

UC San Diego

UC San Diego Electronic Theses and Dissertations

Title

The dawning of musical aspect in process

Permalink

<https://escholarship.org/uc/item/0j08031f>

Author

Obrecht, Alexander Guy

Publication Date

2008

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA, SAN DIEGO

The Dawning of Musical Aspect in Process

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy

in

Music

by

Alexander Guy Obrecht

Committee in Charge:

Professor Jann Pasler, Chair

Professor Jerry Balzano

Professor Marcel Hénaff

Professor Jane Stevens

Professor Tracy B. Strong

2008

Copyright

Alexander Guy Obrecht, 2008

All rights reserved.

The dissertation of Alexander Guy Obrecht is approved,
and it is acceptable in quality and form for publication
on microfilm:

Chair

University of California, San Diego

2008

To my parents.

Contents

Signature Page	iii
Dedication	iv
Table of Contents	viii
List of Figures	xiii
List of Tables	xv
Acknowledgments	xv
Vita	xvii
Abstract	xviii
Introduction	1
0.1 Doing and Naming	1
0.2 The dream of singularity	5
0.3 Multivalence	9
0.4 Two key demonstrations	12
0.4.1 The redundancy and selection of a set	12

0.4.2	From emergent sets to consciousness, a quick step . . .	17
0.4.3	Structure-Preserving Transformations	20
0.5	Theorizing the implicit	25
0.6	The Wrap up: Naming is Doing	30
1	Theory & Perception, an argument for dwelling	32
1.1	The Primary Relationships	35
1.2	An Outline of Four Theoretical Positions on the Listening-Theorizing Relationship	36
1.2.1	Tool and Broken-tool	36
1.2.2	Lerdahl and the Linguistic model	43
1.2.3	Radical rejection of empirical validity	47
1.2.4	Intuitive empathic recognition in the world	60
1.3	Three musical cases	75
1.3.1	Celin Dion, Near and Far	75
1.3.2	Susanna is Waiting	79
1.3.3	YES, a challenge to predicted response	84
1.4	Conclusions	91
1.4.1	Analytical Quality	91
1.4.2	Analysis and the External-Mind	94
2	Lewin's loop	96
2.1	The Implication is Already: Coupling	97
2.2	The Computational approach	101
2.3	Language and singularity	105
2.4	The possibility of simultaneous perceptions	110
2.5	Crossing and Carrying Forward	114
2.6	Performance as perception	122
2.7	The Loop Undone	128
3	A Musical Bridge, A Selective Crossing	130
3.1	Putting the Voice	133
3.2	Getting Inside	136
3.3	The Odd Couple	140
3.4	The Odd Couple Ties	144
3.5	The Couple's Return	151
3.6	A Trajectory	153
3.7	The Drop	155

3.8	The Return	158
3.9	What holds?	161
4	Finding Time for Roses, Enactive Perception and Musical Time in Mozart’s Garden Aria	163
4.1	Enacting time	164
4.2	The Roses	166
4.3	At last, a moment has come	169
4.4	Levarie’s trajectory	171
4.5	Allanbrook’s punctuating contours, implication and realization	174
4.6	The dance instructor and the demon	176
4.7	Pushing the problem back to the antecedent	181
4.8	Mirrored Mirrors	185
4.9	The Consequent	188
4.10	Susanna’s Transformation	190
4.11	The erotics of the mirror	193
4.12	Sinking into darkness	197
4.13	Mobility found, the B section	200
4.14	The unusual place of the Epode	203
4.15	Enfolding the whole	207
4.16	Conclusion	209
5	An Other Garden Aria	215
5.1	In the garden, Martín y Soler’s Garden Aria	216
5.1.1	A Conversation	216
5.1.2	An Opening	219
5.1.3	A Measure	224
5.1.4	A new opening	229
5.2	Excursis into multivalence: pointing to the aspect-structure . .	232
5.2.1	Carried-forward; Moving the aspect-structure	234
5.3	Concluding phrases	238
5.4	Temporary conclusions	246
5.4.1	Multivalence, Performance, and the “right way”	246
5.4.2	The problem of simple twos growing out of a complexity: a seductive return to the aria	251
5.5	B: Centering on a displacement	253
5.6	Coda	266
5.7	Post-Coda	268

6	Conclusion: Observations on where things went and where they might go.....	271
6.1	From dwelling to self-selective production	271
6.1.1	Setting the stage, a reoriented method	271
6.1.2	three analyses, three observations	274
6.1.3	Larger conclusions: A systemic change in thought . . .	278
6.2	Difficulties	280
6.3	Future applications	283
	Bibliography.....	294

List of Figures

Figure 0.1	Open item	14
Figure 0.2	New set member produces aspect “squiggle tongue”	15
Figure 0.3	What other aspects might this set find? What is the call that finds them?	16
Figure 0.4	Structure preserving transformation. Each transform (i- vi) preserves some aspect of the original via a selective focusing (a center	22
Figure 1.1	Multivalence tool: example of multiple intervalic and regis- tral processural possibilities. Excerpt from <i>Tales</i> coda, see §1.3.3 (fig. 1.5).	40
Figure 1.2	Schenkerian reduction	80
Figure 1.3	Narmourian analysis	81
Figure 1.4	“tonal” progression? Chardal transcription of coda/conclusion, Yes (Musical group), “ <i>Nous somme le soliel</i> ”, <i>Tales from</i> <i>Topographic Oceans</i>	85

Figure 1.5	“Tales” coda (Anderson-Howe), guitar solo	87
Figure 1.6	Multivalent processes i (mm. 1–5).....	88
Figure 1.7	Multivalent processes ii (mm. 1–5).....	89
Figure 1.8	Whole tone progression with guitar seam tones.	90
Figure 2.1	Duck-rabbit. from <i>Harpers Weekly</i> 1892, 11/19, p.1114. Image copied by <i>Harpers</i> from <i>Fliegende Blätter</i> , October 23, 1892, p. 147	111
Figure 2.2	Maiden and mother-in-law, Anonymous German postcard, 1888	112
Figure 3.1	Mozart, Violin Sonata n.38 K.403 ii (andante), mm. 1–5...	132
Figure 3.2	Harmonic scheme mm. 1–2.	136
Figure 3.3	Detailed Narmourian analysis (upper voice mm. 1–2).	138
Figure 3.4	Lower voice processes.....	139
Figure 3.5	Rhythmic processes (mm. 1–2).	142
Figure 3.6	Violin entry (mm. 2–5).....	144
Figure 3.7	Melodic and Rhythmic processes (vln. mm. 2–5).....	146
Figure 3.8	Second melodic reading (vln. & pno. mm. 3–5) cf. fig. 3.7. .	149
Figure 3.9	Large Registral Reversal (VR) in the “couple” (mm. 1–2 b.3).....	150
Figure 3.10	The break is healed over (mm. 4–5).....	152
Figure 3.11	Alternate reading (pno. mm. 4–5).....	152
Figure 3.12	A trajectory, (mm. 2–16).....	154

Figure 3.13	Hearing <i>as</i> “tonal 12-tone” (mm. 16–19).....	156
Figure 3.14	First pass melodic processes (mm.16–19).....	157
Figure 3.15	Second pass melodic processes (mm.16–19).....	158
Figure 3.16	False recapitulation and minor recapitulation (mm. 36–48).....	159
Figure 3.17	Extension of the Couple in the Recapitulation.	160
Figure 4.1	Vincent van Gogh, <i>White Roses</i> (1890).....	167
Figure 4.2	“ <i>Deh Vieni Non Tardar</i> ” mm. 1-7.....	172
Figure 4.3	The dance instructor counts.....	177
Figure 4.4	Alternate melody and alternate voices.....	178
Figure 4.5	Narmourian Melodic Analysis.....	183
Figure 4.6	Rhythmic processes.....	189
Figure 4.7	Phrases and form of vocal melody.....	192
Figure 4.8	Melodic processes in Susanna’s first phrase.....	194
Figure 4.9	Melodic processes in Susanna’s second phrase.....	197
Figure 4.10	Melodic processes in Susanna’s second phrase—alternate reading.....	198
Figure 4.11	Melodic analysis of B section.....	201
Figure 4.12	Melodic descent.....	202
Figure 4.13	Four-measure period opening epode.....	203
Figure 4.14	Coming into the clear.....	205
Figure 4.15	Second attempt.....	205

Figure 4.16	Rebar as 9/8, mm37–	206
Figure 4.17	The winds correct	207
Figure 5.1	Melodic analysis mm. 12–15 (<i>“Dolce mi parve un di”</i>)	219
Figure 5.2	Other Processes (mm. 12–15)	221
Figure 5.3	Preliminary rhythmic analysis	224
Figure 5.4	Preliminary rhythmic analysis	226
Figure 5.5	Rhythmic reading as anacrusis	227
Figure 5.6	Revised melodic analysis, cf. fig.5.1	229
Figure 5.7	Higher levels in second reading	231
Figure 5.8	Abstract compilation of mm. 12–15	236
Figure 5.9	(whoops, dropped the ball)—going outside of the accom- modating as-structure	238
Figure 5.10	Melodic processes, concluding phrases (mm. 15–19)	239
Figure 5.11	Erasing the phrase extension and compression (no-no)	239
Figure 5.12	Revised reading of extension	240
Figure 5.13	Second reading concluding phrases cf. fig. 5.10	241
Figure 5.14	Collated metric processes mm. 12–19	242
Figure 5.15	Combined Rhythmic and Melodic reading (mm. 12–19)	245
Figure 5.16	A Schenkerian interpretation of the opening	247
Figure 5.17	B section melodic processes, first phrase (mm. 22–3)	253
Figure 5.18	More “exact” (hypothetical) transform of m. 12 into mm. 22–3	256

Figure 5.19	Aspects of transform become a self-selective phrase	259
Figure 5.20	Melodic processes (mm. 22–7)	260
Figure 5.21	Rhythmic processes in three measure phrase	261
Figure 5.22	Recomposing mm. 25–7 to erase phrase extension	262
Figure 5.23	Six measure period acquires metric centers (mm. 22–7)	263
Figure 5.24	Metric processes in extended phrase, (mm. 28–32)	264
Figure 5.25	Supporting melodic processes (mm. 28–32)	265
Figure 5.26	Coda, crowning excerpt (mm. 40–3)	267

List of Tables

Table 3.1	Closural matrix (mm. 1 & 2).	143
Table 5.1	Scansion and translation of <i>Dolce mi parve un dì</i> . Numbers in brackets refer to scansion of text that is repeated or modified by Martín.	220

Acknowledgments

I would like to thank all of my committee, and in particular Professor Jerry Balzano. The ideas presented in this dissertation stem from 4 years of Friday afternoon meetings with Professor Balzano. His patient and insightful discussion, sympathetic readings, and recommendations for further reading amounted to a wellspring of ideas for developing the dissertation. Jerry began to challenge my thinking in his unique way from my first days here at UCSD. That way asks “How can I understand and take this idea further?” In the process we begin to develop new ways of thinking about the ideas both our own ideas and those of others.

Professor Jann Pasler’s prescient editing and discussion of draft versions of the dissertation have been crucial to the current form

and content. Professor Jane Stevens' continued support of a dissertation that moved increasingly further afield from historiographical accounts. Professor Marcel Hénaff, whose legendary seminars on post-structural thought welcomed a music student and presented a rich variety of ideas that I continue to return to. And Professor Tracy B. Strong who quickly joined the committee when the dissertation was already a draft. A big thank you to all!

I am especially grateful to the members of the Go Duo who have often listened to me and pulled me back to earth in song with stunning musicianship.

UCSD's music department has seen extremely inspiring faculty, visiting composers and artists during my time here. I feel very fortunate for having been a participant in the many events and struggles that have animated the department during this time.

Finally, to my wife, Judy, whose beauty is a desert bloom in my world.

Vita

1998 B.A. (hon.), Music,
University of Ottawa

2001 M.A. Music theory
University of Toronto

2008 Ph.D. Music
University of California, San Diego

ABSTRACT OF THE DISSERTATION

The Dawning of Musical Aspect in Process

by

Alexander Guy Obrecht

Doctor of Philosophy in Music

University of California, San Diego, 2008

Professor Jann Pasler, Chair

This dissertation investigates a way of coming to terms with the heterogeneity of musical phenomena rather than attempting to tame and control it through a reductive process, such as a forced mapping of musical theory to neuropsychological theory of musical perception. I probe the boundaries of current theories, musical and other, ranging from empirical process-oriented theories, to embodied phenomenology and Schenkerian theory—exploring how such theories relate to our perception and what kind of work they are doing. Instead of assuming that acts of perceiving and acts of theorizing are fundamentally different things, I suggest that musical perception should be understood as responsive to acts of theorizing. Critical to this is questioning the plausibility of theoretical singularity with respect to musical phenomena and seeking to come to terms with the manner in which theory opens perceivers to the aspect multiplicity of music. In this sense, I show how theory helps get us closer to the music and how music works in the world as a performance of

something—be it culture, gender, sexuality, policy, anxiety, intellect, physicality or something else. By turning our attention towards the heterogeneity of musical experience, we can begin to understand both culture and the “music itself”.

Such theorizing is tested in multidimensional analyses of operatic works by Mozart and one of his contemporaries where I explore the essence, or the implicit, of a musical piece from within. The analyses begin from music theorists David Lewin, Eugene Narmour, and Christopher Hasty, and attempt to carry their tools forward by mapping out multiple processes that draw us further into the implicit—a state that we might refer to as an assent to the ineffable.

—A detached part, a severed ear, but detached or severed from
whom?

J. Derrida

Introduction

0.1. Doing and Naming

An idea with great currency today is that music is not only “notes” and autonomous structures, but is also deeply imbedded in the production of culture. Studies have moved from creating note models to creating social models, looking to formerly extra-musical phenomena like gender, sexuality, class or some other aspect of social being and then showing how these ideas are bound up in the reception and production of music.¹ The methodological base of this current trend is in the field of cultural studies. Focus on social themes

¹The two authors most cited in this regard are Susan McClary and Lawrence Kramer. See for instance McClary’s *Conventional Wisdom: the Content of Musical Form* (Berkeley: University of California Press, 2000); *Feminine endings: music, gender, and sexuality* (Minneapolis: University of Minnesota Press, 1991); “Paradigm Dissonances: Music Theory, Cultural Studies, Feminist Criticism”. *Perspectives of New Music* 32/1 (1994): pp. 68–85. Kramer’s seminal work is found in his *Classical music and postmodern knowledge* (Berkeley: University of California Press, 1995).

has productively confirmed the apparently ideological nature of “notes” and the correlated ideology of “note theories”.² What this kind of socially aware theorizing leaves out, however, is the fact that music seems to silently bear witness to the social phenomenon, always. Music is seemingly helpless to object, and ever helpful to confirm the theory of the day. Both note-theories and social-theories are incapable of disclosing their own ideological basis.³ It isn’t that either a note-based or a cultural studies-based approach is untrue. They are both good stories that bring out many compelling and interesting aspects of music. By accepting that it is possible to tell multiple stories about music without enforcing an exclusive commitment to any one in particular, we open up a position from where we can talk about the work music does in the world. By finding music at this level where it supports our manifold stories, the music is suddenly allowed to speak for itself without being nailed or usurped by any particular story.

I am not here talking about an “uncovering” or a “revealing” or any other such metaphor of enlightenment. Music that bears all of the scholarly weight we lay on it is not fixed in a way that we can reveal. This music is working in many different ways that are erased by the notion of a single revelation. Music is always in the act of doing and therefore never done, never uncovered. The use of “doing” in this sense requires clarification. It is both a normal

²See for instance Ruth Rosengard Subotnik. *Developing variations: style and ideology in Western music* (Minneapolis: University of Minnesota Press, 1991).

³Carolyn Abbate’s recent article on Jankélévich suggests as much when she argues that both hermeneutic and formalist approaches to music miss out on its most engaging “drastic” qualities, “Music—Drastic or Gnostic?”. *Critical Inquiry* 30/3 (2004): pp. 505–536.

usage and a special one. The normal understanding is that doing is active, in process, engaged with and so on. Music is famously talked about in this regards when it is treasured as unique by virtue of its being in “time”.⁴ By being in time, music is always a doing. But I also want to think about the doing as something that precedes the intellectual act of naming. That is, the doing that we access in order to understand new intellectual contexts and interpretive paradigms. There is an open quality to this sense of doing, a kind of open question that we draw on when some new aspect gets described. It is this opening element of doing that interests me. Where does the musical doing we are familiar with reside in this doing that evades definitive closure in favor of continual opening? And how can we talk about such an evasive doing?

The awareness of this quality of a doing that opens is found by getting inside the experience. To remain on the inside I use the idea of “dwelling,” a being in the phenomenon—the term is taken from translations of Heidegger’s ontology of being-in-the-world or *Dasein* which later becomes “dwelling”.⁵ By dwelling in the phenomenon, we can stay focussed on its “becoming”. I consider note-theories as problematic because they systematically avoid dealing with this most compelling aspect of music: its enigmatic becoming. By dwelling in the phenomenon it is possible to attend to the qualities of the musical becoming. Neither a social explanation nor a note explanation on

⁴For a description and problematized understanding of the temporality of music see chapter 4, especially at §4 and §4.1.

⁵Discussion of Heidegger’s move from *Dasein* to dwelling is in Eugene T. Gendlin. “Dwelling”. In: *Proceedings of the 17th Heidegger Conference University of New Hampshire*. New Hampshire: pp. 133–152.

their own explicitly reckon the becoming, and because they tend to implicate a singular or stereoscopic view of the works they study, they implicitly close out the possibility of directly approaching the multiplicitous structure of the becoming. The structure of the becoming has an unpredictable quality that is systemically erased by any revelatory method.

The unpredictable quality is perhaps cause for scholars to turn away and dismiss the very possibility of the existence of a musical doing, but I think that it is rather something that we should look at with more attention, focusing our energy directly on the most elusive aspect of music. The question becomes how and where to focus.

The unpredictability is not, in fact, anathema to the scholarship of naming things; it is already there, in the variously crazed act of naming. At the moment we abstract from experience by naming something, we loose track of the doing by exerting closure. Yet in giving something a name, we are not simply affixing a symbol to a preexistent object-thing, we are reaching into and holding the implicit structure of the thing steady—locating an *aspect*.⁶ In this sense, naming “finds” aspects in the world.⁷ Generally the finding is

⁶The idea that we are naming things in this way, as some kind of arbitrary naming machine, ideologically lurks in the current love of acronyms (LOA) where words that appear to be cumbersome or idiomatic are given the militaristic appearance of capital letters regardless of the ridiculous and unharmonious nature of the result. By making an acronym stand in for a set of words we are slipping into the game of arbitrary relations—positing that there is no work that words do other than the arbitrary symbolic. The acronym pays no attention to its oversized dominative appearance, it moves like a conceptual bulldozer, a weighty insistence on the arbitrary.

⁷“Finding” in this sense is indebted to its use by Eugene Gendlin in Eugene T. Gendlin. “Crossing and Dipping: Some Terms for Approaching the Interface between Natural Understanding and Logical Formulation” (1995): URL: <http://www.focusing.org/gendlin.html> (visited on 05/2005/01).

useful and therefore contextually relevant—we don’t name aspects at random. This contextual relevance of naming is therefore as unpredictable as context. But noting the doing of naming is particularly interesting for music because music never really had names in the traditional sense.

Music is nameless. We talk about note-names, meters, and opus numbers in the abstract. The rest of music’s names are said to be “metaphorical”. These include the traditional italian descriptions Legato, Adagio, and so on, as well as contemporary popular terms such as Phat. Music is thought to be out of name’s reach for good reason—it resides primarily in the undefined implicit. It is a personification of the naming process, reflecting on and proceeding within the act of naming. Music in this sense is the doing of naming. By looking to how we engage naming with music this dissertation proposes that music is a wild ride in the implicit more so than the explicit. I attempt to illustrate the interplay between doing and naming. While it would be impossible, by definition, to make the implicit explicit, it is nonetheless possible to think about what kinds of qualities the implicit has in how it surrounds our every movement and every moment. Music will take us exactly towards this insight.

0.2. The dream of singularity

In the paradigm shift in musicology of the past twenty years, we might be tempted to identify Susan McClary as the scholar who really led to the break point. But there were murmurs in the 60s, and probably further than that

as well.⁸ Joseph Kerman suggested that musicology was self-absorbed in its focus on historical facts and theoretical demonstrations as ends in themselves. Imagining an integration of the discipline into “musical scholarship” where each becomes a step on the ladder towards critical apotheosis, Kerman suggests that scholars “confront the work of art in its proper aesthetic terms.”⁹ There is a temptation to imagine that Kerman’s “proper” aesthetic terms here constitute a singularity, but it is more understandable as an ethical consideration that must be able to adapt to new circumstances—what is “proper” is ethically responsible to some current context. We cannot posit a fixed mode of inquiry for aesthetics in the same way that ethics cannot be coded into absolute laws.¹⁰ Though there are better, best and poor that might gradate the properness of an inquiry, the terms of engagement are always adapting. The musical object emerges in multiple processural relations (both social, intellectual, and physical) the extent of which cannot be predicted or fixed. We are aware of the inherent quality of Kerman’s analysis in part due to its specificity and contemporary relevance.¹¹ The question is, What is the contemporary

⁸Discussions often point to Joseph Kerman’s 1965 challenge for a critical approach, see Joseph Kerman. “A Profile for American Musicology”. *Journal of the American Musicological Society* 18/1 (1965): pp. 61–69.

⁹Ibid., p. 65.

¹⁰This is an understanding of ethics that rejects Kant’s categorical imperative as well as its relativistic contrary. James Rachels refers to this perspective as a “conscientious moral agent”. The agent is not bound to legislative rules, but this fact does not make her decisions subjective. This conception of morality is able to cope with new situations in a way that is responsible. See James Rachels and Stuart Rachels. *The elements of moral philosophy* (Boston: McGraw-Hill, 2007), esp. ch. 1, 8, & 13.

¹¹Exactly what the conditions are that make Kerman’s project relevant would be a study in itself—perhaps it is related to post-war optimism and the aesthetics of Walt Disney. I bring it up here merely to bring our attention to the conditions so that I can begin to talk about the what qualities the flexible ethics has.

relevance guided by, what force pulls the ethics one way or another?

History, if not postmodernism, has shown us that a singular truth is always contingent upon the discourse that frames it. In an era of multiple frames and discourses, many of which are contradictory and aggressively territorial, if we want to understand what musical understanding is about we might begin to look at how music behaves in different interpretive frames. If musicologists are telling many different stories and the institution of collectively imagined 19th century truth is no longer, then to get closer to where music is an opening-doing, we might begin to look at what kind of work music does to validate our stories.¹² Rather than think about single narratives, why not start to think about how multiple narratives come together and what end those narratives are serving.

