkeley and Los Angeles: University of California Press.

Hatten, Robert. 1994. *Musical Meaning in Beethoven: Markedness, Correlation, and Interpretation.* Bloomington: Indiana University Press.

Ihde, Don. 1976. *Listening and Voice: A Phenomenology of Sound.* Albany: SUNY Press.

Kerman, Joseph. 1980. "How We Got Into Analysis, and How to Get Out." *Critical Inquiry* 7.2: 311–31.

Korsyn, Kevin. 2001 [1999]. "Beyond Privileged Contexts: Intetextuality, Influence, and Dialogue," *Rethinking Music*, edited by Nicholas Cook and Mark Everist.

Kramer, Lawrence. 1992. "Haydn's Chaos, Schenker's Order; or, Hermeneutics and Musical Analysis: Can They Mix?" *19th-Century Music* 16.1 (Summer): 3–17.

Lakoff, George. 1987. *Women, Fire, and Dangerous Things: What Categories Reveal About the Mind.* Chicago: University of Chicago Press.

Lawson, Hilary. 1989. "Stories About Stories." *Dismantling the Truth: Reality in the Post-Modern World*, eds. Hilary Lawson and Lisa Appignanesi. New York: St. Martin's Press: xi–xxviii.

Lerdahl, Fred and Ray Jackendoff. 1985 [1983]. *A Generative Theory of Tonal Music.* Cambridge, MA: The MIT Press.

Lochhead, Judy. 1998. "Retooling the Technique." *Music Theory Online 4.2* (March, 1998): http://www.societymusictheory.org/mto/issues/mto.98.4.2/toc.4.2.html.

Locke, John. 1969. *An Essay Concerning Human Understanding*, ed. A. S. Pringle-Pattison. Oxford: Clarendon Press.

McClary, Susan. 1988. "Terminal Prestige: The Case of Avant-Garde Music Composition." *Critical Critique* 12: 57–81.

Merleau-Ponty, Maurice. 1978 [1962]. *The Phenomenology of Perception*, trans. Colin Smith. London: Routledge & Kegan Paul.

Morgan, Robert. 1977. "On the Analysis of Recent Music." *Critical Inquiry* 4.1 (Autumn): 33–53.

Poovey, Mary. 1998. *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society.* Chicago and London: University of Chicago Press.

Ricoeur, Paul. 1976. *Interpretation Theory: Discourse and the Surplus of Meaning.* Forth Worth: Texas Christian University Press.

Scott, Joan. 1991. "The Evidence of Experience." *Critical Inquiry* 17.4: 773–97.

Stroppa, Marco. 1984. "The Analysis of Electronic Music." *Contemporary Music Review* 1.1: 175–80.

Tomlinson, Gary. 1993. "Musical Pasts and Postmodern Musicologies: A Response to Lawrence Kramer," and "Tomlinson Responds." *Current Musicology* 53: 18–24 and 36–40.

Treitler, Leo. 1989 [1982]. "To Worship that Celestial Sound: Motives for Analysis." *The Journal of Musicology* 1.2: 153–70.

Varela, Francisco J., Evan Thompson, and Eleanor Rosch. 1991. *The Embodied Mind: Cognitive Science and Human Experience.* Cambridge, MA: MIT Press.

Woolgar, Steve. 1989. "The Ideology of Representation and the Role of the Agent." *Dismantling the Truth: Reality in the Post-Modern World*, eds. Hilary Lawson and Lisa Appignanesi. New York: St. Martin's Press: 131–44.

Discography

Charles Dodge. 1992. *Any Resemblance is Purely Coincidental*. New Albion Records. Alan Feinberg, piano.

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