This paradigm shift in musicology that was embraced in the 1980s was long in the making, but insofar as it left out its own conditionality and with that the possibility of irrelevance or negation, it was also a revolution that contained the seeds for its on destruction via singularity. The conditionality is fundamentally ethical, something that we know is flexible and yet right for the time-being. For example, consider McClary's article that imagines "paradigm dissonance".

McClary suggests that the way forward out of the variously entrenched views in musicology/theory is via a methodology called "Cultural Studies".

¹²A compelling elucidation of multiple and irreconcilable stories being told by various musicologies see Kevin Ernest Korsyn. *Decentering music : a critique of contemporary musical research* (Oxford: Oxford University Press, 2003).

By mapping readings of tonality and sonata form onto hegemonies of gender and patriarchal imperialist order, McClary is able to see theoretical objects as culturally relevant—part of the historical definition of cultural ideas. The mapping is explicit: “I am claiming that tonality and sonata correspond to the foundational metaphors that have governed bourgeois thought and social life since the Enlightenment.”¹³ It is of great value to make this kind of claim because it illuminates the manner in which our interpretative practices and cultural products are intertwined and co-productive. The temptation is however quite strong to understand these products of culture as constructed and arbitrary. In practice we know that both the concept of tonality and sonata form are particularly nebulous ideas, both of which remain open to further exploration. Thus McClary’s mapping is, like Kerman’s argument, a fundamentally ethical one—we do not doubt the value of the mapping. McClary’s argument is strong not by virtue of truth conditions, but by elements that are currently valued. What might be pulling these structures of value is certainly not constructed or arbitrary, it is a real response to contemporary need. By turning towards their unspecified ethics it is possible to build upon the insights of both McClary and Kerman.

To wit, what I will perform over the course of this dissertation is a radical questioning of the plausibility of theoretical singularity. Rather than make more quality stories of homologous aspects (here tonality and hegemony), I want to come to terms with the heterogeneous world that gets tamed by our

¹³McClary, “Paradigm Dissonances: Music Theory, Cultural Studies, Feminist Criticism”, p. 77.

desire for the control and truth of aspect. By approaching the process of homogenization from a heterogeneous world we can begin to use theory in a way that preserves musical opening, coming to terms with how music works in the world as a performance *of* something—be it culture, gender, sexuality, policy, anxiety, intellect, physicality or something else. By turning our attention towards the heterogeneity, we can begin to understand both culture and the currently unfashionable “music itself”.

0.3. Multivalence

A heterogeneous world? What would be the good of such a vision? How would we begin to talk about and imagine such a vision? The term that I use for this heterogeneity is “multivalence”, but I use it in a slightly different way than current musical scholarship.

There was a flurry of discussion beginning in the late 80s regarding the determinism of operatic analysis. In a jointly authored paper, Carolyn Abbate and Roger Parker argued that the “reduplication” of unity that has characterized the 20th-century analytic tradition might be selective of a singular aspect at the expense of others.¹⁴ James Webster followed with a new conceptual term for analysis, named “multivalence”, that looked at multiple strands of musical and textual aspects. Webster suggested his concept as necessary for the maturation of operatic analysis, arguing that it is “only by weaning our-

¹⁴Carolyn Abbate and Richard Parker. “Review: Dismembering Mozart”. *Cambridge Opera Journal* 2/2 (1990): pp. 187–195. Reduplication refers to the repeated search for some large scale unifying principle in any given opera; for instance, a harmonic plan or motivic repetition that structures the complete work.

selves from the ideal of absolute music, with its bias towards ‘unity’, can we appreciate Mozart’s operas as ‘multivalent’”.¹⁵

Webster’s understanding of multivalence doesn’t fully address Abbate and Parker’s concern that our discourse selects and confirms particular aspects of the experience and thereby produces them as *the* phenomenon of interest. Rather than address this particularly explosive issue, Webster posits that there are several interpretive strands, some of which can be analyzed in the tried and true tradition of interpretive singularities. Webster imagines two classes of valence in opera: domains and parameters. The domain corresponds to the usual division of labour in an opera, “text, music, stage-action and so forth”; parameters specify the usual division of labor in the domain, for example music has parameter rhythm, form, tonality and so forth.¹⁶ The thinking in each parameter is ultimately exemplified by Schenkerian graphs of harmony and voice leading relations.

Webster’s thorough approach that analyses several arias locally and also in relation to larger generic style tropes is convincing. Further, in an article co-authored with Jessica Waldoff, Webster marries his analytical insights with a notion of “plotting” that thinks about the coming together of all elements as a kind of performance.¹⁷

In contrast with Webster, I work to understand multivalence *within* “pa-

¹⁵James Webster. “The Analysis of Mozart Arias”. In: *Mozart studies*. Ed. by Cliff Eisen (New York: Oxford University Press, 1991): pp. 101–200, p. 198.

¹⁶Ibid., p. 103.

¹⁷Jessica Waldoff and James Webster. “Operatic Plotting in *Le Nozze di Figaro*”. In: *Wolfgang Amadè Mozart: essays on his life and his music*. Ed. by Stanley Sadie (New York: Oxford University Press, 1996): pp. 250–295.

rameters”. In fact, I find the very notion of parameter, laden with computational-speak, to be problematic. Rather than think of musical aspects as coming to us in a packet that we unzip and hear, I argue that hearing-in any particular parameter is a dwelling within that aspect.¹⁸ As a dwelling, it is flexible and responsive: if you are not listening to that aspect then it is not there; if you hear that aspect you are hearing-in, dwelling in the nature of the material. Hearing-in has potential to evolve into further engagement with increasing complexity. This view of multivalence within parameters opens up musical experience rather than artificially confining it, yet it does so without resorting to the romanticism of the wordless, or theory less—opening experience is present in the act of naming and theorizing.

To help clarify the particular approach to multivalence here, it is useful to note that it sidesteps the topic of unity altogether. Webster moves away from the idea that everything in the opera serves a singular idea by putting a relational group of unities in its place. We can readily imagine that this relation group of unities is producing a singular, if complex, vision of the opera’s unfolding. But in the multivalent world that I am describing, where a melody gets more and more complex as we move further into its material being, any discussion of unity is sidestepped: the very idea that there is a unity here is misleading. Any given set of people are going to dwell in the music

¹⁸This notion of being in the aspect differs from the logical order that would see the aspect as being delivered to a hearer, and introduces a responsive order that sees a phenomenon responding to our selection. The difference between these two orders is described by Eugene Gendlin in his “The Responsive Order: A New Empiricism”. *Continental Philosophy Review* 30 (1997): pp. 383–411.

at different levels of engagement. But this variance doesn't mean that there is a unity that we are working towards on the climb up Mt.Parnassus. There is no united object because the object is produced via dwelling which varies according to contextual particularities. In this view of multivalence we are leaving the world of object-things and coming into the world of becomings—a world where things become. In this world we can begin to ask very different kinds of questions: What forces pull at a particular becoming? What interests are being served by it?

0.4. Two key demonstrations

To build my discussion of musical becoming, I utilize the work of several other fields. Two concepts help clarify the doing of naming and the particular way that I am thinking about multivalence. The first is the emergence of a redundancy in material relations, and the second is the aspect to which we are attending when dwelling in a process. The concepts come from psychology and architecture where they are presented as graphic demonstrations. In the interdisciplinary of my argument I begin with the demonstrations in their field to give a better sense of how I will use them as leverage to talk about the perceptual selection of musical aspect from multiple processes.

0.4.1. The redundancy and selection of a set

Normally we think of a set as being a group that is put together in some context and for some reason. There is a set of people waiting to get into the opera-house and another set of people waiting to get into the hockey game.

These two sets are subsets of the larger set: people waiting. They are grouped by reason of “waiting”. They could also be grouped by values, dress code, place, and so on. The first point is that there is no limit on the possible reasons for grouping together a set; although there are, clearly, elements that would *not* give good reason for the set; people standing (too broad, assumes place), people made out of cement (no living person is made of cement so again, the set would be too broad). The second, related point, is that the redundancy is produced by the elements of the set as a material selection—it is not a production of the abstract mind.

The production of redundancy in material is a point that psychologist Wendell Garner made in 1974: meaning is not a singular phenomenon. It is produced in the material world via selective relationships and while there is no limit on the production (the material world is multivalent) there are constraints on the relations—not everything is relatable.¹⁹ The material aspect and contextual usefulness of the selection puts Garner in a class with both Gestalt psychologists and the ecological approach of James Gibson.²⁰

The notion of a selective relation is best illustrated with a graphic figure.

In figure 1 there is a single undefined graphic image.²¹ We cannot see it

¹⁹Wendell Garner. *The processing of information and structure* (Potomac, Md.: L. Erlbaum Associates, 1974).

²⁰On the ecological approach see James J. Gibson. “On the concept of ‘formless invariants’ in visual perception”. *Leonardo* 6 (1973): pp. 43–45; James Gibson. *The senses considered as perceptual systems* (Boston: Houghton Mifflin, 1966); James J. Gibson. *The ecological approach to visual perception* (Boston: Houghton Mifflin, 1979). Gestalt psychology finds principles of perceptual organization illustrated in the world, see for instance Max Wertheimer. “Laws of Organization in Perceptual Forms”. In: *A source book of gestalt psychology*. Ed. by W. D. Ellis (New York: Harcourt Brace and company, 1938 [1923]): pp. 71–88.

²¹This and the following two figures are simplified sketches of Garner’s more complex

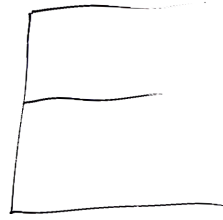


Figure 1: Open item

without in some sense defining it, but that definition is always with reference to an implicit set. The observer might say, when asked, that the image is an E . He might say that it is a square missing a side being bisected into two rectangles. He might see it as a representation of a tool head known as pitchfork. In all cases, and there are an infinity of more, a certain set is being inferred by the observer. He is seeing it as a member of the alphabet set in the first case, as a member of the set of geometric shapes in the second, and a set of tool heads in the final. The figure is open to whatever set the observer infers.

By adding a second graphic, as in figure 2, a set emerges and the members have an identity that is residual rather than inferred. If asked now, the observer will say something along the lines of “this is the one with the squiggly tongue.” Prior to the presence of the second set member, there was nothing to help us understand the original figure as a member of “straight tongued” set—although we can imagine that there is a person who does infer such a set. The

work in Garner, *The processing of information and structure*; and “Good patterns have few alternatives”. *American Scientist* 58/1 (1970): pp. 43–79.

point is that the new member of the set *selects* the perceptually salient aspect. It is not that the aspect “straight tongue” was not there before, it was, but now it is a salient feature, it emerges as rich with information, a “dawning of aspect”.²²



Figure 2: New set member produces aspect “squiggle tongue”

There are an infinite variety of aspects that might be drawn out of figure 1. If I place a picture of a couch beside it, aspect “couch form” is produced. If I place a spade, an arrowhead, a cross, four straight lines, or some other thing beside it, I select still another aspect. The aspect is produced by the invariance between the two when they are *crossed* (brought into contact): invariant aspect square, tool, shape, couch form and so on emerge when the figures are brought together. In the crossing, each participant selects a dormant aspect of the other.

Seeing how the set produces aspect via a crossing, we can begin to think about process. Firstly note that the production of aspect is what might be called “geometric”: it resides in the material or it is something that is demon-

²²Ludwig Wittgenstein. *Philosophical investigations* (Oxford: B. Blackwell, 1953), part II section xi.

strated in the world. To think that the set is something that we “fill in” with our powers of observation and the figures exist as empty “data parameters” misses the manner in which a process is taking place in the world; a process that is selective, reinforcing, and productive of itself. The use of the term geometric guards against a mentalistic understanding. By allowing the processual nature of the set to remain in the foreground of its still reality we can begin to ask questions that are more compelling—what reason suggests the variation “squiggle tongue”? Secondly, we can ask about the nature of the produced set—what is it about this set that affords more members, that sense that remains incomplete and suggestive? In figure 3, I represent these questions with a question mark over an ellipsis at the far right.



Figure 3: What other aspects might this set find? What is the call that finds them?

The call is contextual: something about a given context is already leaning towards the production of aspect *xyz*. The aspect of squareness, of tongueness, and so on are deeply contextual particularities, but the context is always found in the crossing that remains in the material world. I will turn more to the nature of this process below, for now notice how this elliptical space remains crucial to our sense of the set’s affordance. Ordering of the set is unimportant

when discussing the nature of this elliptical space; it could have started with the squiggle tongue or the square. Yet each acquisition of a set member refines the elliptical space. Seen another way, without the undefined ellipsis, the relations that produce the set would be arbitrary and indeed difficult to define.

This elliptical space that calls at the end of any set is of great usefulness to a musical analysis that wants to remain in the realm of doing. Beginning in chapter 3 I illustrate that musical processes (sets of implication realization triples) select aspects of their self in a way that opens the elliptical space. I further argue that it is the particularities of the opening that constitute our understanding of compositional “style”.

0.4.2. From emergent sets to consciousness, a quick step

The notion of the set as producer of aspect helps to focus some of the difficulties that artificial intelligence still faces, and by extension tells us about consciousness. Hubert Dreyfus had from the early years of AI predicted that the frame problem would remain a significant barrier to intelligent machinery.

²³ The frame problem names the inability of a computer program to incorporate major shifts in narrative by adjusting a global frame. Children as young

²³Hubert L. Dreyfus. “Overcoming the Myth of the Mental”. *Topoi* 25/1 (2006): pp. 43–49; *What computers can't do: a critique of artificial reason* (Cambridge, Mass.: MIT Press, 1972); *What computers still can't do: a critique of artificial reason* (Cambridge, Mass.: MIT Press, 1992). Of course, to think that machines are somehow unintelligent seems to have been a serious preoccupation for the modern era, see for instance Jessica Riskin’s article which talks about the apparently shifting goal posts of our understanding of intelligence via machines in Jessica Riskin. “The Defecating Duck, or, the Ambiguous Origins of Artificial Life”. *eng. Critical Inquiry* 29/4 (2003): pp. 599–633.

as 4 years old can accommodate major shifts in a narrative—we cope.²⁴ A computer program cannot cope with the kinds of frame adjustments that the four-year old can, largely because we cannot quantify all possible contexts. Even now, 30 years and billions of research dollars later, in an era that envisions technical advance as ever rapidly changing and “shrinking” the world, the frame problem remains. The narrative, be it a book-story or the kinds of working stories that give coherence to our lives and daily beings, is subject to the same kind of productive revision that a set is.²⁵ There are always more aspects that remain implicit in the set only to be brought out by the crossing of a new member and context.

The implicit is a kind ragged edge; a complex edge, like a broken shard of pottery or a torn paper.²⁶ By focusing on the set as containing discrete properties we miss this ragged edge. The frame problem stems from the inability to adequately contain or quantify the edge as a set member. Without the ragged

²⁴Daniel Dennet suggests that the idea of the “frame problem” is understood differently by different authors, e.g, John McCarthy and Patrick Hayes; see Daniel Dennett. “Cognitive Wheels: The Frame Problem of AI”. In: *Minds, Machines, and Evolution: Philosophical Studies*. Ed. by Christopher Hookway (New York: Cambridge University Press, 1984): pp. 129–151. It is Dreyfus who introduces the idea of “coping” as a way of understanding expert knowledge, see his Dreyfus, “Overcoming the Myth of the Mental”.

²⁵Life in general is subject to radical revisions in narrative. This is the familiar experience noted by Maurice Merleau-Ponty when he recognized that the understanding of his personal past is subject to change: “Tomorrow, with more experience and insight, I shall possibly understand it differently, and consequently reconstruct my past in a different way.” Maurice Merleau-Ponty. *Phenomenology of perception* (London: Routledge, 1962[1945]), p.346.

²⁶This understanding of complexity relates largely to the chaotic aspect of the ragged edge. We recognize in that edge a uniformity, or attractor, that holds it constant. On complexity and chaos see Mitchell Waldrop. *Complexity: the emerging science at the edge of order and chaos* (New York: Simon & Schuster, 1992), James Gleick. *Chaos: making a new science* (New York, N.Y.: Penguin, 1988), John Briggs. *Fractals: the patterns of chaos: a new aesthetic of art, science, and nature* (New York: Simon & Schuster, 1992).

edge, the frame becomes obsolete very quickly. But how does this ragged edge allow for the frame to adjust? The openness of the ragged edge leaves the set ready to incorporate new aspects and restructure existing ones in ways that are contextually particular and meaningful. In a crossing we make use of the ragged edge's mutability, the quality of which feeds back to define the edge. The ragged edge moves forward with every new redundancy or invariance. In that movement forward we get a sense for the quality of the edge, a sense of how it holds things together. Clearly the edge is more complicated than a linear program, but that is no reason to avoid the clear demand that it makes to scholarship in general.²⁷

Since history has shown us that the human consciousness has been continually redefined in accordance with technical mechanization, we might be wary of suggesting that the implicit, with its ragged edge, is definitive of consciousness. Jessica Riskin. "The Defecating Duck, or, the Ambiguous Origins of Artificial Life". eng. *Critical Inquiry* 29/4 (2003): pp. 599–633 However, we can note that there is a manner in which the redefinition of consciousness according to mechanization is itself a set with an implicit ragged edge-like feature, and speculate that our understanding of the world is somehow intimately tied up with our understanding of the implicit. If consciousness is found inside a sensibility for this moveable frame, we can begin to ask several

²⁷I take this idea of a ragged edge up at several points below (see especially chapters 2 and 5); the relation between the implicit ragged edge and consciousness is discussed in Bruce Mangan's article on "the fringe", a reading of psychologist/philosopher William James' understanding of experience, "Sensation's Ghost: The Non-Sensory 'Fringe' of Consciousness". *Psyche* 7/18 (2001): URL: <http://psyche.cs.monash.edu.au/v7/psyche-7-18-mangan.html> (visited on 22/06/01).

questions of it: What kind of work is the frame is doing? Why is the frame's product particularly important at this particular time? And on a more theoretical level, what kind of qualities hold the frame together as it winds its unpredictable way through time. Understanding the wholeness of a wandering frame is illustrated by the idea of "structure-preserving transformations."²⁸

0.4.3. Structure-Preserving Transformations

Having seen how the addition of a member to a set can articulate a new aspect via redundancy, and noting that this kind of production is relational (a cross), the complete features of which are always in a process rather than fixed, it is possible to begin to think about the process itself. The physicist-architect-philosopher Christopher Alexander has gone a good way towards talking about this kind of thing under the rubric of "structure-preserving transformations". The idea of a transformation has to do with Alexander's understanding that there is a process that underlies the growth of all living things, and that these living things include architecture, geological formations, physical processes like the creation of a snowflake, and cultural rituals; in short, Alexander's scholarship covers almost every discipline.²⁹

To get a sense for what Alexander is talking about, consider figure 4.³⁰ Here I have drawn a sequence of transformations that relate an initial dot

²⁸The idea of a "structure preserving transformation" is drawn from Christopher Alexander's study, *The process of creating life: an essay on the art of building and the nature of the universe* (Berkeley, Calif.: Center for Environmental Structure, 2002), pp. 51–106.

²⁹There are many non-living processes as well, arbitrary highrises, developments, streets, most modern architecture and most of the twentieth century, *ibid.*, pp. 108–36.

³⁰Alexander has several similar sequences both abstract, like this one, and relating to actual structures in the world. For example, see pages 52, 212, 445 in *ibid.*

to a more complex tile. Notice how the change gets more radical towards the end, altering many of the previous developments but still maintaining a holistic connection to them. Transformation vi is the most extreme, but even if something of the linear flow has been disrupted in vi, the point I want to draw attention to is that something has been preserved. Each of the transformations are “structure preserving”. Each transform performs a crossing that selects an aspect of the set as illustrated above (§0.4.1) . However, here in figure 4 there is an explicitly temporal and organic relationship being described. How can a dot have the implicit structure of a tile!? Notice that the initial “dot” does not have to be present in each transform, so while these transforms are geometric and material, they are not parallel or equivalent to the “ink spot”—they are relational. We can ask of this process the same questions that we began to ask of the sets in figure 3. What is it that holds these discrete states in relations to each other? How is the process shaped? Since it is very easy to imagine that there is another outcome plausible here—it is a dot, after all—we can ask, What makes this particular series cohere?

Alexander asks exactly these kinds of questions of the structure; questions that ask what holds the sequence together. We cannot point to any particular instance and posit that this is the final state that summarizes what is preserved in the transformation. Each transform *carries forward* some aspect of the implicit and in so doing articulates a future. Alexander wants to know what that process is that holds them together, a question that he answers with an idea of “living process” that can be variously described by 15 properties. This

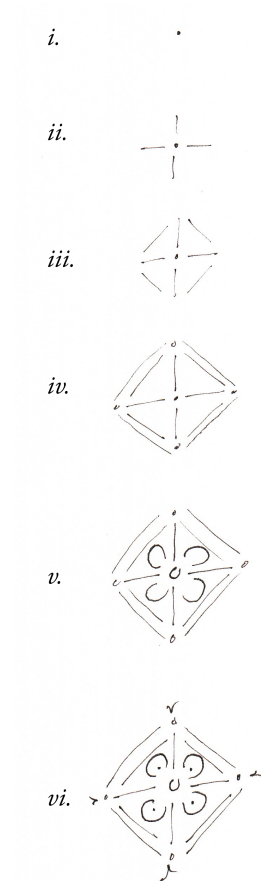


Figure 4: Structure preserving transformation. Each transform (i-vi) preserves some aspect of the original via a selective focusing (a center

process is not a unity because it cannot be described by a single property, it is multivalent. The properties are often related to a phenomenon of “preserving centers”.³¹ In figure 4, we might say of the process that it preserves centers:

³¹The 15 properties are described originally in the first volume of Alexander’s study: Christopher Alexander. *The process of creating life: an essay on the art of building and the nature of the universe* (Berkeley, Calif.: Center for Environmental Structure, 2002), esp. 79–143. Some of the properties include: levels of scale, centers, boundaries, repetition, non-separatness, inner calm. For a full listing of the 15 properties see Alexander, *The process of creating life: an essay on the art of building and the nature of the universe*, pp. 65-83.

an initial center is focussed on by four lines at stage *ii*; the lines start to point to four additional centers in *iii*; the four new centers are strengthened in *iv* $\mathcal{E}$ *v*; and a new set of four centers emerge around the initial center in *v*. In sum, 9 centers are preserved by the figure. The properties that Alexander points to are not only descriptive; they allow us to start to really engage what is a quality transform (and also what is not) at the level of their becoming, or their being. Nor are the properties subjective, they are strictly speaking geometric, or demonstrable in the world. The unusually wide array of properties speaks to Alexander's non-reductive approach. All of these attributes of process can be applied to the above discussion of the becoming of a set and the maintenance of a coherent frame around our being. Discussion at this level of analysis is discussion of dwelling.

In later chapters, especially §3 and §5, I take this approach of structure-preserving process and consider what we can say about multiple musical processes. I argue that musical processes are geometric and relational as well, and we can talk about the kinds of things that these processes select, preserve, and focus on. By thinking about processes and the implicit centers that they realize, it becomes possible to talk about music's relation to a being in the implicit.

To recapitulate, I showed a set as defining its aspects through a crossing. I drew a sequence of transforms that were related by a concern, not a rule or law, but a concern for the preservation of structure. In between these two demonstrations, I suggested that the so-called frame problem is a function of

forgetting that sets are produced in the crossing of elements and that crossing is unpredictable though knowable as a ragged-edge. Lastly, I noted that the being that resides in the concerns of a crossing is a being that dwells: dwelling is the preservation of the concern.³²

How exactly do open sets and structure-preserving transformations relate to multivalence and music? The multivalence that I attempt to describe is that process of selection whereby different processes are presented simultaneously and the cross produces some aspect. On the most general level, if I hear a piece of music with a given theory (hearing *for* cadence, *régle d'octave*, Schenkerian “ $\hat{5}$ line” etc.) I am hearing a cross between that theory and the selection that it makes of the music. There are many theories out there, theories to help us make music and theories to understand music—they are all selective crossings. Simply put, the theory is not benign, it is an active member of a perception. A multivalent approach is about more than the selection of theory; it goes further into the music as it takes place in the material world whereby

³²This special notion of “concern” is indebted to Bruno Latour’s usage in his article on the contemporary condition of critique, “Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern”. *Critical Inquiry* 30/2 (2004): pp. 225–248. Latour’s thesis is that in a post 9/11 world it is no longer appropriate for critical thinking to approach “facts” with iconoclast critique. In place of such iconoclasm, Latour offers concern, a concern to get closer to the facts and the institutions that produce them by drawing out the many processes that contribute to their arrival in facthood. Such an understanding of concern is directly relevant to my project here, which is critical of music theoretic and music sociological study without dismissing the importance of either. Rather than theory bashing, I am attempting to look at exactly how theory gets us closer to the music. Latour’s idea is indebted to Martin Heidegger, who likewise talked about a concern for dwelling in his late work on poetry, collected in Martin Heidegger. *Poetry, language, thought* (New York: Perennial Library, 2001[1971]). The idea of crossing will return several times below, it is derived directly from another Heidegger scholar, Eugene Gendlin, see his Gendlin, “Dwelling”; Gendlin, “The Responsive Order: A New Empiricism”; Gendlin, “Crossing and Dipping: Some Terms for Approaching the Interface between Natural Understanding and Logical Formulation”.

the processes internal to music, rhythmic and melodic, are themselves fraught with crossings and becomings. This multivalent world of music is productive in its own relation to the implicit; each crossing contains the ragged edge and thereby anticipates a future. This is how I begin to theorize music in the implicit.

0.5. Theorizing the implicit

The main theoretical tools of musical process are developed by Eugene Narmour.³³ I use Narmourian processes as analytical tools to illustrate a heterogeneity of processes in a way that opens the experience of a listener. This use of Narmour is unique to my dissertation. It goes in a different direction than perceptual psychology because it does not look for a single predictable response, but at nor does it imagine that it has any one single analytical truth as does some particular music-theoretical reading. I outline positions on the relation between theory and perception in chapter 1. There I clear the way for thinking about how analysis is a way of hearing “as” that is offered to listener, and imagine what Narmourian analytical techniques present in terms of the nature of that offering. Rather than try to prove a universal validity of a single reading, I utilize the process-based analysis to reveal multivalence. At the junctures between multiple processes we are invited to reflect on our selective perception and articulate it with increasing nuance. It is puzzling why a process-based approach has not been taken up more generally by the

³³I understand Narmourian theory as being best represented in the first volume of Narmour’s study of melody; *The analysis and cognition of basic melodic structures: the implication-realization model* (Chicago: University of Chicago Press, 1990).

theoretical community.

One reason for the avoidance of Narmour's theory could be its undue focus on the "cognitive". It is the cognitive aspect of his theory that has led perceptual psychologists to try and "prove" the theory. As I show in chapter 1, the idea that we perceive in our "special human heads" in a way that is homologous to Narmour's theory erases the most valuable aspect of the theory for analysis—illustrating multivalence. Proving some kind of constant human brain mechanism that gets turned on by a particular sonic event and context is necessarily at odds with a music analysis that looks towards the manifold possibilities of experience. I suggest that the "head bound" aspect of cognition is not necessary for fully preserving the value of Narmourian archetypes. Because the archetypes are situated *in* the world as it is found to be meaningful by a perceiver, it preserves the elliptical and unfixed quality of opening perceptions: as the world changes, new issues will draw out new ideas. By utilizing Narmour's archetypes towards pointing at multivalence I suggest that we encounter a method to talk about the nature of the unfixed.

The worldly situatedness of perception, what Gibson called the ecological view, allows that the more we focus on the thing in the world the more that thing begins to respond. The state of being in the world that is focussed and within this responsive dynamic I call dwelling. What is unique about dwelling is that it disassembles the traditional division of subject and object. Dwelling is a finding of subject in the "affordances" of the object. Because the object is a field of affordances, it is no longer a stable singular thing; the affordance is

found in context—a melody might afford reverence, or humor, it might afford calling to someone over a distance or any number of other things depending on the context. Because subject is a finding in the object it is a similarly contingent production rather than a separate entity of the name “I”. The approach to music analysis that begins from dwelling is one that invites the listener into the complexity of the relationship as a dynamic experience. From a responsive dwelling in music, where predictability is challenged, it is possible to consider the nature and structure of the implicit.

Chapter 2 takes the analytical point of view developed in chapter 1 as being present in the theoretical writing of David Lewin.³⁴ A responsive and multivalent view of musical analysis is outlined and practiced by Lewin, but it gets voiced in a formalist language counter to its goal. The celebration of formalism arrests the multivalent and responsive view, leading to some logical conundrums regarding language and specifically music theoretic language. By highlighting the relationships between Lewin, Martin Heidegger and Eugene Gendlin I attempt to retrieve the valuable insights that Lewin has to offer without the burden of formalism. Lewin’s insight becomes a springboard for discussing how ideas like “poetize”, “hearing as” and “carried forward” are used and positioned regarding analysis. In the remaining chapters, I analyze several pieces of music so as to illustrate a few ways that the approach from dwelling reveals aspects of the implicit.

Turning first to an analysis of a middle movement of a sonata fragment

³⁴David Lewin. “Music Theory, Phenomenology, and Modes of Perception”. *Music Perception* 3/4 (1986): pp. 327–392.

by Mozart, chapter 3 begins moving towards a qualitative view of the multivalent processural architecture that Lewin intimates. In this chapter a feature of Mozartian style is identified as a particular virtuosity at navigating the implicit. The analysis looks at how a very unlikely pair of motives are brought together in such a way that they afford even wilder excursions into the implicit—one moment stretches far enough to be heard as a twelve-tone aggregate (figure 3.13, §3.7).

The approach to cognition that finds the complex quality of experience in the world rather than the mind is suggestive of an enactive account of perception. In chapter 4 I rehearse the idea of enactive perception as summed up by Alva Noë.³⁵ The claim of enactivity is that perception is found in the movements of objects—whether that movement be determined by my body’s relational movement or my physically moving the object. I explicitly associate Noë’s enactive account of visual perception with Narmourian processes, whereby the processes in music mobilize our implicit, movement-based, perceptual understanding of the world. By associating movement with process, the importance of music to our most elementary understanding of being is more directly articulated. If as beings we understand the world through movement (performed or not), and music is a performance of our “understanding movement,” then music is our worldly understanding. That is, music is a structure of being.

The argument that finds a structure of being via enactive perception is

³⁵Alva Noë. *Action in perception* (Cambridge, Mass.: MIT Press, 2004).

based on an extensive analysis of a famous Mozart aria. This analysis confirms the validity of other readings without resorting to cognitivist model of perception, yet at the same time it inadvertently reifies the historically incontestable fact that Mozart is very complex and engaging music. To understand Mozartian greatness, in chapter 5 I take up an aria with similar *topos* by a lesser known contemporary, Vincente Martín y Soler. A critique of the aria is addressed through an analysis that finds complex multivalence of the order noted in Mozart. This chapter begins to correlate multiple modes of processural analysis, looking to Christopher Hasty's theory of rhythm alongside of Narmourian melodic processes.³⁶ Hasty's view of meter, like Narmour's melodic process, is seen as grounded in the world rather than in the interpolating mind of a perceiver. The finding of emergent complex structures suggests that looking towards how multivalent processes come together gives insight into the issue of individual style and value. To this end I employ Alexander's techniques for describing process to speak about relations between multiple Narmourian and Hastian processes. What such an analysis implies is that privileging specific genres or canonic composers in analytical discourse is not especially helpful if we wish to understand what about these works that makes them a particularly valuable and rich source for inquiry. The comparative approach of this final chapter reveals that dwelling in processes can nuance understanding of both the canonized and the minor composer (Mozart and Soler), and looks forward to more particular applications.

³⁶Christopher F. Hasty. *Meter as rhythm* (New York: Oxford University Press, 1997).

0.6. The Wrap up: Naming is Doing

This introduction began by explaining that an active doing is present in the act of naming. I proceeded to illustrate how a set produces aspect and suggested that we might think about being, or consciousness, as producing itself via material crossings. Rethinking musical process without the trappings of cognitive predictability allows for an engagement with the manner in which a processural sequence produces musical aspect. Close readings attend to the production of musical aspect such that a space opens for reflecting upon the manner in which multiple processes interact. Drawing the listener into the work via processural analysis is a special kind of return to “the music itself”. Yet here the music itself is neither a closed structural architecture nor a subjective or relativistic view. The processural view remains grounded in the material world and allows that materiality to be a complex heterogeneity that is always becoming. Similarly, a view that looks to aspect produced in process does not exclude socially oriented analyses. Social formations are deeply imbedded in the affordances of processural products. Explicitly recognizing the ragged edge that is effected by multiple processes interacting in the implicit allows an understanding of the openness through which social formations are concretized.

This dissertation probes at the boundaries of current theories, marking where they leave off. I consider how theories relate to our perception, what kind of work they are doing, ultimately trying to come to terms with the manner in which theory opens perceivers to the doingness of music.

Another way of asking my dissertation's question would be, What does the doing of music do? The urgency of this formulation is intentional; we could have asked what a musical doing is, or, perhaps what it did, but these types of questions are already in the world of objects that simply "are". By asking on (different from asking about by virtue of emplacement; asking on is dwelling, asking about is recollecting) doing within itself, what *does* doing *do*?, I keep the active alive and focus on the becoming. By getting inside the becoming, allowing for its contingency and even threatening its verity with elements that are outside of closed logical systems, we can begin to ask new questions about what kinds of properties the becoming has, what it is responding to, and what it is producing. The question of musical doing is at the root of a current impasse in critical musicology. We are relatively certain that music is always a doing, but exactly what it is a doing of, or what it does (the doing of the doing) remains unclear. Above I have laid out a theoretical apparatus to address the question of doing without slipping into the world of abstract "things". In what follows I will begin to illustrate specific manifestations of musical doing.

... guided by gestures befitting the measure here to be taken. This is done by a taking which at no time clutches at the standard but rather takes it in a concentrated perception, a gathered taking-in, that remains a listening.

M. Heidegger

1

Theory & Perception, an argument for dwelling

Is music theory a folk-science sentimentally hanging onto perceptual ideas of the 19th century? Do the claims of music perceptionists that dash treasured ideas about form and harmonic syntax leave the theorist without clothing or castle? In this chapter, I redress and rebuild music theory as a tool to bring perception into the work, to dwell in its complex becoming. To dwell is to empathize, to be outside of the biological confines of skin and bone that perception deems as primary. It takes place in the world and is comfortable with dynamic unpredictability. To articulate this dwelling, I point to a misconception in current views of the relation between music theory and music perception. The stories that these two fields tell about the world are so different that

any mapping from one to the other is going to be ripe with problems. A review of the literature finds a customary mapping whereby a perceiver is passively receiving theoretical content, this model obscures our empathic involvement with musical material. Focussing on the empathic as a “dwelling” enriched by analysis establishes the field and direction of this dissertation. Taking tools that hone and enrich perception without the ideology of predictability or the paradox of the 19th century homunculi, equips a voyage into the call of the implicit.¹

Introduction

At a recent multi-disciplinary conference on digital infrastructures a cognitive scientist with a neuro-science focus asked me: “What’s the point of studying music, shouldn’t you just listen?”² Variants of this kind of question abound, all of them predicated on the assumption that acts of perceiving and acts of theorizing are fundamentally different things that exist in separate worlds. It is thought that by “studying” or theorizing music we are somehow breaking from the state of grace that a “pure” listening allows. This pure listen is somehow uncontaminated by theory, it is an ear that ties a collection of firing neurons to an acoustic world. The assumption is that if we *really* want to study music our focus should be on neurons in a state of “un-theorized” grace. The implication (for a pessimist) of the assumption is that analysis is

¹On the paradox of the homunculi, where a little man inside my head perceives my perceptions inside of his head, which must in turn have a little man, see Daniel Dennett. *Consciousness explained* (Boston: Little, Brown and Co., 1991).

²*The Infrastructures of Digital Design: Thinking/Building/Living*, Center for Research in Computing and the Arts (CRCA), University of California San Diego, 01/31–02/02 2003.

somehow a quaint relic of a bygone era.

Yet at the same time that music theory is presumed moot in regards to the real, there is a kind of “value-free” connection mediating the two worlds of neurons and theory. This connection posits a relationship of transparency between the world of perception and theory so that to theorize a perceptive act is in fact somehow redundant. Theory is redeemed only as a carbon copy of perception. In this chapter I complicate such “transparent” assumptions and attempt to look forward to a material world that is responsive to acts of theorizing.

To begin with, I look at the theoretical postures relating the fields of “music theory” and “music perception.” The assumption of transparency has led to many unproductive “mappings” of the observations of one field onto the other.³ By considering several stances on the relationship between these two fields, I suggest an understanding of the relationship that is neither transparent nor derivative. Focused attention on some specific cases fleshes out the mutual dependence of theory and perception. The conceptual division between theory and perception ultimately obscures what we value in both perceptual experience and in reflective theorizing about it.⁴

³On mappings in general, see Lawrence M. Zbikowski’s “Conceptual Models and Cross-Domain Mapping: New Perspectives on Theories of Music and Hierarchy”. *Journal of Music Theory* 41/2 (1997): pp. 193–225, especially pp. 202–5.

⁴The all-pervasive nature of the binary divide is itself a very big question; what is it that is so immediately appealing about knowing a world that is real at a level that is beyond my knowing it? Perhaps it is the impulse towards religion; that is: creating an incontrovertible truth that is not apparent, providing a conceptual place for the ignorant “dark” figures to be held at bay by enlightened masses, and providing the place to do so—in the laboratory.

1.1. The Primary Relationships

Fundamentally, there are two approaches to the relationship between music theory and music perception. The first maps the one onto the other in a one-to-one relationship between how we analyze and how we hear (perceive) music. The implication of this “isomorphic” approach is that analysis will somehow *predict* the response of any given auditor. For example, an analysis that finds a given chord as structurally significant will assume that the significance can be perceptually salient to any auditor, including those *not* versed in structural analysis. For this analyst, a perceptual psychologist can design a test that will confirm or deny the predictions of the analysis. The general implication of the isomorphic approach is thus that analysis *assists* in the recognition of phenomena that are already present in experience.

In the second approach, analysis is not a description of perceptual experience, but the *invitation* to contextualize experience with a technical agent or tool. This takes the same “structurally significant chord” and offers it to an auditor as a way of understanding her perceptual experience. In this case the auditor is using the conceptual tool to reveal an aspect of experience. The tool in this case is not at all isomorphic with experience, but rather an agent that attenuates the listening experience towards particular aesthetic practices and in so doing reveals a particular aspect. In this case, a response is not predicted unless the auditor has been offered the tool. The upshot of this approach is that analysis manufactures a conceptual ground onto which experience is refined.

Obviously these are extreme positions; one offers something of an *a priori* view and the other more of a “constructed” view of perceptual experience. Rather than insist on a nature-nurture kind of argument, I will use this binary characterization to ground the more nuanced positions outlined below. The narratives that individual authors adhere to in order to navigate between the two fields are incompatible. Rather than despair at this irreconcilability, I use it to set the stage for analytical procedures that embrace the character of a multiply defined world. A world that responds to different narratives is the world in which a dwelling exists, and it is towards this level of experience, into dwelling, that analysis can direct us.

1.2. An Outline of Four Theoretical Positions on the Listening-Theorizing Relationship

1.2.1. Tool and Broken-tool

Narmour’s multivalence tool

Perhaps the most difficult case is the position employed by Eugene Narmour, for although he aligns his music theory with the “isomorphic” position, he actually supports a more open-ended view of musical experience. Narmour does not actually do experimental testing, but the first volume of a projected five-volume project outlines “Twenty Experimental Questions” for experimental testing that would provide potential falsification and thus empirically validate his theory.⁵ While several perceptual psychologists have taken Narmour

⁵Eugene Narmour. *The analysis and cognition of basic melodic structures: the implication-realization model* (Chicago: University of Chicago Press, 1990), pp. 418-23. An

up on his suggestions for testing, as a mode of analysis the theory remains an anomalous case.⁶ Yet it is as an analytical tool that Narmour's theory is at its most compelling. In fact, the results of perceptual experiments throw the analytic value of Narmour's theory into relief.

Narmour's underlying premise is that there are subconscious psychological constants that govern the experience of music. The architecture of the theory is founded on the implication-realization model of experience.⁷ The Implication-realization model was suggested by Leonard Meyer and to a certain extent it is the premise of Lévi-Strauss' analysis of Ravel's *Bolero* (aided by Lévi-Strauss' friend, composer René Leibowitz).⁸ However, Narmour was the first music theorist to take this model seriously as an underlying principle and formulate an explicit system for its application. The basic premise is that on hearing a

outline of the project as a who can be found in an earlier article, "Some Major Theoretical Problems Concerning the Concept of Hierarchy in the Analysis of Tonal Music". *Music Perception* 1/2 (1983): pp. 129–199. For a general review of the completed project see William Forde Thompson's "A Review and Empirical Assessment". *Journal of the American Musicological Society* 49/1 (1996): pp. 127–145.

⁶Narmour is frequently invoked in meta-discussions of theory, as in Ian Cross. "Music Analysis and Music Perception". *Music Analysis* 17/1 (1998 1998): pp. 3–20; Joseph Kerman. "How We Got into Analysis, and How to Get out". *Critical Inquiry* 7/2 (1980): pp. 311–331; Carol L. Krumhansl. "Music Psychology and Music Theory: Problems and Prospects". *Music Theory Spectrum* 17/1 (1995 1995): pp. 53–80. Yet as an analytical practice there are no published Narmourian analyses other than his own—cf. Schenkerian styled analytical endeavors enumerated by David Beach in "A Schenker Bibliography: 1969–1979". *Journal of Music Theory* 23/2 (1979 1979): pp. 275–286; "The Current State of Schenkerian Research". *Acta Musicologica* 57/2 (1985 1985): pp. 275–307.

⁷Narmour's theory is outlined and articulated in different contexts, for instance in his *Beyond Schenkerism: the need for alternatives in music analysis* (Chicago: University of Chicago Press, 1977), also see Narmour, "Some Major Theoretical Problems Concerning the Concept of Hierarchy in the Analysis of Tonal Music".

⁸Leonard Meyer is famous for this theory, originally published in 1967, it was republished more than 25 years later in *Music, the arts, and ideas: patterns and predictions in twentieth-century culture* (Chicago: University of Chicago Press, 1994). Lévi-Strauss' analysis is found in .

musical event the listener anticipates, or expects, another. This expectation is either confirmed or denied. Formally, the expectation is characterized as having two basic possibilities, the events of which are notated as follows: $A + A \rightarrow A$ and $A + B \rightarrow C$ (arrows equal “implies”).⁹ That is, non-change implies more non-change (it is a Process), and change implies more change (a Reversal)—Processes and Reversals are labelled P and R respectively. To these two melodic possibilities, Narmour adds the possible duplication of the event—labelled D. The three basic possibilities are complicated by referring to either intervallic or registral motion (register, labelled V, refers to direction while interval, labelled I, refers to the size of the interval. Hence there are five more types: Intervallic or Registral Process (IP and VP), Intervallic or Registral Reversal (IR and VR), and Intervallic Duplication (ID)—registral duplication is an impossibility because the terminal note would have to be the onset, and such a case would be a straight duplication. All intervallic processes contain a registral component and vice versa, just as all processes involve an interval and registral direction. The question is not of exclusive types, but rather of particular aspects being prominent. Narmour argues that the prominence is a function of differentiation in a process: by calculating the difference between two successive intervals, for example, he argues if the differences between two intervals moving in opposite directions is greater than a minor third, then this constitutes change ($A + B$) such that it is an Intervallic Reversal (IR) otherwise

⁹A full description is contained in Part One “Conceptual Background” of Narmour, *The analysis and cognition of basic melodic structures: the implication-realization model*. See also Thompson, “A Review and Empirical Assessment”.

it is an Intervallic Process (IP). A Registral Process (VP) does not change direction, but it does contain an intervallic differentiation greater than a minor third. Thus a process is a sequence of intervals closely related and moving the same direction, if the direction changes, then the process becomes a process of Interval, and if the close relation changes then it becomes a process of register. These eight processes double with the possible addition of retrospective to each (symbolized by enclosing the moniker in parenthesis). The retrospective prefix allows that an implicative process can be revised, such as a large interval onset implying a reversal but actually becoming a process or duplication with the terminal interval. Finally Narmour adds an idea of registral return (aba or aba'), single intervals (dyads) and single notes (monads). Thus Narmour nuances two basic structures into twenty structures.¹⁰

The archetypal processes are *not* mutually exclusive, it is possible that they are overlapping or even present at the same time. By allowing multiple processes to coexist Narmour's theory becomes extremely helpful for the analysis and graphic representation of a multivalent phenomenon. Narmour suggests multivalence works across the musical experiences of rhythm, meter, and harmony.¹¹ Together, the different archetypes create a matrix of potentially conflicting entities, affording a very rich and nuanced view of the musical experience. The selection of intervallic or registrally oriented processes is a case

¹⁰There are also guidelines for chaining processes together, assessing harmonic influence, indicating surprise, intra and extra-opus style influences among others.

¹¹Narmour, "Some Major Theoretical Problems Concerning the Concept of Hierarchy in the Analysis of Tonal Music".

in point (fig. 1.1).¹² Seen as intervallic processes (noted above the staff) a different grouping forms than if seen as registral processes (noted below the staff). In either case, there are two valences containing processes in different states of completion.¹³ The point is not only that interval processes are notionally equivalent to registral returns, but rather, the processes are in multiples of valence, and this plurality affords a sense of the complexity of the listening experience.

Intervallic:

Registral:

Figure 1.1: Multivalence tool: example of multiple intervallic and registral processural possibilities. Excerpt from *Tales* coda, see §1.3.3 (fig. 1.5).

The multivalence afforded by a Narmourian analysis is striking particularly in light of his interest in an empirically verifiable view. The two features of his analysis that distinguish it from others are: (1) it allows for alternative applications of the archetypes, and (2) it proceeds from the “surface” up to higher levels of perceptual organization rather than from a background “given” to that foreground “surface realization.”¹⁴ These two differentiating features

¹²The reader new to Narmourian analyses is advised that bracketed processes are “retrospective” and register is represented with a V except in the case of a registral return which can be either exact (aba) or inexact (aba’). In §§1.3.2 & 1.3.3 I illustrate Narmourian analysis more directly by discussing some procedural questions in practical applications.

¹³There are more levels of depth possible here, even at this “local” level. The point here is not to be exhaustive but rather to show that the tool is adept at bringing us towards such a nuanced view.

¹⁴Figure 1.1 doesn’t stray from the surface level of a Narmourian analysis.

allow for particularities of the surface to be “meaningful,” or present, at higher levels of experience. The nature of this analytical method, for it to reap the benefits of multivalence, requires an analyst to test multiple readings and evaluate their relation to the experience. It can be noted that there is nothing in the experience that is at odds with a particular process, thus we can say that the experience affords multivalence: on hearing *as* a process *x*, the material responds such that it affords *that* hearing. The empirical responds to the tool and produces multivalence. By re-hearing a set of consecutive notes into one of several possibly salient features, the analyst makes a choice between what he thinks he hears and then tests these “theory-laden” hearings in a process that potentially enriches the experience. As an analytical process that recursively engages experience, Narmour’s theory is one that offers the auditor a way of attending to musical phenomena that is more aligned with the tool-relationship, bringing one to view the complexity of musical experience. As a tool, the theory is an invitation to dwell in the complexity of the experience; the tool operates as the agent of this dwelling.

Schellenberg’s Test and the Broken-tool

One perceptual psychologist who formulated Narmour’s theory into a testable hypothesis is Glenn Schellenberg.¹⁵ After reducing Narmour’s theory to a set of five quantifiable principles, Schellenberg tested auditors’ conformance with the model by asking them to evaluate the relative “goodness” of a final note

¹⁵E. Glenn Schellenberg. “Expectancy in melody: tests of the implication-realization model”. *Cognition* 58/1 (1996): pp. 75–125.

(known as the “probe-tone” method). Initial experiments revealed that indeed Narmour’s theory did a good job predicting subject responses. Schellenberg then goes a step further by reducing the five principles to three—creating a “revised model”. Calculating the results based on his simplified model revealed that “for each listener group, the revised model predicted the data just as well as the original model,” and after further statistical comparison “the models did not differ significantly in their ability to predict the variation in the averaged data for each group.”¹⁶ Further experiments confirmed that the revised model was equally able to predict the results.

While Schellenberg’s reduction of the system to three factors might be thought of as good scientific practice in that it is more elegant to have a simpler and more parsimonious model, the effect that it has on the analytical potential of the larger model is one of impoverishment. By seeking parsimony, evidently for its own sake, Schellenberg does substantial damage to the capacities of the theory. In fact, Schellenberg’s initial five principles, while supported by Narmour himself, were already a kind of reduction of the theory.¹⁷ The revised model took an already simplified model and made it more coarse grained. But a reduction of this kind is completely at odds with the multivalence noted as a valuable analytical product. If it were possible to return with Schellenberg’s

¹⁶Schellenberg, “Expectancy in melody: tests of the implication-realization model”, pp. 90–1.

¹⁷Schellenberg cites a personal communication with Narmour, but Narmour himself calls for just such parsimony: “This cosmological imperative . . . reminds us what the goal of music theory is, or should be: namely, to construct a unified perceptual theory of the greatest psychological economy and the most elegant theoretical parsimony . . .”. (Narmour, *The analysis and cognition of basic melodic structures: the implication-realization model*, p. 423)

model we would no longer be in the presence of multivalence.

It seems that in order to confirm the predictive validity of the theory, one has to undo the subtle nuances that the theory presents for understanding experience. Making the theory systematic by removing the multitude of possible analyses means Narmour's theory is less able to articulate a multivalent musical experience—the multivalence-tool is broken. If scientific perceptual testing means impoverished music theory then it follows that the two modes of thinking, “perception via conceptual tool” and “perception as scientific account,” are not as homologous as Narmour implies.

1.2.2. Lerdahl and the Linguistic model

An account of music perception that is exclusively rooted in a mechanism of cognition is found in the co-authored book, *A Generative Theory of Tonal Music*.¹⁸ Fred Lerdahl, the music theorist half of the *GTTM* co-authorship, has continued to theorize along lines which map theory directly onto perceptual experience. Fred Lerdahl. *Tonal pitch space* (New York: Oxford University Press, 2001). The main difference between Lerdahl and Narmour is that the former uses what is essentially a subtle modification of Schenkerian methodology such that it resembles the tree diagrams of a Chomskian grammatical analysis. In Lerdahl's recent work, he admits as much with the promise that that his theory is descriptive of a reduced state; he writes: “Unlike the *Ursatz*, which it superficially resembles, the basic form is not an a priori generating

¹⁸Fred Lerdahl and Ray Jackendoff. *A Generative Theory of Tonal Music* (Cambridge, Mass.: MIT Press, 1983) hereafter abbreviated *GTTM*.

structure but a description of a common reductional state, reflecting the trajectory from structural beginning to cadence.”¹⁹ In effect, a subject has been easily grafted onto the Schenkerian paradigm such that perception is reducing the surface experience of the music to a “common reduction”. Lerdahl’s theory of pitch space essentially tries to map out how a disinterested subject would perceive large-scale structures.

In contrast to Cook who posited one psychological listener in two-worlds, Lerdahl believes that there are two kinds of listeners: attentive and inattentive. In the case of a non-tonic ending “as a symbol of the lovelorn”, Lerdahl posits that both listeners “accurately perceive the beginning as tonic and the ending as tonic.”²⁰ How is this? The attentive listener perceives the relation of harmony following a traditional scheme of harmonic relatedness. The inattentive listener however, who has question marks regarding “where he is” in the prolongational hierarchy, nonetheless assumes that he has concluded on the tonic and thus hears the same “pitch-space paths” as the attentive listener.²¹ Essentially, even if you cannot hear tonal closure, you are still hearing according to a paradigm that asks: “where am I in tonal space currently?” Positing such a mechanism is circular reasoning *par excellence*. For in imagining that every listener actually perceives music according to an attentive or inattentive mode along a hierarchy of “good” tonal closure it concludes that in fact they

¹⁹Fred Lerdahl. *Tonal pitch space* (New York: Oxford University Press, 2001), p. 25. “*Ursatz*” here is a Schenkerian concept that posits a “fundamental line” to which all surface elements of the music relate.

²⁰Ibid., p. 228.

²¹Ibid., p. 228.

do return to this hierarchy and make it work one way or another. Yet there may be some value to the claim that we are experts at evaluating the coherence of harmonic material, but such a claim needn't invoke a cognitive explanation.

Lerdahl is not a music-psychologist, so ultimately he does not have the requirement of empirical evidence for his claim. As an analytical speculation, it suggests that on some level there is a cognitive function that enforces all musical extracts into a given paradigm—here “tonic-finding.” Whether they are aware of it or not, it is assumed that there is something in everyone's perceptual experience that functions in this manner such that if they learn the rules of good tonal progression they will be able to articulate this experience in the language appropriate to those rules. The Lerdahlian argument suggests that musical experience is somehow equivalent to harmonic practice, it relies on the assumption that all listeners “experience large-scale closure” even if they “pay more attention to local and intermediate levels of prolongational structure.”²²

²³ As an analytical claim we can't disagree that tonal return is hearable *when* we hear-as tonal return—it certainly seems like a possibility that everyone is capable of coupling with this aspect of experience. But the selective nature of “hearing as” is of a different order than a predictable cognitive mechanism—

²²Lerdahl, *Tonal pitch space*, p. 229.

²³Recently Lerdahl teamed up with psychologist Carol Krumhansl to “model” Lerdahl's theory such that it can predict auditor responses, Fred Lerdahl and Carol L. Krumhansl. “Modeling Tonal Tension”. *Music Perception* 24/4 (2007): pp. 329–366. They suggest that musical tension and attraction calculated according to Lerdahl's theory is empirically validated by students who evaluated their hearing based on tension—that is, students asked to hear as tension produced average ratings similar to those predicted by the model. While the results are said to be important for a cognitive theory of music, it seems more likely that they roughly correlate our understanding of tension with material situations like distant or dissonant harmonic relations.

we can select other aspects causing tonic-finding to become articulated with anything from metric process to emotional affect and ineffability. By positing an always active cognitive mechanism that performs tonic finding we close out the possibility of multivalent and selective experience. The phenomenon of tonic-finding could equally (and more efficiently) be evidence that we are capable of relating and pointing to the invariant features in the environment, here that of "tonic", should we direct our attention towards that feature.

Of course, there are aspects that are heard before the invitation to hear as "...", but these are contextually valid for the hearer such that they are invited by the context. In the case of tonal closure, we might ask what makes it a contextually viable question, or why did the initial auditor deem it a valid consideration? There are several answers plausible here, from textual practice to cultural formations. By reading along, playing from, or copying to a musical score, the aspect of tonal return is graphically apparent. It is probably the first lesson in any basic counterpoint course that we begin and end on the same note. Thus it can be argued that the invitation to hear tonal return is the invitation to hear "as the technique of writing." Though textual encoding is helpful in explaining the analytical fascination with tonal return, it pushes the problem back to the formation of a text without fictional notes. We now ask what is the context that the musicians were responding to when the text was modified to make tonal return a clear aspect. Now we are in the realm of the cultural, we may begin to talk of feudal authority, the modernist impulse towards first principles and so on. By recognizing such a cultural and material

selection we open up the inherent multivalence of musical products in such a way that the singularity of a cognitive mechanism is less valuable.

Musical experience involves a good deal more than just the perception of good harmonic practice, there are thankfully many other aspects which we are able to experience in such a way that the understanding of cultural and material selection is problematized rather than predicted. In this way the multivalence of the Narmourian approach to process is particularly valuable. Cognitive mechanisms posit a universalism that is at odds with selective multivalence, in their place I am suggesting that we look to the manner in which the cognitive is found as part of the multivalence of the material world.

1.2.3. Radical rejection of empirical validity

Cook and the Antipathy of Two-worlds

Nicholas Cook is the main—if somewhat radical—proponent of the view that perceptual testing does not, and need not, map easily onto analytical practice and vice versa. In his 1994 article on the topic, Cook points out that all perceptual testing is necessarily done in an artificial environment—we never listen to music where we are asked to put the elements of a piece together such that they “seem correct,” or choose a suitable closing tone from a series of “probes.”²⁴ The methodology of the perceptual psychologist gears

²⁴Nicholas Cook. “Perception: A Perspective from Music Theory”. In: *Musical perceptions*. Ed. by Rita Aiello and John A. Sloboda (New York: Oxford University Press, 1994): pp. 64–95. A slightly special case of this would be McAdams’ experiment with Roger Reynolds’ composition *The Angel of Death*, which culminated in a special issue of *Musical Perception*. The experiment involved subjects attending a concert in an auditorium where all was exactly like a concert experience save for the presence of slider boxes that the audience was instructed to manipulate according to their experience. An outline of the

itself towards an understanding that has less to do with empirical listening than it does the ability to play in the artifices of a specific kind of musical game. For Cook, this has to do with the language that frames the questions and the amount of ear training experience that the listener has. The language game that we are asked to play by means of a questionnaire applied to musical examples reveals our conceptual grounding in musical language as much as, if not more than, music. It is thus not necessarily true that the results say anything about a corresponding listening practice. What they do demonstrate, for Cook, is a methodological error that stems from the assumption that a listener hears the “composer’s intent” through a musical vehicle that is mechanically identical to language.

Essentially Cook is an advocate of the “theory as tool” position, but a few complications add nuance to the view. Two aspects of Cook’s critique are of particular interest: the first is that there is such a thing as a “normal way” to listen. The cultish adherence to a notion of everyday-life that is somehow self-explanatory seems antithetical to the position that advocates for theory-as-tool. Context will always render experience as uniquely focussed (or unfocussed) on a particular aspect. In fact, it is this uniquely contextual aspect of experience that affords Cook’s critique of perceptual testing as a misunderstood ear-training language-game. Why then does Cook insist that there is such a thing as a “normal-listen” that ought to be the object of empirical study?

experiment is in Steve McAdams. “Prolog”. *Music Perception* 22/2 (2004): pp. 171–172.

If in fact there is a “normal” way to listen, it would seem that it is somewhere very close to not really listening at all. For to say that there is a normal way to listen is to assume a way that is divorced from the act. If we ask “How am I listening?” we stop listening and evaluate listening—as if it were a possibility to do so. This idea that we can self-evaluate necessitates the invocation of a subject that splits away from the self so to be rendered an object of study. By making an object out of hearing we perform the same tool-breaking exercise as in §1.2.1, we reduce the experience to a simple model in a retreat from complexity rather than engage further. Our question should be “how does hearing as x -theoretical tool do . . . (some response)” not “what is hearing.” The former question seeks more nuance of increasingly finer grain, while the latter seeks an singular object.

Of course, it might be argued that Cook’s interest in the normal is a rhetorical device used to throw its extreme into relief: that listening to music in a controlled environment and being asked to evaluate the relative fit of a probe tone is *not* “normal”. How then does Cook talk about this not-abnormal listening? We get a taste of an answer when Cook turns his attention to the perception of large-scale harmonic progressions—the fundamental basis of a hierarchical music theory. His argument is that even if it can be shown that people tend to group their hearing (when *asked* to divide dots up on a page) in a way that corresponds to the lowest level of a harmonic progression, it does not necessarily follow that they are in some way parsing the material

at the highest level.²⁵ Further, he suggests that there is no equivalent to the perception of a unified linguistic utterance at the highest level in music. That is, the evidence of parsing the musical surface does not necessarily correspond to the abstraction of a deep-structure.

The criticism is focused on mappings of linguistic theory onto hierarchical music-theory. The latter is made manifest in Schenkerian theory, while the former is attributed to Lerdahl and Jakendoff's *GTTM* and Irène Deliège's experiments in auditor parsing. Cook suggests that even if we assume that grouping is the ordinary way of listening, the surface grouping does not necessarily imply a large-scale high-level understanding. Moreover, music does not have the semantic content that converges at the highest level of a linguistic diagram, says Cook: "the 'deepest' level of Schenkerian structure... means nothing at all".²⁶

To think about a kind of surface listening, Cook conducted some tests where he changed the harmonic progressions of pieces so that they did not conform to a unified harmonic space. By asking students to evaluate the relative "goodness" of these pieces, Cook found that they were untroubled by movements that moved away from a hierarchically sensible tonic so long as the piece was longer than 30 seconds—their goodness rating was unaffected. The reasonable inference Cook draws from this is that, "in perceptual terms, an extended composition cannot have the tonal unity that a single phrase has."²⁷

²⁵ "Lowest level" refers to the surface features of the musical material while highest refers to so-called deep-structures.

²⁶ Cook, "Perception: A Perspective from Music Theory", p. 76.

²⁷ Ibid., p. 75.

Again we are left wondering exactly what these “perceptual terms” are. Is there some kind of perception that is untainted by theory?

The psychologized theory that Cook suggests as replacing the imagined unity of traditional theoretical accounts is one where “multiple cognitive frameworks” are employed in a fluid response to a particular listening. It is difficult to find a clear notion of what is meant by the phrase “multiple cognitive frameworks”. In fact, the literature Cook cites is looking for one cognitive framework only, but one that adapts itself to novel situations in an “evolutionary manner, with new rules proving their right to survive in competition with existing rules.”²⁸ Alan Marsden and Anthony Pople imagine a psychological mechanism that identifies rules and modifies them when they are broken. In a related article Marsden tries to model some exact rules for a Mozart melody (K. 465) using a “process of induction.”²⁹ The rules that are derived are specific to the piece, essentially they are idiosyncratic versions of Narmour’s implication-realization model. As mentioned, Narmourian analysis focusses on the particularities of the piece, maintaining their presence at the lowest levels. If multiple cognitive frameworks are to be contextually valid, then we must assume that they at least support if not depend on multivalence as seen above (§1.2.1). In what way is this distinct from a music-theoretical account?

Cook explains a strictly theoretical account as having value by virtue of its difference with the psychological account. The two fields of inquiry (psy-

²⁸Alan Marsden and Anthony Pople. “Modelling musical cognition as a community of experts”. *Contemporary Music Review* 3/1 (1989 1989): pp. 29–42, p. 41.

²⁹Alan Marsden. “Listening as discovery learning”. *Contemporary Music Review* 4/1 (1989): pp. 327–340.

chology and music theory) are seen as entirely different because theory was developed as a way of conceiving how the composer put the work together not how the works were experienced. If music-theories are recipes for construction, they are not therefore necessarily mapped onto perceptual realities. For Cook it is the *difference* between the perceptual reality and the theoretical construction-plan that gives the theory perceptual value. Cook makes the point provocatively by saying that, “from the music-theoretical point of view, an analysis can only have value to the extent that it *deviates* from perception”.³⁰ In this understanding, the analysis operates as a kind of arbitrary grid through which we gain insight into our otherwise amorphous perceptual psychology—let’s call this the “difference model”.

The difference value of analysis is illustrated by consideration of a Schenkerian graph and an analysis by Charles Rosen. The graph, one of Schenker’s own, is seen as extraordinary in its apparent erasure of some perceptually salient moments. Cook argues that it is only by standing in contrast to the actual experience that the graph reveals aspects of experience—a revelation that is not at all homologous to the graph itself.³¹ Reading Rosen’s analysis gives a little more nuance to Cook’s position. Rosen’s theory, which posits a refined sensibility to harmonic processes, is accepted according to Cook, *not* “because we believe it to be in some sense correct... [but rather] because we

³⁰Cook, “Perception: A Perspective from Music Theory”, p. 89.

³¹There is always the possibility of making this argument of non-correspondence; consider, for instance, Heidegger’s assertion that, “what is spoken is never, and in no / language, what is said.” (Martin Heidegger. “The thinker as poet”. In: *Poetry, language, thought*. Ed. and trans. by Albert Hofstadter. New York: Perennial Library, 2001[1926]: pp. 1–15, p. 11)

find it persuasive. . . [and it] contributes to our experience of the music”.³² Perhaps Cook is here thinking about Rosen’s analysis as effecting a way of hearing as opposed to standing in opposition to an undefined yet assumed “hearing”. But there still remains the detritus of the idea that analysis is an “add-on”, a kind of turbo-charger for normal hearing; it is persuasive and additive. The assessment of Rosen’s analysis finds value in the analysis primarily in its capacity as an aid to our understanding rather than its functioning as a tool to produce our understanding.

The difference-model makes the important point that any analysis will necessarily be different from the experience, but it also shows that difference is not in itself a sufficient condition.³³ The difference model now points to the need to think about what makes a particular difference valuably different.

Consider again Cook’s suggestion that we only hear tonal coherence in a thirty-second window. Provided there is a more time than that, it is possible to gradually move to any area of the tonal system—Wagner’s 3-hour movement resolving an opening dissonance in *Tristan und Isolde*, for instance, could move virtually anywhere without upsetting the sense of good harmonic progression. The thirty-second window is similar to Levinson’s argument for a state of “quasi-listening” that navigates a momentary sense of well-connectedness.³⁴ Of course, this kind of temporary grasp and free floating awareness of the music

³²Cook, “Perception: A Perspective from Music Theory”, p. 89.

³³Plotting a frequency analysis against a predictable function will, for instance, be of limited analytical value. Even a frequency analysis, on its own, is radically different from hearing but of limited value for hearing.

³⁴Jerrold Levinson. *Music in the moment* (Ithaca, N.Y.: Cornell University Press, 1997).

is supported by many intuitive reports. Consider Yann Martel's description of losing focus on the music by wandering into thoughts about his roommate's Union work, Joseph Conrad, the semicolon, and the general condition and direction of the narrator's life.³⁵ When arguing for the "suggestive" nature of a particular hearing Ronald de Sousa speaks of his thoughts tending to revert to the "irrelevantly philosophical" at the opera.³⁶ But do these observations of a meandering consciousness and selection of goodness *mean* that any notion of large scale form is a fiction?

Before tossing out large scale form as a fictive product, a move that would itself be ideologically tending to a view of the "real" as an "immortal truth", we can reconsider the result of the experiment with Cook's insight in mind. In light of the above questions regarding the value of difference, what might the the thirty-second window tell us about difference? The thirty-second window, as something that is different from experience throws into relief exactly that which it apparently made fictive: *large-scale harmonic coherence*. We are faced with the interesting phenomenon of what it is that holds a 60-second bagatelle together, let alone a three hour opera. Yann Martel's narrator *knew* that the music had lost him when "Words started cropping up in [his] mind."³⁷ De

³⁵Yann Martel. "The time I heard the Private Donald J. Rankin string concerto with one discordant violin, by the American composer John Morton". In: *The facts behind the Helsinki Roccamatios and other stories* (Toronto: A.A. Knopf Canada, 1993): pp. 85–129, esp. pp. 93–107.

³⁶Ronald de Sousa. "Sex, drugs and Mahler. Reflections on Martha Nussbaum's Upheavals of Thought". [draft essay, March 5, 2004]. 2004. URL: <http://www.chass.utoronto.ca/~sousa/UPHEAVALS-APA.pdf> (visited on 13/07/06), p. 7.

³⁷Martel, "The time I heard the Private Donald J. Rankin string concerto with one discordant violin, by the American composer John Morton", p. 96.

Sousa similarly recognized that he had drifted away. Both cases recognize a coherence from which they have de-coupled and thereby produce exactly that coherence in its negation.

The evidence suggests that the world of perception and the world of theory are mutually reinforcing. By theorizing about large scale form I can begin to move more precisely towards this aspect of perceptual experience. How does the sense of “rightness” of a harmonic journey respond to actively theorized listening? We may need to rethink what sort of a thing the “rightness” of a harmonic trajectory is, but ignoring it altogether is absurd exactly because it is such a persuasive invitation to listening. We are headed in an interesting direction if we can use Cook’s insight productively, without rehearsing iconoclastic critique; perhaps in moving this way we can get closer to what we are interested in: the complexity of musical experience as it informs conscious reality.³⁸

Some Radical Consequences of Rejection

To get a better idea of how assuming a radical discrepancy between theory and perception can be misapplied, it is useful to consider some analysts and scientists alike who seem to take such ideas with abandon to their “logical conclusions.” Analyst Robert Fink, for instance, rejects the notion of deep-structure altogether and so provides an extreme equivalent to Cook’s whereby

³⁸That this is a central concern of musicology in general is perhaps a personal view, but there is a strong case for its centrality in both historical and theoretical discussions of music. Carolyn Abbate’s work on musical presence suggests this is both the central concern and one in need of further study, “Music—Drastic or Gnostic?”. *Critical Inquiry* 30/3 (2004): pp. 505–536.

the analyst attempts to freely navigate a surface.³⁹ In trying to go beyond the surface depth metaphor that informs and structures a lot of analysis, Fink moves decidedly to the surface.⁴⁰ Fink admits that “the unmediated surface of a work becomes a bewildering place... a turbulent sea of seemingly random, overlapping lines, from the smallest scale to the largest.”⁴¹ Yet from this admission of chaos Fink proceeds to pick out registrally significant notes (ones that are high and difficult to sing in the “Credo” of Beethoven’s *Missa Solemnis*) and map complex connections between them: a “heterogenous web of surface resemblances, not all of them pitch based.”⁴² By avoiding the hierarchical analysis he “drives a transgressive wedge between the surface and the depths.”⁴³ After several more examples, Fink concludes: “I perceive (and value!) a Beethoven symphony as existing, disorganized, and all surface. It feels like an *ego*—and makes me feel more like an *id*... Perhaps, after all, beauty is only skin deep.”⁴⁴

Fink’s analysis of more recent works is interesting. It is probably a healthy dose of reality to conceive of works as chaotic and shallow rather than ordered and deep, but it is a little unwarranted to think in such extreme terms. Ulti-

³⁹Fink is well known for his analyses of minimalist music, Robert Wallace Fink. *Repeating ourselves : American minimal music as cultural practice* (Berkeley: University of California Press, 2005), a music that is all about a kind surface opulence, here these ideas are applied to Beethoven.

⁴⁰Robert Fink. “Going Flat: Post-Hierarchical Music Theory and the Musical Surface”. In: *Rethinking Music*. Ed. by N. Cook and M. Everist (Oxford: Oxford University Press, 1999): pp. 102–137.

⁴¹Ibid., p. 108.

⁴²Ibid., p. 112.

⁴³Ibid., p. 113.

⁴⁴Ibid., p. 137.

mately Fink is taking a position that is as equally entrenched in ideology as the one he argues over-determines the musical experience. Perhaps we don't need to go so far as to altogether reject the position that posits a structural background, but could rather try and unpack some of its assumptions in ways that further our understanding and bring us closer to the object of our inquiry.

A similarly iconoclastic position exists in the domain of music psychology where studies reject the relevance of large-scale form. In an experiment involving "musical puzzles", Bigand et al (hereafter Bigand) conclude that we are totally unaware of harmonic movement even for short minuets.⁴⁵ In the test, students were asked to put together 18th century minuets according to their general sense of "goodness." The minuets were cut in half and then transposed into several different keys. Subjects (students) were asked to put a large collection of fragments together in ways that seemed most natural. The students mixed up the original order of the minuets, placing harmonic phrases in the wrong order in addition to mixing unrelated keys. Bigand went on to test the perception of closure at cadences. At this task the students were generally good at assigning half cadences less closural value than full cadences, and only slightly less convinced with modulatory cadences.⁴⁶ One unusual result here was that in main key minuets, amateur musicians gave a lower completion rating to the second half than they did to the second half of those with a modulatory key (called dominant key minuets). But do we want to take such

⁴⁵Emmanuel Bigand, Barbara Tillmann, and Francois Madurell. "Local versus global processing of harmonic cadences in the solution of musical puzzles". *Psychological research* 61/3 (1998): pp. 157–174.

⁴⁶Ibid., p. 166, Figure 5.

a result and argue that harmonic coherence doesn't exist? It is more valuable to see an interesting nuance of our understanding of coherence—something like modulation to the dominant on its own affords a marked experience of completion. However, the results led the experimenters to “call into question current theories which assume that musical events are integrated into a strict harmonic hierarchy.”⁴⁷

Did the experiment really “prove” this? Probably not. The experiment only showed that students are not very good at putting together an array of 18th century minuet parts—and why should they be? Given the mass of materials, the participants were probably overwhelmed by the task of matching. It doesn't follow that the overwhelmed individual is evidence for their having no awareness of harmonic structure; at most it suggests that our relation to music can be easily thrown out of balance or disrupted.

Bigand's experiment was geared towards finding its revolutionary result. Documentation of the experiment indicates that students were good at putting together one minuet by Mozart (labeled D-K4).⁴⁸ It is unclear why this piece was excluded from subsequent analyses, but had it been included the overall results may have been less conclusive. Perhaps the favorable result had to do with the fact that the second half immediately moved towards the tonic key. The removed minuet moves immediately to applied harmony in a progression $V^7/ii - ii - V - I$, while the kept minuet remains in the key of V following a

⁴⁷Bigand, Tillmann, and Madurell, “Local versus global processing of harmonic cadences in the solution of musical puzzles”, p. 169.

⁴⁸70% correct both on tonality and order, *ibid.*, table 3.

progression $V - V/V - V^7 - I$.⁴⁹ What the variance in the result does show is that students are aware of *something* that influences their ability to put the puzzle together correctly. It may be that the way the harmony is voiced affected performance as well, for it is a rare piece that begins with the dissonance of the minor seventh. But the experiment did not follow any such lines of inquiry, preferring to posit that we are not aware of tonal structures.

If what the authors wanted to suggest was that we are not aware of good orderings, then they might have played the pieces with their halves reversed and asked the students which they thought sounded like the original. More radically, they might have even transposed the second half up a tritone and asked students which sounded more natural. By doing so they would have preserved some of the aspects of normal musical experience and perhaps gotten a little closer to what that experience consists of.

Both Fink and Bigand go further than Cook by concluding that all musical experience is of moment-to-moment arbitrary and even chaotic associations. While both studies reveal the inadequacy of a completely determined approach to listening practice, they go too far in assuming that theory contains nothing of particular value for the experience. Before suggesting a way out of such extremism, I will consider the completely determined approach.

⁴⁹Bigand, Tillmann, and Madurell, “Local versus global processing of harmonic cadences in the solution of musical puzzles”, pp. 171–172. Compare minuets D-K3 and D-K4.

1.2.4. Intuitive empathic recognition in the world

DeBellis and intuitive recognition

A carefully thought out position on the relationship between analysis and perception is found in Mark DeBellis' work. The idea that analysis is the articulation of a musical experience is seen in terms of an epistemological problem. That is: "We want...to understand why this process issues (if it does) in knowledge; we want an understanding of how anyone knows that a putative articulation of his or her hearing is in fact a correct articulation of it."⁵⁰ DeBellis points to the disconnect that Cook finds so objectionable, that is, how are we supposed to understand listening based on compositional practice? The point is refined somewhat in order to incorporate a Schenkerian modeling of content communication. Like Cook, Debellis sees content-communication as incoherent, but for a different reason: "If [content] can be grasped only in structural hearing, then the communication model fails. For the great composers had no expectation that listeners would engage in a special perceptual activity...utterance cannot plausibly be taken to be a code such that a key is evidently required," and the sender does not imagine that the receiver has the key.⁵¹ The fallout from such an argument would be such that if we don't need the theory to grasp the content, why do we need the theory? And yet Debellis is not giving up on the possibility. He answers the riddle by saying that he will try and marry composer's content-x with and Schenkerian content-y "which is

⁵⁰Mark DeBellis. "Musical Analysis as Articulation". *Journal of Aesthetics and Art Criticism* 60/2 (012002 2002): pp. 119–135, p. 120.

⁵¹Ibid., p. 126.

distinct from, yet gives us insight into, the former kind of experience [content x]”.⁵²

After sorting through the infinite regress of putting analysis before hearing, DeBellis settles on the notion of an intuitive hearing such that analysis is now the evaluation of a plausibly identical relation between itself and the intuitive hearing. By invoking a model that posits the same phenomenon can have different representations, DeBellis concludes that “the intuitive hearing of a passage as a dominant prolongation is cognitively distinct from a structural hearing of it as a dominant prolongation, though the same content specification, ‘as a dominant prolongation’ applies to each.”⁵³ With this DeBellis is set to confirm a relationship between composer and hearer; content can now be seen as the transmission of an intuitive musical experience that the composer has, and the analysis is actually a manner of revelation of “what the content of that message, the content of that intended experience, truly is.”⁵⁴ But DeBellis is more interested in the epistemological issue that accompanies the mapping of intuitive onto theoretical hearing: “The question is how we know how to make that translation. . . it is entirely unclear how. . . the knowledge that $P = F$ [intuitive = theoretical], could possibly be empirical.”⁵⁵ We cannot infer the possibility of there being a relation between P and F such that we can assume an identity, thus it must be a priori.

Debellis’ argument seems like an absolute regression into an idealized world

⁵²DeBellis, “Musical Analysis as Articulation”, p. 126.

⁵³Ibid., p. 129.

⁵⁴Ibid., p. 130.

⁵⁵Ibid., p. 132.

of author, meaning and intention. There is a leak in his argument when he starts to think in terms of a “message,” but the problem seems to be more with the use of the term than the meaning it denotes. The communicative element is not necessarily a sign to some worldly phenomena or composer’s affect. It is rather left in the realm of *recognition* of some intuitive musical experience. This experiential recognition is a different species of communication than a message that is coded, delivered and made sense of by a receiver; it is a kind of “becoming” that precedes semantic interpretation. At the analytical level of recognition we are below the process that finds a meaningful element to a “dominant prolongation” or “non-tonic ending.” I may find a meaningful element in a dominant prolongation, and the composer *may* have intended such a meaning or a very different one. In either case, the difference between my own “meaning” and the composer’s “meaning” as defined in linguistic terms follows *after* the experiential process of recognition.

This sense of recognition is a special use of the word. It isn’t the case of both the composer and I recognize a musical feature in the sense of recognizing an equivalent image. Recognition in this usage points to a more elemental condition of being. The recognition that Hegel speaks of in the famous “Slave and Master Dialectic” is the basis of finding a self. The model suggests that a self realizes itself in a process whereby it first exits itself, thus becoming other than itself, and then it returns to itself, having recognized its otherness. The return to self is characterized as recognition. Thus when man takes up a labor to satisfy a desire—in effect displacing that desire—he finds his activity

external to himself and in that finding recognizes himself *as* a self. In this way, self also finds itself in other selves: in the love relationship, for instance, the self experiences itself “as a needy, desiring subject”.⁵⁶ Self is found reflected in others, and that reflection, along with the acquisition of self, is called recognition. In a love relation recognition is mutual, whereas in the lordship and bondage (master/slave) relation it is unbalanced because the self of the lord does not return, but stays on as the will of the bonded. Recognition conceived of in this way is the process through which being a human self emerges.⁵⁷

With this special sense of recognition we can think of the self that is found in musical listening as one that is not necessarily equivalent to the composer’s. When I hear a “dominant prolongation” I am finding myself literally within that hearing. The usual interpretation of such a process is that the composer intended and enforces such a finding, but the finding of self that is other than self need not be the will of the composer finding itself in the listener. If it were the case that a composer actually willed a self then we would not have the situation of multiple hearings and interpretations—whether played or heard. The evidence from multiple interpretations suggests that it is not the case that a will finds and dominates a listener. If it were the case that I am hearing an intention then the multiple interpretations would not be able to have the

⁵⁶Axel Honneth. *The struggle for recognition: the moral grammar of social conflicts* (Cambridge, Mass.: Polity Press, 1995[1992]).

⁵⁷An original reading of reciprocal recognition as embodied in gift exchange is in Marcel Hénaff. “Ceremonial gift exchange and logic of recognition: contribution to a political anthropology of the social bond”. Manuscript published in course reader for Prof. Hénaff’s course “Struggle for recognition: Subjectivity, Identity, and Otherness” (Winter 2004, UCSD literature). 2004.

multiplicity that they have, nor would repeated listening have the kind of multiplicity that it has. We can accommodate both of these exceptions by saying that the recognition that structures hearing is found by both the player and the listener (and we can assume that the player is always a listener too) in a manner that is specific to the context and particularity of the performance. The contextual requirement implies that we are finding ourselves in a way that the author could never predict. Were it the case that the author could predict the context, say he had an omniscient understanding of the future, then the act of recognition would not be mutual, it would become the unbalanced state of slave and master. The self that is found in a work is imbedded in the historical and cultural context that is meaningful to that self-finding; because of this particularity of finding self, it is absolutely unpredictable—which is a good thing because living in a world that simply repeated itself would be a tautology of immense heaps of boredom.

Understanding recognition as a process of finding self affords nuance to Lerdahl's closure paradigm of mandatory closural-evaluation. To the extent that we understand a musical interpretation as a finding we can imagine that part of this finding is produced by closure. If a work is being performed through a process of recognition where a self is othered and created by the music then the process will close at the conclusion of the work and in a sense the cycle of finding self is always closing. Lerdahl's leap to cognition closes out such an embodied reading by presenting standard music theory dressed in

“obligatory cognitive” clothing.⁵⁸ There is a lot more to a piece of music that gives a sense of closure than a harmonically related cadence. Meter, approach, dynamic, and material, all gather together to create relative degrees of closure or non-closure—again the virtue of Narmour’s system is its ability to quantify such multiple aspects. But there’s more to be wary of with Lerdahl than the reductive nature of his analysis and its attempt to be all encompassing. What is productive of the underestimation of musical experience is his avoidance of this special sense of recognition as a determining element of the experience.

Walton and the intensional

Lerdahl circumvents this processural notion of recognition by positing that there is a set of quantifiable rules for the analysis of tonal music or “pitch-space” that function as a value free mechanism in the perception of music—that is, according to the “unitary reduction analysis” principle.⁵⁹ The measuring of unitary prolongational structures as disinterested entities belies a certain degree of skepticism with the requirement of recognition and covert optimism as to the truth of his “empirical” system. The condition that Lerdahl creates for his perspective is akin to a foreign anthropologist viewing a recently

⁵⁸Lerdahl and Krumhansl, “Modeling Tonal Tension” essentially conceives of standard tonal pitch relations with some arithmetic to calculate spatial relations. An ecologically oriented view of the tonal system that looks to symmetrical invariance rather than numerical calculation is presented in Gerald J. Balzano. “What are musical pitch and timbre?”. *Music Perception* 3/3 (1986): pp. 297–314. A review article by Henry Klumpenhouwer summarizes the method of Lerdahl and Krumhansl, “Modeling Tonal Tension” in the context of a larger argument about the production of an opposition between two formerly related projects of the Academy, Henry Klumpenhouwer. “Review of *Tonal Pitch Space*”. *Journal of the American Musicological Society* 58/2 (2005): pp. 488–496.

⁵⁹A list of these rules is indexed in Lerdahl and Krumhansl, “Modeling Tonal Tension”, pp. 383–91.

discovered colony on Mars. Scott Walton employs just such an analogy to explain the terms of analysis and experience in the paradigm of recognition.⁶⁰ Walton proceeds from the observation that an anthropologist on Mars might observe something called laughter but never get close to humor through empirical means of study. Fundamental to his argument is that the anthropologist is lacking the sense of acknowledgment or recognition. When we laugh at a joke we are recognizing an experience.

“Amusement is an *intensional* experience, an experience which is *of* something. It is not a mere twinge or tickle in the stomach that one feels as a result of hearing a good joke.”⁶¹ The anthropologist who designs tests to try and predict when the Martians will laugh ultimately fails because he does not have “an awareness of what it is that Martha [the martian] laughs *at*.”⁶² We need to have a sense of acknowledgment for this to happen. A sense of recognition must underlie the understanding of what Martha laughs *at* (not the causes of laughter, but the direction of it). To know the reasons, we must empathize with the person laughing. Such an act of empathetic imagination implies that we have a similar sense of humor—one that we can mobilize to understand the laughter while not necessarily laughing. The process of empathic recognition exerts itself at a level other than causes, so that “anything Martha might tell him about what features of the situation are objects of her amusement [does

⁶⁰Kendall L. Walton. “Understanding Humor and Understanding Music”. *Journal of Musicology* 11/1 (1993): pp. 32–44. Lévi-Strauss employs the same metaphor when trying to explain emotion in musical experience; see “Finale” in Claude Lévi-Strauss. *The Naked Man* (New York: Harper & Row, 1981[1970]).

⁶¹Walton, “Understanding Humor and Understanding Music”, p. 34.

⁶²Ibid., p. 34.

not] explain to him how to imagine being amused by those features.”⁶³

Humor conceived as an intensional (directed and empathically situated) experience, Walton argues, is paralleled in our understanding a piece of music. To think of the analytical act as a situation that is devoid of intuition, while we are dealing primarily with an intuitive experience is to miss out on the interesting facets of analysis compounded with an erroneous conception of the nature of experience. Even in the case where one interrogates their own experience of music as an attempt to try and generalize the results “there is still a gap between knowing what features make the music work, and understanding how and why it works.”

Walton sees the intensional aspect of musical experience as being the thing that theorists interrogate upon analysis: “They spell out the intensional objects of their musical experiences”.⁶⁴ The observation of intension is seen as akin to figuring out what one is angry or anxious about, or what colors a sense of unease with a character. Such understandings have a kind of revelatory aspect in that they bring a previously unrecognized element into light: “*Now* I know why I’m angry.” Or, as Wittgenstein notes in his explanation of the “dawning of aspect”: “I have a tune played to me several times and each time in a slower tempo. In the end I say ‘*Now* it’s right’, or ‘*Now* at last it’s a march’, ‘*Now* at last it’s a dance’.—The same tone of voice expresses the dawning of an aspect.”⁶⁵ There is a sense of revelation that accompanies the

⁶³Walton, “Understanding Humor and Understanding Music”, p. 35.

⁶⁴Ibid., p. 39.

⁶⁵Ludwig Wittgenstein. *Philosophical investigations* (Oxford: B. Blackwell, 1953), p. 206e.

ability to point to the object of intension and give it character. Walton distinguishes these sorts of understandings from Freudian repressed states, because they are not repressions that need to be overcome, but rather realizations of intensional objects.

Revelations of intensional objects are found through introspection in a process that “leads to a *recognition or acknowledgment* that such and such features of the music are included in the content of one’s musical experience,” which is different than merely “acquiring information about what features are part of the content of one’s experience.”⁶⁶ Walton proposes that there is a two step process involved whereby initially one “sees the humor” and then articulates “what it is about the situation that is funny, to recognize or acknowledge the object of one’s amusement.”⁶⁷ Analogously, he suggests that this is what theorists are doing, in which case the second stage in the process can enrich the first. But the analytical process does not mean that we are suddenly aware of the complete picture, Walton goes on to suggest that these intensional objects might not be the complete picture of what we hear—there may be ineffable content in the music. But at the same time we don’t know if we have a good way of “ascertaining what the content of these intensional states includes.”⁶⁸ But failure to recognize the potential revelatory aspect of a suggested state does not necessarily mean that it isn’t somehow there.

Walton concludes with the somewhat surprising suggestion that,

⁶⁶Walton, “Understanding Humor and Understanding Music”, p. 41.

⁶⁷Ibid., p. 41.

⁶⁸Ibid., p. 42.

analyses are probably, more often than one might have thought, specifications of what we hear. The possibility is open that even the Schenkerian deep structure of a piece...is in fact an unacknowledged part of the content of musical experiences of ordinary listeners. Listeners' inability to specify the tone row of a twelve-tone piece is not sufficient to establish that they do not hear it.⁶⁹

The element of the unacknowledged presents the implicit as directly connected to analysis. In listening to a work we navigate an implicit that gets brought forward with theoretical pointing. The range and context of the implicit may have something to do with the ineffability of the experience. In a different context, Cook sees the correspondence of theory and experience as the fundamental problem of analysis and performance.⁷⁰ That is, the analyst will always confirm his analysis as either being the same as or similar to the performance, or different. Thus there is no possibility that an analysis can be incorrect. For Cook, this is a problem of the conceptual framework that surrounds performance and analysis. The frame implies that analysis is a fundamentally truer representation of the music than performance rather than the other way around. In Cook's view, performance is always a kind of analytical gesture that relates to past performances. He suggests that if we drop the frame of representation we will be in a better position to analyze the actual musical material—that which is performed—without thinking in terms of a “fidelity to the authorial intent” regimen. Fidelity, arguably the most fundamental musicological pursuit, is in fact given its utmost authority by the

⁶⁹Walton, “Understanding Humor and Understanding Music”, p. 42.

⁷⁰Nicolas Cook. “Words about Music, or analysis versus Performance”. In: *Theory Into Practice: Composition, Performance and the Listening Experience*. Ed. by P. Dejana (Leuven BE: Leuven University Press, 1999): pp. 9–52.

analyst who is aware of its “true” content.⁷¹ But do we need to go as far as Cook recommends?

Probably not. It is of dubious value to think that we can overturn all musicological thought and its effect on reception in one gesture. On some level performers are equally affected by musicological discourse (Cook would argue that performers and performance are effectively erased by the discourse). Walton’s view, and to a certain degree DeBellis’ as well, would argue that analysis needs to recognize what it is actually doing: addressing and recognizing intensional elements of intuitive listening practice. Theoretically, performers are doing just that as well: recognizing.⁷² Yet this understanding of the intensional does not mean that analysis constrains or forecloses the recognition of novel features as yet unrecognized. In fact, analysis is doing just the opposite; in its most open form, it presents the possibility of novel readings that abound in the experience of music. It can bring us closer to the intimations and content of the implicit—a state that we might refer to as the assent to the ineffable.

Ineffability

Music has a long history of associations with the ineffable—from pre-modern speculative theorists like Zarlino to the absolute music paradigm led by Hanslick in the 19th-century.⁷³ Clearly there is something about musical

⁷¹Cook, “Words about Music, or analysis versus Performance”, p. 39.

⁷²On the relationship between performance and analysis see also Abbate, “Music—Drastic or Gnostic?”.

⁷³Eduard Hanslick. *The beautiful in music: a contribution to the revisal of musical aesthetics* (New York: Liberal Arts Press, 1957 [1854, tr.1891]); Gioseffo Zarlino. *Dimostrazioni*

experience that resists articulation as much as it draws us towards attempting to do so. Rafael De Clercq has outlined its significance by not rushing to dismiss “common” usage.⁷⁴ Clercq disagrees with both the explanatory regimes that suggest language is not sufficiently nuanced to catch subtle shades of grey, and those who argue that ineffability is not an attribute unique to artworks. The former explanation, that the unsayable could be said with finer conceptual tools, does not “explain why we attach importance to what is unsayable.”⁷⁵ To the latter explanation, that the ineffable is everywhere, Clercq counters that such an observation does not explain why the ineffable arises particularly in musical or aesthetic experience.⁷⁶ That is, musical experience affords the ineffable, and this affordance is generally foregrounded, so to ignore it altogether is “presupposing already that it is deceptive.”⁷⁷ Clercq proposes that the best explanation of the ineffable is found in Michael Polanyi’s focal and subsidiary awareness model.

Polanyi’s model, as summarized by Clercq, suggests that during an aesthetic experience we are aware of *both* focal and subsidiary elements of perception. This is in contrast to language perception where we attend to the focal. In non-poetic language, attention is directed towards the meaning of a phrase rather than its other possible meanings. We attend *from* subsidiary meanings

harmoniche. A facsim. of the 1571 Venice ed. (New York: Broude Bros., 1965).

⁷⁴Raphael De Clercq. “Aesthetic ineffability”. *Journal of Consciousness Studies* 7/8–9 (2000): pp. 87–97.

⁷⁵*Ibid.*, p. 91.

⁷⁶The argument is for aesthetic experience in general, but the particular argument here belongs to music-philosopher Stephen Davies.

⁷⁷Clercq, “Aesthetic ineffability”, p. 90.

to focal meaning. If during aesthetic experience we attend to the focal and yet maintain the subsidiary, then there is a remainder, or a surplus of “meanings.” The abundance of potentially conflicting meanings is dealt with by naming it as ineffable. In other words: “Because of the so-called ‘unspecifiability of the subsidiary’ it is impossible to make fully explicit what is responsible for the striking character of the aesthetic object.”⁷⁸ This explanation goes some of the way in explaining why it is that viewing music theory by a strict linguistic model falls flat; by reducing musical experience to a singular “meaning” we miss out on the valuable subsidiary multiple “meanings”.

Philosopher musicologist Roger Scruton puts forward another explanation of ineffability.⁷⁹ Although Clercq rejects Scruton’s theory because it seems only to apply to musical experience, it is worth considering in light of the above consideration of recognition. By Scruton’s account, aesthetic ineffability arises from the impossibility of placing the first person in the third person. Fundamentally, this is an act of empathy that can never be described.⁸⁰ For Scruton, ineffability is “simply a special case of first-person awareness—the impossibility of translating ‘what it is like’ into a description.”⁸¹ By this he means that we are drawn into a work in the sense of being asked to conjoin two elements and “make” a metaphor happen. In this action of “being-drawn” we become aware of the impossibility of knowing “what it is like” to be, or at least to translate that sense of being. Music is like a metaphor that constantly

⁷⁸Clercq, “Aesthetic ineffability”, pp. 93–4.

⁷⁹Roger Scruton. *The aesthetics of music* (New York: Oxford University Press, 1999).

⁸⁰Ibid., pp. 360–64.

⁸¹Ibid., pp. 364.

draws in its hearer such that we are in the constant presence of ourselves in the paradoxical state of knowing that we cannot know. “[M]usic achieves the greatest possible distance from the explicit statement, while still inviting us to ‘enter into’ its expressive content.”⁸²

Like Walton, Scruton sees music as an empathetic event. When we empathize with someone we are not necessarily equivalent to that person, but given the circumstances we can imagine what it is to be that person. In other words, it is an act of recognition. Expressive content is what Scruton considers to be the operational characteristic of this act of recognition. Scruton sees this sympathy as a kind of emotional education that we get from repeated exposure to music, or “the impulse to selfless gratitude for the gift of life, in full awareness that the gift will soon have vanished.”⁸³ Because of this ethical-educational element, he suggests that “we should resist cognitive theories of expression; for, however sophisticated, they miss what is really important.”⁸⁴

Of the two accounts of ineffability, Polanyi has modeled it in terms of perceptual process while Scruton steadfastly maintains that it is a process of recognizing the impossible elements of being. Is there any hope of reconciliation? Can we say that recognizing the impossible elements of being is essentially a process of paying attention to the subsidiary phenomena? Perhaps it is better to think of Scruton as providing an answer to the more difficult question of what it is that makes us aestheticize certain perceptual activities, while

⁸²Scruton, *The aesthetics of music*, pp. 364.

⁸³Ibid., pp. 359.

⁸⁴Ibid., pp. 359.

Polanyi models how it is possible that we experience aesthetic ineffability. A more thorough discussion of the ineffable is needed, for now it is enough to realize that it plays an important role in the negotiation between theory and perception, and a multivalent analysis may best serve the interests of a view that is non-reductive and open to discuss the ineffable.

Having sketched out some of the philosophical and theoretical issues that music perception and music theory give rise to we can note that the two fields are in a complex web of relations. Several stories are competing, and very often they contain systemic disagreement as to what we are talking about when we talk about theory or perception. For instance, the story of an absolute and singular mode perception can be contrasted with the relativistic navigation of the surface, yet the two stories are not so much contrastive as they are radically different formulations of the question. Similarly, the story of a perceptual cognitive mechanism which is at odds with a story of an empathic selection seem to exist in two different worlds. In the empathic position, agency dwells in the external cultural and material world while the cognitive, agency is an automated biological mechanism. At one level the disjuncture resides in the notion that theoretical validity is empirically predictable or else it is subjective experience. What the understanding of mutual-recognition does to this binary is say that in fact our theoretical observations result from a being in the world that is sensitive to the principled variation of contextual gatherings. In what follows I will continue to address and nuance the many levels of this schism via some specific examples as well as begin to develop an analytical position

that understands a dwelling in multivalence as empirically valid and thereby explorable.

1.3. Three musical cases

1.3.1. Celine Dion, Near and Far

As an initial example consider a specific “non-tonic return” case. The song in question is a famous one, “My Heart Will Go On” written by James Horner and Will Jennings and sung by Celine Dion in 1997 for the major motion picture *Titanic*. The song, along with the film, was a major success and so it provides an interesting theoretical case whereby millions of people have heard it. The text involves a narrator coming to terms with the loss of a loved one, and her belief in the eternity of her love. One interesting aspect of the song is the harmonic structure, which contains a refrain and introduction in c♯-minor moving to its relative E-major for verses. The final refrain modulates into f-minor, concluding with coda in Ab-major. Structurally this is a relatively simple and common procedure in popular music. Take the final verse and “step it up a notch”, adding a kind of urgency, or renewed energy to the repeated material. The effect in this case is mediated by a modulatory passage, but it is nonetheless a strong feature of the song. That is, both the “inattentive” and the “attentive” listeners will most likely be “aware” of the key change. The question is how does this listener who has no training in harmonic perception aware if they are not paying attention to the process?

Referring to the above discussion we can identify two approaches for explaining the state of the awareness the listener has: one, following the radical

move of Fink, may argue that a harmonic analysis is actually not what they are perceiving, that rather, they are simply navigating a surface. The other, following Lerdahl, would argue that they either perceive the ending as a poor grammatical shift (in the case of the attentive listener), or they perceive no change in harmony and are left with a metaphorical question mark at the conclusion (as in the case with the inattentive listener). To the theorist who is thinking of his theory in terms of recognition of intuitive listening experience, both of these answers are unsatisfactory.

The first suggestion, which is of course a kind of caricature, is objectionable for two reasons. Firstly, by suggesting that there is only a free-style navigation of surface features without attention to or awareness of a gathering of elements in the background, this hypothetical theorist rapidly depletes music of the Dionysian element he is allowing it. The theorist who argues for a free-style navigation begs the question of content: if the modulation was removed, or, for that matter, if the harmony was changed (say reversed, F descending to E), there would apparently be no effect on the experience. It probably would not be necessary to go as far as inverting the harmonic plan to temper the notion of free-style. One could simply play the song both with and without the modulation and ask any auditor which version seemed more compelling. The answer would no doubt be the original, and there would be evidence that harmonic change is perceived. Harmony is *not* the *only* thing that is perceived, it is accompanied by a certain timbral abandon (distortion) in the voice, structural repetition, instrumentation, dynamics, ornamentation, and

so on. The second reason to reject this view is that in moving towards a subjective truth, the premise of cognitive or empirical validity is invoked as its opposite, “objective” truth. In terms of recognition this kind of division is unsatisfactory because if we recognize the urgency of the voice, harmony and so on, we must be aware of the nature of that urgency, we must know what it is directed at. If we know what it is directed at we must be present in its world, and not a subjective relative one.

Rejecting the free-style argument is not to accept the Lerdahlian unified mapping of a listener’s process. To assume that there is a mechanism that is parallel to the one that is being used in the evaluation of language (if there is such a mechanism) is to posit a device that sidesteps any sense of musical recognition. If the recognition involves an externalized dwelling in some of the work’s aspects then all that is needed is some direction for the aspect selection. Once the listener has coupled with that aspect its presence is complexified.

Imagine that after a few tests it became clear that listeners are aware of harmonic change, and they are more likely to point to it if the modulation is “unprepared”. Now imagine that a group of these people gather and are given the conceptual tools to talk about harmonic relationships and chord charts to look at with associated music to listen to. It would not be difficult to show this group a way of attending to harmony that would let them forever know that the thing they could not name is a modulation. This may prove to help them come closer to what it is that they are experiencing, and it may be revelatory such that they are suddenly aware of a phenomenon and it has

powerful implications for how they experienced the whole song—it is, after all about the irrelevance of distance for love: “Near, far, wherever you are”.⁸⁵ We can therefore understand the modulation as underscoring, or even effecting the ubiquity of the narrator’s love. To realize the appropriateness of the semantic mapping does not mean, however, that the understanding is complete.

In this particular case, it would be easy for the person who just learned the powerful listening tool of harmonic analysis to assume that it is *definitive* of their experience. Or worse, they might assume that it is constitutive of music in general, and that they have now mastered its status as a thing. This would be essentially turning them into a kind of monolithic subject incapable of attending to anything but chord progressions. In order to remedy this situation, they would need to be given more tools to problematize that simplistic view, tools that could push them back towards realizing a process of recognition. This is not to say that we want to return to a state of “pure” unaffected hearing—there is no such hearing. It is only to say that in recognizing a “thing”, it can easily be construed as a “thing already there” and further “the only thing there”. In making this move to the “thing” we are behaving like Walton’s anthropologist: erasing the condition of empathic engagement. The selection of aspect is a recognition of our dwelling, and that dwelling coexists with the ineffable.

An analysis that proceeded forward from the selection of a dwelling would

⁸⁵There are hundreds of internet sites that offer the lyrics to this song, for instance, James Horner and Will Jennings. *Celine Dion - My Heart Will Go On Lyrics*. 1999. URL: <http://www.seeklyrics.com/lyrics/Celine-Dion/My-Heart-Will-Go-On.html> (visited on 29/07/06).

have to ask what of the ineffable becomes apparent when we find an aspect. That is, what is the structure of the ineffable from the point of view of the particular selection? The listener who has been trained to recognize the aspect of harmony is now able to feel how they dwell: they know what the experience is to find that aspect, and by extension they know the open place from which that aspect finding comes. The experience has garnered more than a single aspect, it has multiplied by the factor that recognizes the ineffability as a source of dwelling and furthering the articulation of experience.

1.3.2. Susanna is Waiting

Consider another example, now in the lens of a Schenkerian graph (fig. 1.2). The upper staff contains all the notes from the first phrase of Susanna's Act IV aria "*Deh vieni, non tardar*" (Come now, don't be late) from *Le Nozze di Figaro*.⁸⁶ The lower staff contains a foreground reduction of these notes such that they all belong beneath a "prolonged" c' , and at an intermediary level they outline an f-major triad. The reduction could be done in other ways, it could have taken the initial c' as an upper third of the a in the second measure making the piece a $\hat{3}$ line instead of a $\hat{5}$ line.⁸⁷ Such a change would be analytically more graceful but experientially bizarre—eventually one would have to argue that the $\hat{3}$ was already present in spirit in the first measure.

⁸⁶Notes for this analysis were transcribed from Wolfgang Amadeus Mozart. *Le Nozze di Figaro*, *Wolfgang Amadeus Mozart neue Ausgabe sämtlicher Werke* (Kassel: Bärenreiter, 1973), p. 510.

⁸⁷I avoid the standard use of "white notes" (half notes with elongated stems) in part because it is inappropriate at a local level but more importantly to stand back conceptually from the $\hat{3}$ or $\hat{5}$ either/or singularity.

Conceptually the idea is that all members of the tonic chord are mapped according to the conceptual weight they receive in the experience of the piece. The Schenkerian will argue that all the actual notes that one hears on the surface are bubbling-up from a background chord; the interest of the surface is derived from the manner in which they bubble up.



Figure 1.2: Schenkerian reduction

There are advantages to thinking in the Schenkerian way. It is simple, elegant, and corresponds to an underlying sense of “order” in harmonic language. It also allows the analyst a methodology for dealing with musical relations on a note-to-note level. Yet the stony presence of the graph as a tangible feature fails to address the interesting question of what it is in the “bubbling-up” that makes the music so compelling. Ultimately the graph looks like and privileges a reduction even though all the notes are retained. Rhythmic notation has been mapped onto a harmonic structural notation such that I can imagine an experience equivalent to the unveiling of a stable harmonic world.

A Narmourian analysis proceeds in the opposite direction of the Schenkerian. Beginning on the surface, it makes no assumptions about the composing out of chords or the retention of prolonged notes. If a note gets a lot of empha-

sis it can harbor increased tension and expectation, but this tension does not necessarily prolong the note in the sense of a structural base. By beginning from the surface, Narmourian analysis proceeds to larger levels that retain the idiosyncrasies of the surface.

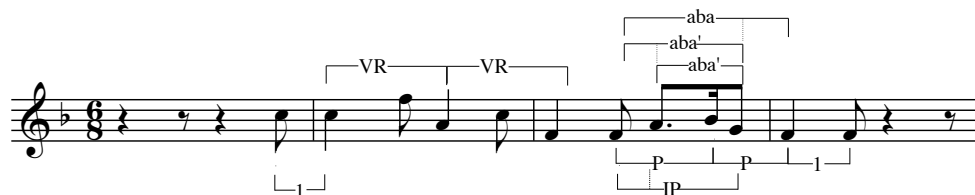


Figure 1.3: Narmourian analysis

The analysis of the same Mozart melody from a Narmourian perspective has several interesting results (fig. 1.3). Most notably, the phrase now divides into two parts such that we can conceptualize the process of opening and closing in a manner that does not involve successive nested statements of the same triad. The first half would correspond to the initial triad of the Schenkerian graph in figure 1.2. In Narmourian language, I am reading this half as a dyad (labeled 1) followed by two interlocking Registral Reversals (labeled VR). The second half is read as both a pair of interlocking Processes (labeled P) and a network of registral returns (labeled aba). The two halves are here conceived as very different: a sequence of reversals versus a sequence of processes. The network of registral returns in the second half implies that it is far more stable than the first half as well as more complex. Finally, processes mark a division at the third eighth note of the third measure clueing us to listen more closely to the apparent change and consider relations between the

halves.⁸⁸

Gone are the simple reductions and unified prescriptions of the Schenkerian graph and in their place is a more complex and even slightly unbalanced surface that invites the listener to wonder: “how is it so elegant and clear through all this complexity?” That is, the analytical practice brings us to question, not answer, the intuitive act of listening. The Schenkerian analysis has the same effect, but the terms are inverted: “how is it that such a complex bubbling-up has so simple an origin?” Both graphs have the potential to be thought of as somehow “true” but the value that either has is in fact not of truth, but of bringing the analyst to question the constitutive features of an apparent truth.

Missing from any graphic representation of an experiential ground is the process that the analyst goes through to create that ground. Susanna’s melody is particularly interesting by reason of its vaguely problematic relations with Schenkerian analysis. However, the result *looks* like it “fits” into the Schenkerian paradigm without much difficulty. Aside from the choice between a $\hat{5}$ or a $\hat{3}$ line there are more elemental difficulties particular to the piece—no doubt these have something to do with its expressive character as a whole. The piece in fact descends to a low A in the third line of text (before the modulation to the dominant), and rises to a high a’ for its final line—which is repeated after a deceptive cadence. These two points of “a-ness” might be taken as an argument for a $\hat{3}$ line and graphed accordingly, but that would miss the point that the transformative character of the C is at least as fundamental to the expe-

⁸⁸In chapter 4 I analyze this piece in much more detail.

rience of the piece and more importantly, that the analytical technique brings the analyst to confront these sorts of questions. Likewise with the Narmourian analysis, the analyst is brought to confront questions like: “is the opening a dyadic structure or a triadic?” Or, “should I continue to assess groups of two if I begin that way and the metric organization of the piece implies such a grouping, or is it more valuable to think of interlocking groups of three that operate against the metric regularity?” And further, “are these groups interlocking or are they separate?” The reader of the graph should consider these sorts of questions (in both cases) if the act of reading it is going to be of value. In these ways, the graph becomes grounds for considering the act of experiencing music, both for the analyst’s processes and its reader’s. Schellenberg’s reduction of the system (§1.2.1) removes this important element of analytical process by removing many of the conceptual tools that are required for its articulation. The removal of the tools itself selects and produces a particular kind of hearing.

The engagement that a graph requires in this regard is different that saying that it is valuable only insofar as it is different from the experience (§1.2.3). The reading offered here does not suggest that the graphs are exactly homologous to the experience, there were aspects that required a deliberation by the analyst and the reader. Yet the “bubbling forth” of each graph, while caged in the seemingly vague and multiplicitous word of “bubbling”, relates to an exact understanding of the affordances that emerge simultaneously with the graph. To think of these graphs as somehow difference driven misses their

ability to select that aspect of the experience exactly; what difference implies is that there is a real world of experience and an artificial world of analysis, I am arguing that the real experience is effected by the real analysis—and a most inattentive listen is a species of analysis, however weak. The analysis encourages a deeper engagement with what is always a selective process.

1.3.3. YES, a challenge to predicted response

A final example brings the discussion back to the predictive assumption of traditional analytical practice. A clear instance of a predictive assumption is found in an article by Matthew Brown et al (hereafter Brown) wherein Schenkerian analysis is used to predict whether a piece of music will be judged as tonal or atonal.⁸⁹ The impetus of the argument is to disprove the accusation that Schenkerian analysis is circular—there is no way of falsifying the theory that we hear deep structures because analysis sets out to find and inevitably does find those structures, which circularly confirms the initial hypothesis. To test where and when the theory will predict a composition as tonal or atonal Brown argues that if $\sharp\text{IV}/\flat\text{V}$ occurs in a piece then there are two conditional options: (1) if it is directly related to the tonic the piece the it will be heard as outside the realm of tonal music, or (2) if it can be seen as indirectly related to the tonic ($\flat\text{III}/\flat\text{III}$ for instance), the piece remains tonal. They test several occurrences of this chord in several areas of the literature: some common practice pieces by Chopin, Beethoven (opus 59), a Schubert song, Berlioz's

⁸⁹Matthew Brown, Douglas Dempster, and David Headlam. "The $\sharp\text{IV}(\flat\text{V})$ Hypothesis: Testing the Limits of Schenker's Theory of Tonality". *Music Theory Spectrum* 19/2 (1997): pp. 155–183.

(funeral march from *Fantastique*), as well as some 20th century pieces by Debussy, Berg, Webern, and Bartok. Their musical samples supported their hypothesis leading them to suggest that Schenkerian theory can predict an auditor’s judgment about the tonality of a work. Ultimately, however, they leave the job of empirical proof for this final claim to cognitive psychologists—their conclusions are “only weak confirmation of the hypothesis.”⁹⁰

The figure displays three systems of musical notation, each with Schenkerian analysis labels below the notes. The first system (measures 1-8) has labels: f#: iv, D: vi, ?, iv, bvi, ?, iii, v, bVII, bII, iv, vi. The second system (measures 13-19) has labels: biii, ?, v, ?, iv, bVII, bII, iii, v, ?, bII. The third system (measures 24-29) has labels: —, iv, vi, i, iii.

Figure 1.4: “tonal” progression? Chardal transcription of coda/conclusion, Yes (Musical group), “*Nous somme le soliel*”, *Tales from Topographic Oceans*.

Before giving such a hypothesis to psychologists, the claim might be tested

⁹⁰Brown, Dempster, and Headlam, “The ♯IV(bV) Hypothesis: Testing the Limits of Schenker’s Theory of Tonality”, p. 182.

in the realm of pieces that are not already circumscribed by a discourse of tonal/atonal. Consider the genre of progressive-rock. Here are works that break from the five-minute song tradition by weaving together songs and instrumental passages, thereby creating large-scale forms. The 1973 double album *Tales from Topographic Oceans*, for instance, restates motivic elements from the full two-hour set in a coda-like passage in the conclusion.⁹¹ The harmonic sequence that takes place over the course of this coda is riddled with “ $\sharp\text{IV}/\flat\text{V}$ ” chord relations (fig. 1.4). In the chordal reduction a roman numeral analysis is sketched in two different keys, D-major and $\text{f}\sharp$ -minor. The question marks in the analysis refer to where the tonal system of relations fails, *not* where it seems incoherent. Indeed, the progression, while generally sounding amorphous, at no point sounds “atonal”. Perhaps the coherence has to do with the fact that it is a sequence of diatonic chords above a whole-tone progression. A Schenkerian analysis would have to adjust its paradigm in order to illustrate a sense of the “unity” of the coda. Such an adjustment, if it were possible, would necessarily contradict the claim that Schenkerian analysis can predict judgments about overall tonality.

A Narmourian analysis is more helpful towards thinking about the kinds of things that are holding the coda together. Figure 1.6 outlines a few Narmourian processes in the first few measures of the guitar solo (transcribed in fig. 1.5).⁹² Recall that the analysis does not proceed from a background

⁹¹Yes. *Tales from topographic oceans* (Atlantic SD 2908, 1973).

⁹²Apart from a few very minor alterations made according to my hearing, the transcription (from memory) by Jerry Balzano.



Figure 1.5: “Tales” coda (Anderson-Howe), guitar solo

assumption, but rather considers the foreground, or the material surface, as constitutive of deep structure. The opening five measures move through 3 different keys, from D-major to g-minor to D $\flat$ -major—the latter involving the first leap to a $\flat$ V. The processes, in this reading, are interrupted at the the move to g-minor (a melodic jump to d'' whose surprise is noted with an exclamation point), while they are enveloped into the move to D $\flat$ -major. At the highest level, a retrospective Process moves across the two key areas (brack-

eted processes are retrospective as opposed to prospective). By looking to processes we get a sense of how it is that the “tonality” may be maintained here. We also get a taste for the multivalence of those processes: above and below the staff some possible readings are noted. For instance, the opening two measures are seen as interleaved Processes and Interval Processes. Following the interruption another set of Interval Processes couple with a chain of inexact registral returns, which at another level outline a Process and a Registral Process. These brief remarks give a sense for how the opening hangs together within complexly multivalent processes.

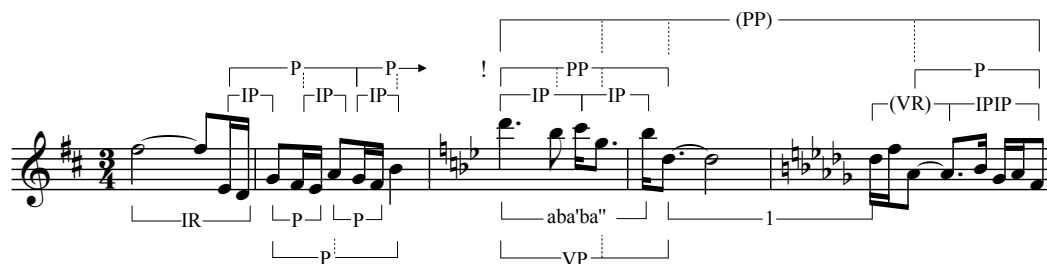


Figure 1.6: Multivalent processes i (mm. 1–5).

One of the interesting things about Narmourian analysis is its tendency towards threes: an initial tone projects forward into a second tone and the two become the basis for a process that is completed on the third tone. The threes can be complete or they can be dovetailed onto another process. That this very simple numeric aspect makes the immensely complex multivalent structures is an interesting feature modularity. But there are elements of two as well. Another reading sees a sequence of dyads (noted with the numeral that

indicates their size (fig. 1.7). This second reading amplifies the multivalence but at the same time brings out a new sequence of higher level Processes—note that the brackets have been removed, such a small interval process is not retrospective. Changes at the surface affect the deep structure, and yet, the observation that there is an over-the-barline continuity of process remains.



Figure 1.7: Multivalent processes ii (mm. 1–5).

There are many other things that might aid in thinking about the coda's coherence. For instance, things that have been constant over the course of the album: the compression, timbre, the instruments, and the recollection of motivic material—here drawn from the opening of the album's fourth section (side four "*Nous Sommes le Soleil*"). These are temporally gathered elements that can be pointed to, but not necessarily predicted. Here I have only focussed on the immediately apparent relations. If it is partially via processes "over the barline" that distant harmonies are sewn together, then if we look at all the $\sharp\text{IV}/\flat\text{V}$ transitions they might connect via smooth processural relations. In figure 1.8, I abstract the whole tone progression, creating a regular bass line, and similarly take the "seam tones" that cross the barline from the guitar solo, thus adding a second-species counterpoint to the progression. The result is nothing like the original but it is not arbitrarily different either.



Figure 1.8: Whole tone progression with guitar seam tones.

The assumption that music theory can predict an auditor's response is a clearly debatable. The argument stems from the related assumptions that (1) the auditor is somehow devoid of theory and (2) theory has a different ontological status than audition. If we remove the idea that there can be a predicted response and replace it with the idea that music theory engages and enriches our empathic dwelling, then we can begin to consider the kinds of things that the "Tales Coda" has to offer a theory of tonal perception; namely, that tonality is an emergent product of perceptual adaptation. Secondly, by taking away the idea that theory is predictive, we diffuse the originality imperative that demands the reinventing of musical systems for an original work. The possibility arises of new works and situations that are productive rather than derivative—we can ask how else a piece might be made without being iconoclast. Finally, theory can invigorate our involvement with music and open us up to social significance. For in the sense of theory understood here, as an invitation to enrich dwelling, theory is already social; it is an activity *in* the material world as opposed to an abstraction outside of it. By probing the material world we address ourselves and others in contextually meaningful ways.

1.4. Conclusions

1.4.1. Analytical Quality

Given the illustrations of multivalent processes whereby the piece responds to different selections, it might be asked how analytical quality is determined: “Is there a ‘best’ analysis?” This question is not as troubling as it may first seem. At the moment that we begin to consider theory as a valuable tool for enriching our dwelling in music, where abstract truth does not obstruct socio-culturally meaningful use, the temptation might be to say that the quality is relative to the historically situated use. Thus while Schenkerian analysis may have been the best means for a particular culture to articulate a recognition of a meaningful display of order, it might be insufficient for another that finds a Narmourian perspective more representative of a pluralistic approach. This culturally specific understanding might be seen as the “duck-rabbit” interpretation of analytical quality. A culture whose world is alive with rabbits sees a rabbit and vice versa with the duck. Neither group is wrong, nor is there a better interpretation. We might generally understand such a situationally relevant understanding as a “utilization-focused analysis”; an analysis that realizes its situational use.⁹³ A contextually relevant explanation goes awry at the moment we start to imagine that *everything* is relative because in saying so we begin down the slippery slope that says it is conditional, arbitrary, and

⁹³The expression, utilization-focus, comes from an approach to evaluation that takes into account the values and situation of the intended user. See Michael Quinn Patton. *Utilization-focused evaluation : the new century text* (Thousand Oaks: Sage Publications, 1997).

eventually subjective—at which point we are right back at the Fink position. What has surfaced in the above discussion is that infinite relativity is insufficient for characterizing the relation between theory and perception because it negates our empathic involvement—our dwelling. The idea of infinite relativity severs the empathic connection because it imagines that the understanding is not shared; this ascetic moment erases exactly the basis on which theory can be an enriching exploration of understanding. Rather than think of analytical quality as relative, we should understand it as an index of what is specifically meaningful such that what emerges from any particular analysis is the production of quality. This emergent quality is different from a global perspective that posits relativity and concludes arbitrariness as the rule; it is a local perspective that posits specificity and concludes with the directly meaningful. More challenging is the manner in which emergent quality opens up the more difficult questions of how this quality was called for; What forces were at work that were answered by the particular analysis?

Frequently in analytical arguments claims of individual hearings are advanced to justify some particular analytic choice. To the extent that I have argued analytical value stems in part from its engagement of the analyst with experience one might be tempted to say that all readings are good readings inasmuch as they relate to the individuality of the reader. However, the argument for subjective readings is unfounded. The conception of recognition here resists subjectivity, because recognition takes place in the material world. What we recognize is already in the lived experience: seeing humor, laughing or

not, requires empathic dwelling in the specific context. Dwelling in the world resists the idea of relative subjectivity while at the same time it includes multiply contextually defined usage—a dwelling is always within context. Because the context is multiply defined, or multivalent, there remains an unknown that can account for novel understandings and individual selections. Rather than invoking the binary of subjective/objective with its implied critique of the relative subject, why not follow individual hearings outwards and see where they lead? Analysis from dwelling is in this way a kind of externalized performance rather than a subjective interpretation. The analysis goes into the material and selects features that are contextually relevant to the external dwelling and with whatever tools are handy focusses on those features.

The tendency to think of analysis as subjective in contrast to the objectivity of perception can be seen as the root of many of the disagreements between the two approaches. Empirical verification is a term used as a bridge between an inward and “subjective” assessment and a “real” world. The bridge operates by assuming that an illusion has to be debunked. A corollary to this premise is that there is a “real” world and a “mental” world. The two worlds theory of Modern-era science leads the perceptual psychologist to show “how mistaken we are”, and the music theorist to think in terms of singularities. If we understand the mental world as performed in the real world we can avoid both of these kinds of reductions. As a performance we can begin to think about what kinds of things we are performing rather than how we are inwardly deluded. We can think about how one analysis is more persuasive, more en-

riching, and invite others towards it. Inevitably we are drawn back to music, and that is after all what theories and theorizing call on us to do: listen again and re-cognize.

1.4.2. Analysis and the External-Mind

By thinking of analysis as a performance we mediate between Cook's impasse between theory and perception and Lerhdahl's transparent linguistic model. Cook distains the text as the misguided agent of perceptual theory, but perhaps text is not necessarily as ambivalent as he assumes. The mind is often thought of as somehow separated from the world of text, but it is not necessarily so. The central claim of the "external-mind" is exactly that the material world, be it buildings or clay is a legitimate place to locate the "mind" (as opposed to its usual locale which coincides with the biological boundary of the skull).⁹⁴ The claim is rooted in the fact that our capacity to engage in complex calculation is aided by objects in the external world: the abacus, the note pad, the computer etc. Andy Clark and David Chalmers note that moving letters around on tray in a game of scrabble increases the "mind's" ability to find new words. Text serves to increase the mind's ability to solve complex arithmetic. As Clark and Chalmers explain, even the linguistic utterance, sounding the voice into the world, is a kind of material text that makes the mind what it is.⁹⁵ Limiting perception to a biological process in the brain

⁹⁴Andy Clark and David Chalmers. "The Extended Mind". *Analysis* 58/1 (1998): pp. 10-23.

⁹⁵On the extended mind see also Andy Clark. "Natural Born Cyborgs?". *Edge* 1/80 (Jan. 2001): URL: http://www.edge.org/3rd_culture/clark/clark_index.html (visited on 20/06/3). A similar yet more microscopic account of nonrepresented embodied cognition is

drastically limits the understanding that emerges in these cases as well as the above considerations of music theory. We might profitably ask what perceptual benefits might be had if music perception is not thought of as devoid of “text” in the sense of notes on the page. By the accounts of the external-mind, music notation is already a kind of theory of music and as such enters in to our perceptual framework. Thus it does not do justice to the experience to consider notation as somehow irrelevant. By the same token however, it is equally problematic to view the text as the “real” thing. Textual dwelling is *a* real thing, it is *a* real performance when read, but not *the* (singular) real thing. By resisting the singularities that emerge with concepts like “brain” and “real” we can define a territory that is appropriate for the concerns of music. This territory follows neither the slippery slope of relativism nor the brain-centric view of perception. In this territory a multivalent response is performed by analytical selection, and the real becomes the properties of the response.

The view that holds theory and perception as distinct entities, where one is in the service of the other, misses out on the mutual roles that each play in our emergent understanding of music. Through exercising this relationship by recursively engaging one with the other we move towards our understanding without getting caught up in the partisanship of orthodoxy. Ultimately the value of our frameworks rests in our ability to see them as frameworks, and their ability to suggest further means of addressing experience.

being developed by Patricia Carpenter and Christopher Davia. “Mind and Brain: a Catalytic Theory of Embodiment”. Manuscript. Oct. 2005.

... thus a sensible datum which is on the point of being felt sets a kind of muddled problem for my body to solve. I must find the attitude which will provide it with the means of becoming determinate ... I must find the reply to a question that is obscurely expressed.

M. Merleau-Ponty

2

Lewin's loop

Having established a direction of inquiry that is based in the externalized and embodied being in the world, a dwelling, a new and broad vista opens forth. What can we talk about here? How can we talk about here? To provide some footing in this territory this chapter will introduce some of the terminology and concepts that will be instrumental in the analyses of the concluding three chapters. These conceptual stakes are introduced by a reading of David Lewin's paper on music perception and phenomenology.¹ Lewin's "loop" sets the stage for the recognition of musical self-selection as an aspect of musical dwelling. With the concept of the implicit, it is shown that music

¹David Lewin. "Music Theory, Phenomenology, and Modes of Perception". *Music Perception* 3/4 (1986): pp. 327–392.

itself, via multiple processes, selects perceptually salient aspects—subsequent processes reach into the implicit manifold of the past and select aspects via reinforcing differences.²

2.1. The Implication is Already: Coupling

Citing Husserl's theory of perceptual experience, Lewin considers perception in terms of a vast network of related events or things.³ These things of the perceptual net can include other perceptions. Thus, if a perception can include a perception, an opportunity for a feedback loop arises: perception is of a perception is of a perception... These loops are important to Lewin's reflections on music perception.

The recursive loop structure that Lewin first brings up is an incestuous looking: Siegmund looking at Sieglinde looking at Siegmund looking at... etc. The recursive loop structure is thought of in terms of a computation problem. A computer given the task of evaluating the pair (Siegmund and Sieglinde in rapturous gazing) would do so forever.

Lewin has two ways out of this computational loop: the first is to “have an overriding external call from a more global part of the system interrupt the endless tryst” and the other is to have an initial parser that would precede the evaluation and recognize the loop and call for its eventual break.⁴

Three musical examples are given to illustrate the loop in musical terms.

²That this is a *selection* and not a projection is important towards the end of the externalized geometric understanding developed in the introduction and first chapter. See §0.4.1; §0.4.3; §1.4.1; §1.4.2.

³Lewin, “Music Theory, Phenomenology, and Modes of Perception”, p. 332.

⁴Ibid., p. 331.

They include a phrase ending just before the realization of the back end of a cadence, a phrase ending with the realization of a complete cadence and a phrase that has a deceptive cadence. Lewin talks about the first two phrases in terms of a perception *of* theoretical listening.⁵ In this mode of conceiving of the experience, the implied resolution of the first phrase is said to already be present in the perception. This manner of understanding a heard cadence is distinguished from one that imagines the realization as implied but not actually present; “In the Husserlian view, Perception(b) [realized harmony] *does actually happen at cursor-time X* [unrealized/implied harmonic continuation].”⁶ The hearing of an implied harmony, as a theoretical hearing, is actually structurally equivalent to hearing the implied harmony realized.

Conceptually, this notion of hearing an implication may seem like a small thing, perhaps excessive in its verbiage: “of course, to hear an implication is to hear the realization already, otherwise we wouldn’t hear it as an implication.” But in fact, this little feature has potential too grow into some pretty extreme insights into consciousness or being. In a paper from a 1952 lecture, Martin Heidegger, a phenomenologist who doesn’t make an appearance in Lewin’s paper, suggests that our understanding of spacial location has come at the expense of our understanding of dwelling, or our ability to dwell.⁷ In opposition

⁵Lewin maintains a multivalent view of the musical experience, in the examples he talks about how we can be said to be perceiving many things in the audio stream: a set of things including a harmony (V^7), a melody ($\hat{7}$) and a bass ($\hat{5}$). Thus a theoretical listening is one that selects a music theoretical aspect, here of harmonic completion. cf. §0.4.1

⁶Lewin, “Music Theory, Phenomenology, and Modes of Perception”, p. 332.

⁷Martin Heidegger. “Building Dwelling Thinking”. In: *Poetry, language, thought*. Ed. and trans. by Albert Hofstadter. New York: Perennial Library, 2001[1954]: pp. 141–61.

to the notion that space is grounded by rational measure of distance, Heidegger suggests that space is grounded in location, or locations provide the space that man operates in. Locations are characterized by man such that being in a location is a manifold experience of space.

Rather than placing man on one side and space on the other, whereby distant things are representations in the mind, Heidegger explains that in thinking of a location we are already at the location. The reasoning for this understanding lies in the manner in which man dwells, which is always already within the global context. Dwelling from afar, or thinking of a distant location, is a literal being in that location. Consciousness in space is therefore a manifold experience of spaces. Heidegger gives the example of the lecture hall's door:

When I go towards the door of the lecture hall, I am already there, and I could not go to it at all if I were not such that I am there. I am never here only, as this encapsulated body; rather, I am there, that is, I pervade the room, and only thus can I go through it.⁸

The reality that lets us head for the door is one where we are coupled with the door's point in space already. This making present of the door in space guides our engagement with the trajectory towards the door. Coupling with the future is a present state and in this presence gives us insight into the structure of consciousness as larger than the isolated mind and within a multivalent world. Thus the notion that an implication is already heard as its resolution extends into consciousness more broadly conceived. The theoretical hearing of an implied resolution "as" an unfinished cadence is more than a

⁸Heidegger, "Building Dwelling Thinking", p. 155.

theoretical construct, it is a real phenomenon that gives us insight into the conditions of reality.

In noticing this important “already” aspect of hearing a cadence, Lewin finds another loop. If I perceive the implication of the front half of the cadence as already the back half of the cadence then when the back half of the cadence realizes the implication of the front half I am also already at the front half. The implication-realization pair forms a loop in the same way that Sieglinde and Siegmund’s incestuous gaze did.

Lewin proposes to place this loop structure of a musical percept within the language of a computation so as to embed it within a larger perceptual experience. He begins to create formal percept lists, where hearing each side of the cadence can be cast in terms of an argument list for each percept: the front half would have as one of its defining arguments the implication of the back, and the back half would have as one of its defining arguments the realization of the front. As an argument list, Lewin formalizes the loop into a computational problem.

Before Lewin takes us to the resolution of the loop between the front and back of a cadence, he considers another problem: What if the cadence is evaded? Were this the case, Lewin doesn’t want to say that the back of the cadence is no longer present in the front, but rather that the back half remains in the front and remains present in the new evasion or displacement of its occurrence. That is, the argument list for the evaded cadence would not disrupt the existence of the presence of the back half of the cadence in the

front, but it would include in its argument list a notion of the denial of the implication.

With this new confirmation/denial element on the argument list, Lewin now rethinks what the perception of the back half of the cadence is. This new aspect of the perception sits at a higher place than just another argument in the percept list, it is a new perception with a new list. The new backside of the cadence (which is acoustically identical to the old one) will have a perception of the perception of the old backside which has in its argument list the confirmation of backside.

Thus it is that Lewin sets up the computational approach to a perceptual system that is defined and redefined as “new information,” observations or potentials are encountered.

2.2. The Computational approach

The computational approach to perception includes four aspects, each of which can include an indeterminate number of things. The four aspects are an event, a context, a perception-relation list, and a statement list. The “event” item of the list is seen as possibly redundant, because it could be inserted in the statement list, but Lewin keeps it because he does not want to be susceptible to the notion that there is no real event apart from the statements that could be made about the event. The event then is a kind of ideological formation that holds the possibility of perceptual contingency at bay. Below, I return to this ideological place holder in the perception for a more thorough consideration. For now I note that the idea of an event without a corresponding statement is

an event with the statement “no statement”; a curious blank for the sake of reality.

The context is the set of sonic experiences under consideration. Lewin argues that the context is necessary for perception of location, for without it, he could trick a perceiver into thinking that a symphonic chord was the first measure of a symphony when in fact it was the second. The context that he gives for the location trick shows that his model is correct, for it was with that context that the perceiver made the error—the error suggests that context informs perception. The context is further illustrated as necessary because without it there is no way that a perceiver can make any sense out of an isolated event alone; thus he establishes the utility of his model as one that partitions musical perception from solely sonic perception.

The perception-relation list is where we would find the recursive loop aspects of the perception. The list includes previous perceptions coupled with their relation to the current perception. Therefore the list for the backside of a (perceived) cadence that includes a loop back to the front where it persists as the implied and existing back would be found in this part of the perception list.

The statement list contains a series of statements in some language, including various discourses like graphic analysis, psychology, poetry, and even performance. The statements that wind up in the statement list eventuate from context. Lewin gives the example of a chord heard in three different ways according to three different music-theoretic models: the “rule of octave”

(*régle d'octave*), chordal harmony, and Schenkerian harmony. The three different hearings all involve invoking aspects that are not part of the sonic signal proper (a numbering of scale tones, octave equivalence and an implied direction). These unsung aspects are considered “linguistic resources” that enable perception statements.⁹

With formal model in hand, Lewin analyses a portion of Schubert's song “Morgengru” whereby a list of 12 perceptions are discussed in such a way that they coexist and contradict each other. The elements that make up the argument lists are specific to his analysis so that while he engages the architecture of his formal model, the observations are not at all predefined. There is no set of possible perception-relation pairs given, they proceed from the analysis. The statements, all of which take place in an idiosyncratic graphic form require textual elaboration. The flexibility of his analysis is not contingent upon the rigor of his model, and so we might ask what work is the model doing, and further, what sorts of processes are guiding the analysis.

Possibly, what is going on here is that there is a sense in which Lewin wants to understand the complexity of the phenomena in terms of a simple device. This understanding allows him to think that what he is doing is more than the messy process that is analysis and analytical engagement, because it cleans up the mess, putting it into an attractive (if computer language is your thing) and tidy package. Lewin suggests as much when he argues that the model in a way that allows him to be “precise and formal about these

⁹Lewin, “Music Theory, Phenomenology, and Modes of Perception”, p. 343.

matters.”¹⁰ That is, he can speak about matters in such a way that they are perception-relations without seeming to become imprecise or speculative, or, perhaps even “subjective”. Later, Lewin explains that the model is keeping things rational: “I find the phenomenology of the model an attractive way to avoid the dichotomies [of traditional analytical practice] without abandoning rational discourse.”¹¹

In what way is he speaking of the phenomenology of his model? The model provides an administrative function to his insightful analysis, it allows multiple observations to compete with each other and even contradict or envelope each other. But the administration says nothing of the phenomenology of the experience per se, it enables a formal articulation of the multivalence of the experience, but it does not tell us what the experience is as a doing, nor does it let us think about how such an analysis comes into being. The global context of the analysis is precisely what got in the way of AI. At the drop of a hat, even very young children can completely reorient according to a new global context.

Early AI came up against the problem that it couldn't follow a simple story and Hubert Dreyfus explained that it was because the computer couldn't frame the information.¹² Conceived as the passive reception of a list of context-free facts, the computer could not grasp a simple narrative. As Dreyfus tells the story, it was a student of his phenomenology class who brought the Husserlian

¹⁰Lewin, “Music Theory, Phenomenology, and Modes of Perception”, p. 347.

¹¹Ibid., p. 360.

¹²Hubert L. Dreyfus. *What computers can't do: a critique of artificial reason* (Cambridge, Mass.: MIT Press, 1972).

framing issue to Minsky's attention. Minsky then proceeded to think that the frame was the next issue in front of AI research. Lewin's noticing points of contact with Minsky and Husserlian phenomenology is based on a collection of essays edited by Dreyfus.¹³ But Dreyfus brings Husserl up in regards to AI as anticipating the problems AI faced with regard to "everyday knowledge". Where Lewin's analysis is compelling is not in the formalized computational voice, it is in his ability to navigate and pull from the implicit into the language.

2.3. Language and singularity

In the fourth section of the paper, Lewin suggests that a multivalent approach to analysis as evinced by his multiple perceptions is out of keeping with traditional analytical modes. The language that we use in discussing an analytical insight often falsely constrains our understanding of perception. When we say that "the harmony is..." we imply that there is a singular manner in which the harmony exists as opposed to the multiply defined relations that can occur simultaneously. The singularity that analysis hunts for is found as well in the two-dimensions of the page on which it occurs. The Euclidian/Cartesian representation of the work on a two-dimensional page is suggestive of a singularity for each point that exists on the page; the graphic representation suggests that an xy pair defines a singular moment in musical time and space.

Other ideologically bound aspects of language are pointed out. Words like "simply" or "merely" help us shoo away perceptions that compete or contradict

¹³Hubert L. Dreyfus and Harrison Hall. *Husserl, intentionality, and cognitive science* (Cambridge, Mass.: MIT Press, 1982).

each other, and move our understanding towards a larger, more important, singularity. Lewin suggests that this “way of talking” effects our ways of thinking about our hearing such that rather than returning to compelling moments for further contemplation, we think we have solved the dilemma and move on to the next. We might think of this move to “press away from the solved” as the avoidance of dwelling whereby the difficult questions of a work are cut off. Here is another congruence with Heidegger, who asserts that post WWII man has forgotten how to dwell, preferring to displace a holistic dwelling with a technically progressive consciousness: “man still does not think of the real plight of dwelling as *the* plight.”¹⁴

The words that effect our analytical methodology lead towards a heirarchy of importance: the most important is brought into view by the expressions like “simply” that push other perceptions aside. The syntactic importance is created by the methodology as having very little to do with the poetics of the work. Lewin illustrates the problem of this idea by analyzing a bit of Shakespeare. In a moment of *Macbeth*, Lewin argues that the subject of Macbeth’s post-murder utterance concerning his bloodied hands is the word “this”, referring to the actor’s hands. But the aesthetics of the utterance are argued to reside in Macbeth’s hand moving into the “multitudinous seas incarnadine”. Thus while the simple syllable referent, “this”, is the veritable subject it is not its grammaticality that is of interest to us. Lewin suggests that the word, “this”, is in fact tied to the the previous sentence where it

¹⁴Heidegger, “Building Dwelling Thinking”, p. 159.

refers to blood, and that its presence as referring to the hand equates the blood with the hand, so it carries more aesthetic weight than the grammar alone assumes. It is a moot point to wonder whether the word “this” or the “multitudinous seas” are more important because both participate in the aesthetic content, to privilege one for the other is to mistake syntactic with aesthetic function. The idea that there is a more important word in the text is shown as interrupting the poetics of it as a whole by forcing a dichotomy between poetics and sentence structure: “‘importance’ is not a useful critical expression here, and it particularly misses the mark when it invites us to vote between English sentence-structure and poetic compositional shape.”¹⁵

A situation analogous to the Shakespeare critique is described of a Schenkerian analysis of a Handel tune “Joy to the World” whereby Allen Forte maintains that the fundamental line can only be said to begin on $\hat{5}$ because of the musical harmonic syntactic support for that moment—at “world”. Lewin argues that there is an identical mistake when we advocate grammatical truth over the poetics of the whole poem to when we suggest that there is a truth to the syntax of a Schenkerian analysis that supercedes the musical utterance as a whole. Lewin attempts to read the aesthetic significance of the Schenkerian graph by arguing that the “pre-urlini” material (“Joy to the”) is associated with the cosmic *because* it arrives before the worldly/human “world” of the head-tone ($\hat{5}$). Hearing the piece as a move from cosmic to worldly is supported by the analysis. But this does not mean that the head-tone ($\hat{5}$) of the piece

¹⁵Lewin, “Music Theory, Phenomenology, and Modes of Perception”, p. 364.

is somehow more important than the initial $\hat{8}$ of “Joy”. There is no reason to think that discourse surrounding syntactic structure (a hierarchy of important notes) is equivalent to the aesthetics of the whole—yet it is just such a leap that many critics and analysts make. While the syntax informs the aesthetics of the whole, it doesn’t amount to the whole.

There is a bit of a retreat in Lewin’s thinking here. The perceptual account that he made for the Schubert allowed for a multivalent experience of different temporalities and a multiply defined harmonic context. Now Lewin wants to think about the impossibility of a perception that contradicts itself within some language. Because he has made it clear that an aesthetic perception is not to be defined in terms of the syntactical proficiency, now he continues that we can exclude some analyses based on how they violate the language. So an argument that suggests $\hat{8}$ is the perceived head-tone is not false because it gives too much emphasis to the opening “joy”, but rather it is false because in the discourse or language of Schenkerian theory (according to Forte) it is not true. Similarly, saying that there are 2 head-tones, each of which is valid on their own, is false as a simultaneous perception in Schenkerian language/discourse. We might perceive them both to be equally valid, but we cannot say that they occur simultaneously without changing the apparently inflexible language of Schenkerian analysis. According to Lewin’s model, one of the perception relation pairs of each would contain the denial of the other, thus they could not be simultaneously perceived.

At this point, where suddenly the “language L” is doing the verification

work of the perception, we can see how the flexibility of the model operates. Recall that the statement list is what stipulated the necessity of language L. We were told that in fact, the statement list could absorb the work of the event list because the event is of the form “at the X (down beat, measure 2 etc)”. Lewin kept the event as its own list because he didn’t want to admit that all perception is aspect perception, preferring to hold onto the idea that there is perception that has no statement. Now in the case of the verifiability via the language of “Schenkerian analysis”, we see that statements are true or false as specified by the boundaries of that language. Fair enough, if a conditional groundwork has been laid out for a language, then we can verify statements within that language. What is interesting is that Language L also enters into the P-R pairs. The P-R pairs, whose identifiability and content I pointed out were unspecified, are now doing the work of language L too: the P-R pairs contain the restrictions of the language L. But if indeed the P-R pairs are informed by the truth conditions of Language L, as in the case of Schenkerian language, then isn’t it the case that the P-Rs are an abstraction from that language and therefore have even less to do with the messy doings of perception than language? Or do the P-Rs originate in the work and find language? Without meaning to sound dubious of Lewin’s project, I bring this up to try and get closer to the valuable offerings that are perhaps obscured by the formalism associated with artificial intelligence. In noticing the bleeding of ideologically charged language through the various lists, that is, I suggest we are on track towards resurrecting the soul out of the AI-corpse.

2.4. The possibility of simultaneous perceptions

The stipulated language *L* is brought back to perceptual validity by reference to the duck-rabbit, the famous image that can be seen as either a duck or a rabbit, but not both at once (fig. 2.1). Lewin suggests that this supports his observation about Schenkerian head-tone (cryptically called the *Kopftone*) perception. It is possible to perceive both a duck and a rabbit, but it is not possible to perceive both at once in the same way it is possible to hear the head-tone as $\hat{3}$ or $\hat{5}$ but not both at once. Lewin uses sentence logic to clarify his point. In language we carelessly say that we see both a duck and a rabbit without stipulating that we see them at a particular time. If we reformulate the sentence to say, at some time and place I see a duck and at some time and place I see a rabbit, then we can create a symbolic statement of the type: TPD & TPR where T is some time, P is some place, and R and D are rabbit and duck. The sentence so configured is what we mean when we say (carelessly but exactly) that we see a duck and a rabbit. But the sentence does not logically admit to the permutation TP (D & R). The parallel between the duck rabbit and the head-tone pivots on the notion of language: a duck rabbit “is not a well-formed object within animal language” as a double head-tone is within Schenkerian-language.¹⁶

At this point one may be tempted to say that the comparison is unfair, perception of the duck rabbit involves a different kind of operation than the perception of a head-tone in music. The animal language that is violated is

¹⁶Lewin, “Music Theory, Phenomenology, and Modes of Perception”, p. 371.



Figure 2.1: Duck-rabbit. from *Harpers Weekly* 1892, 11/19, p.1114. Image copied by *Harpers* from *Fliegende Blätter*, October 23, 1892, p. 147

more perceptually present than the Schenkerian language. In the first place, what is meant by animal language anyways? What Lewin's use of the example suggests is that we are talking about an "animal form language" that contains the grammatical rule of species-unity. Yet there is another example that performs the same kind of frame switching where the species is constant, the "Maiden and mother-in-law" (fig. 2.2). It is much easier to see the two images at once in this second figure, probably because both women are facing the same direction.

What the old-young woman shows is that what we are talking about as a language *L* is more generally a seeing-as. When we see the duck rabbit "as" a duck we are orienting ourselves with the duckness and similarly when we see it as a rabbit we orient to the rabbitness. The orientation of each involves a front and a back. The seeing as a back is something that we perform in the picture, implicitly invoking our knowledge of what it would be to see the other



Figure 2.2: Maiden and mother-in-law, Anonymous German postcard, 1888

side. Because the direction of the duck is opposing the direction of the rabbit, the possibility of seeing them at the same time is as impossible as turning our head two different ways. The old-young woman share a back, and so we can orient to both at the same time. This view of seeing-as is suggestive of a performative aspect in seeing, an enactive understanding of perception that is summarized by Alva Noë.¹⁷ The picture is a performance of spacial relations that are governed by our implicit knowledge of the mathematics of movement. The language is not an “animal language” as much as it is a geometric system

¹⁷Alva Noë. *Action in perception* (Cambridge, Mass.: MIT Press, 2004).

to which we couple when we perform an orientation to the picture.

Now we can ask if the language of Schenkerian theory has an equivalent to the geometry of movement. Insofar as we agree that it does we are invoking Schenker's cosmic theory of the "chord of nature" and the universal laws of its elaboration. In this view, hearing as a Schenkerian is hearing a universal truth to the chord of nature and performing the elaboration of that chord via one of the archetypal descents or fundamental lines. Considered as a performance of the chord of nature, the apparent exclusivity of the performance of a $\hat{5}$ or a $\hat{3}$ line can be considered as sharing a property in the same way that the young-old women share the back of a head. Thus hearing a simultaneous head-tone and not-a-head-tone-yet should be much more plausible than the analogy to the duck-rabbit suggests. Both require a performance in the same temporal direction and are based on the articulation of the same phenomenon.

Thus we find that Lewin's language L as a theoretical (as opposed to a real) system not only bleeds into the perceptual relations but it also acts in a way that stands outside of the percept as it is found in the world. Lewin's language L is however not so rigorously defined as its instance in the Schenker case. He suggests that in fact the language L could include other non-linguistic modes like a graph, a poem, or a performance. The final chapter of his article deals with this possibility, I turn to it now as an example of crossing and carrying forward.

2.5. Crossing and Carrying Forward

Lewin's ideas on the performative as analysis can be constructively seen as a Gendlinian crossing/carrying forward.¹⁸ Philosopher Eugene Gendlin uses the notion of the cross in a way that is very illuminating in relation to Lewin's understanding of performative analysis. Seeing Lewin's essay as a cross focusses our attention on what has as yet remained unspoken—the process or phenomenology of analysis I have implicated as obliquely related to his computationally styled formalism. In this section I outline the elements of the cross that I am drawing on before turning back to Lewin's chapter. On reaching the conclusion of Lewin's article with a performative crossing in hand, I can return to the initial moments of Lewin's paper and begin to think about another analysis, thus carrying forward the idea as understood.

The central feature of the cross that I want to engage is its “carrying forward”, a feature which produces a presence at the same as it time reaches back and creates a past. But first, I should clarify what is meant by a cross in this regard. The crossing is open to an indeterminate number of applications because it relates at some level to all the practices we engage in while being. One clear instances of a crossing is in metaphor where one idea-thing is crossed

¹⁸The use of this term by Eugene Gendlin has its origins in his reading of Heidegger's concept of dwelling. It could be argued that the cross is related to Heidegger's “preservation of the four-fold”, not only because a cross creates four quadrants but also in the manner in which the crossing is an attending to the implicit. I stick with Gendlin's term because of its simple clarity. See Eugene T. Gendlin. “Crossing and Dipping: Some Terms for Approaching the Interface between Natural Understanding and Logical Formulation” (1995): URL: <http://www.focusing.org/gendlin.html> (visited on 05/2005/01); See also above at §0.4.1 and §0.4.3.

with another idea-thing to yield a new idea-thing: e.g. the aria grows. Another instance of a cross would be in interacting with another person or thing, a surf board and a surfer (an initial cross) is crossed with a ocean swell revealing new aspects of the wave. A scientist probes the atomic structure of matter with an accelerator, a cross. A music analyst plays a piece “this” way, a cross. And we needn’t actually keep the cross in the experience of humans, a light particle smashes into a tree leaf emerging paled on the other side—particle crossing leaf. A drop of water falls 300 feet onto a rock—droplet crossing with rock. I could go on, but the reader should be able to think of some similarly obscure crossings on their own. The cross “brings things together”, but in this bringing together it bears witness to a carrying forward.

Before I get to carrying forward more needs to be said on the nature of the things in “bringing things together”. The language suggests that there are preexistent things, words (aria and growth) objects (man, board and waves) accelerators particles and so on, such that they bring their preexistent beings into proximity with one another to perform a crossing. This assumption of preexistence is what Wittgenstein argues is an error in our conception of language. Wittgenstein shows how a word’s meaning is always a use that functions within a particular situation in a way that is unique to that situation. This is not to say that words are imprecise, it says that words are exactly precise to the situation of their use. Because words function in the world it is an error to think that language somehow stands outside of the world as it does in a general theory of language. So the error in thinking that there are

preexistent determinate states of things (beings words objects and so on) is that things are conditional to use, and in use they are already crossing: the word crosses with the situation, the object crosses and so on.

For instance, I say “aria” in a room filled with the sounds of “Deh vieni non tardar” and another person, presumably you, understands that I am naming the

experience of that music ridden room. Now I am outside and I hear a crow calling from a tree, I say “aria” and again, you understand that I am hearing and naming the call of the crow in a particular way. Now I see a swan dive off a cliff, I say “aria” and you know that I am naming the peculiar grace of the dive. The three arias are formed by the word crossing with three situations.

Of course, there is a conventional understanding of the word aria, particularly to opera goers and musicologists, but this alone doesn't mean that it preexists as a thing. I could start with any one of my three uses and if you had never heard the word, you would follow my meaning. If you didn't follow my meaning, we could talk it out, and you would then know how I was using the word even if I didn't bring up its history of usage in music. The word, even as understood in its most “objectively true” manner can only be initially found in a usage, be it on top of a score or in a poem or wherever. All words are initially found in a crossing, the policing of the meaning, use and understanding of a crossing is what is called ideology and will not directly concern me here.

It might be said that in giving three different examples of aria crossing

with conditions in the world I am cheating because I kept one side constant (aria) and varied the other. But the words alone are not what is happening in the world in a cross. For instance, take the following two things: a wave and a plough. Alone these mean nothing until I enter into them imagining a plough as a steel blade that pushes and a wave as seen at the ocean's shore. They could equally be entered into as other things, a plough as a plastic shovel acting on the beach, and a wave as an invisible sonic event.

Take them as you will take them and make a metaphor: The wave is a plough. Now we have them together, the curl of a wave is temporarily frozen into steel. So we might say that wave has a curl and plough has a curl, and that in a metaphor we are entertaining the curl as object of our aspect seeing. The curl is somehow brought into focus in a way that looking at either alone does not invite. We are seeing the curl of a wave as the curl of a plough. We could even go further and say that there is a thrust, or push, or displacement that each have. But there is more than resemblances.

When we play the game of resemblances we are abstracting from context and at the same time inserting a context.

The context insert is something along the lines of a play of connections, a constellation of relations that can be removed from the world that they arise in, and replaced when the time comes. It's the "inert context" room that we take the metaphor, a place in the imagination similar to a white walled interrogation room.

Metaphors are freer than the interrogation room implies. For instance,

if I say “the wave is a plough”, and you follow my gaze out to the shore and see that there are several surfers about to get bowled over by an incoming wave. You immediately “see” the aspect of wave and plough as something that empathizes with the future of the surfers. This is a dwelling: in a metaphor we are wading out into the world.

In a second instance, I say “the wave is a plough” and I am pointing to the schematic diagram that illustrates the movement of sand on a beach by a wave. You immediately grasp the metaphor as a mechanical explanation for the bathymetric system that I am pointing to. You empathize with the wave as a scoop, a thing that carries. We wade out into the world already.

In a third instance I am listening to Alvin Lucier's 1992 *Music for Piano with Slow Sweep Pure Wave Oscillators*. Pointing towards the relation between the strings of the piano and the electronic oscillators I say “the wave is a plough.” Here the situation is once again quite different, now you are invited to understand the electronic sound as a wave that brushes up against the string. Here the empathy is with invisible phenomena, or auditory phenomena that is experienced. Once again, we wade out into the real world through metaphor.

If all things are already a crossing before they come to a crossing then it looks like we have a problem of circularity. Surely there must be some solid base for at least the original cross. But there is no need for such a thing as a base, and the fluid history of languages confirms this. In fact, if there was a base of the sort cast into stone by an act of God or the administration of a community, we would hardly have much to say—there would in fact be nothing

to say because words would have already said it, it would be very dull. Of course, there may be a way to think of what we say as inevitably nothing, and I won't take the possibility of such a view away, but this cynical self-erasure is already being a one dimensional view of language. Words do not only carry meanings on their backs, they produce meanings in their use, as they cross with situations.

Words are not wholly arbitrary either. In this manner they come equipped with a kind of reception field. The character of this field is constrained, but it is a moving constraint—what Deleuze calls the second type of line, it has thresholds but it is also moving.¹⁹ For instance, when I say “this xyz is an *aria*” the word immediately acquires that aspect of “this xyz”. Again, to repeat, the idea that aria already has the aspect to which I am pointing to necessarily misses the point. The fact that we don't see it as having acquired the aspect is a condition of understanding the aspect. That is, the act of seeing the aspect in the word necessarily appears to have already been there. If the aspect wasn't there before, we reason, it wouldn't be there now, because in the real world things don't appear out of nowhere. But in language, aspects do appear out of nowhere—the word comes to us fitted with a receptor-suit, and we send it into the world and it immediately attaches to the aspect revealed in such a way that it appears to have already been there. It wasn't. The nowhere that the aspect comes from is unknown but for a sense we have of its structure.

¹⁹Gilles Deleuze and Claire Parnet. “Many Politics”. In: *Dialogues II*. Trans. by Hugh Tomlinson and Barbara Habberjam. New York: Columbia University Press, 2002[1977]: chap. 4, pp. 124–148, p. 125.

The incredible aspect of language and the structure of nowhere is precisely the fact that we know, already, that the blank receptor-field of the word will work in this case. That is, its use is already sensed as being there, even when it is not—it is “always already”.²⁰ Our sense of “good usage” allows us to try and conceive what it is that makes up the receptor field. It is constrained but only loosely. The aria is a long way from an apple, for instance, but that doesn’t mean that the two are forever locked apart: there could be a day when the apple quality of an aria is so clear that it is considered redundant to point to it. To formalize this concept slightly, I will summarize that the word, before its use, has a reception field that is filled in at the moment of its use; our sense of the field is unspecified, but at the moment that the use is found, it becomes specific.²¹

Understanding language as a dynamic use takes us to the crossing: the moment that the word is put to a use, it is a crossing. Because the word suddenly fills out with the found aspect, we think that it already had that aspect, but it did not: as Wittgenstein implores us regarding aspect seeing, “Assume that it constantly changes, but you do not notice the change because your memory deceives you.”²² The first property of the cross is that it creates the things crossed. The aspect that attaches to the word at the crossing, in

²⁰“always already” is a Heideggerian condition of *Dasein*, or being in the world: we are “always already” thrown into the world, it always already finds itself in the world as present and “ready to hand”. See (Martin Heidegger. *Being and time: a translation of *Sien und Zeit** (Albany: State University of New York Press, 1996), pp. 67–72 (P. 1, sect. III, n.14 A))

²¹On the moment of “finding”, see Gendlin, “Crossing and Dipping: Some Terms for Approaching the Interface between Natural Understanding and Logical Formulation”.

²²Ludwig Wittgenstein. *Philosophical investigations* (Oxford: B. Blackwell, 1953), p. 206e.

that imperceptible moment, creates the thing crossed. When I see the swan dive and say aria, the swan dive aspect of aria is created as well as the aria aspect of the swan dive. Neither the dive or the aria previously had those aspects; now they do. The cross creates the parents.

The retroactive nature of the crossing outlined by Gendlin contrasts the traditional understanding of metaphor—as outlined for instance by Lakoff and Johnson.²³ Rather than thinking that there are preexistent aspects inherent to the words that are matched up in a metaphor, the cross argues that the aspects are created at the crossing. Heidegger uses the example of a bridge to illustrate this creation aspect: the bridge is not the connecting of two preexistent banks, “The banks emerge as banks only as the bridge crosses the stream.”²⁴ The technology of the bridge “designedly” creates the banks to lie in precisely the manner in which the bridge connects them. Yet the retroactive nature of the cross is complimented by another feature that Gendlin calls carrying forward.²⁵ When I point to a crossing, as I did in my aria dive, I am also carrying forward the thing that I point to, the thing that was implicit gets carried forward. Presumably, if I pointed the aria-dive aspect out to you, and you saw the aspect (in the manner “Oh yea, I see”) then you are carrying that aspect forward, making sense of it in a way that is meaningful to you. If I wrote this two hundred years ago, and you found the text preserved in a cave,

²³George Lakoff and Mark Johnson. *Metaphors we live by* (Chicago: University of Chicago Press, 1980).

²⁴Heidegger, “Building Dwelling Thinking”, p.150.

²⁵Gendlin, “Crossing and Dipping: Some Terms for Approaching the Interface between Natural Understanding and Logical Formulation”, also see “The Responsive Order: A New Empiricism”. *Continental Philosophy Review* 30 (1997): pp. 383–411, esp. p. 15.

you might not know exactly what I meant two hundred years ago, but you would still theoretically make the crossing (or else nothing happens), saying “Oh I see”, and in that moment, you would be making current something that I said long ago. It doesn't matter so much if what you see is what I meant, what matters is that it is now a meaningful cross, again. By being a meaningful cross, again, it is carried forward.

2.6. Performance as perception

Lewin prefaces his discussion of performative-perception by rehearsing the distinction between subject and object. There is a paradigm that serves more than just perceptual studies of music where the subject perceives an object that is outside of him. This paradigm is contrasted with the composer who, in the act of composing is not creating something that is already there and outside of him, it is something that is being created, and this creation is such that upon finishing the composition, the composer often cannot see the reason for the product—he is too close to it. Thus the composer does not stand in the subject object paradigm. Similarly, the musician performing is not performing something that is other than the here and now of the performance. The performance is a part of the performer. We might even say that a good performance stems from a performers involvement, or being in, the performance—for haven't we all heard performances that are somehow removed from the performer, somehow just going through the motions without really “being there”. Lewin puts it clearly: “the music' as what-is-played-right-now is far from prior to the performer's activity. . . no one can help but recognize 'the music,' after it

becomes separate from the person of the musician, as a trace or record of that person's activities." David Lewin. "Music Theory, Phenomenology, and Modes of Perception". *Music Perception* 3/4 (1986): pp. 327–392, p. 377 In both cases, the notion of music as object apart from composer or performer fails.

If theories are part of a paradigm that is distinct from practice such that they misconstrue subject object relations, what good are they? Lewin suggests that they are valuable insofar as they become "goads to musical action, ways of suggesting what *might* be done, beyond ways of regarding what *has* been done."²⁶ That is, music theory or analysis is a powerful tool when it carries forward. In the event that we perceive something outside of ourselves, something "out-there" that we can consume, we do not carry forward. If a metaphor is put into a time capsule and reopened 200 years later and read as a strange confluence of words, pleasant to the ear but without any sense, the cross is evaded and nothing carries forward. For Lewin, in order to carry forward something that is a "doing", you must be doing more than passive consumptive perceiving.²⁷

Lewin broadly defines the "doing" of musical analysis as inherent in all kinds of actions that he refers to as "everyday acts of musical 'noodling'."²⁸

²⁶Lewin, "Music Theory, Phenomenology, and Modes of Perception", p. 377. Of course, the notion that something that has been done can be redone is behind the modernist impulse for the "original". Lewin's use of it here is perhaps leaning towards the modernist impulse, but at the same time it can be read more optimistically as a mode of "seeing as" whereby the average level of engagement with music is the "seeing as" a passive object somehow fixed in time.

²⁷Lewin speaks of this doing as a musical action that we perform, I use the word "doing" here in reference to the introduction, where I attempted to problematize the transparency and understanding of what it is that music does. See especially §0.1 and §0.6.

²⁸Lewin, "Music Theory, Phenomenology, and Modes of Perception", p. 377.

These actions include walking, unconscious gestures, whistling, singing, humming, knocking clanging gurgling burping and so on. The gestures are trans-modal modes of musical perception that carry forward. From the most elementary of gesture, Lewin suggests that there is a range of activities that become closer and closer to “high art”: amateur performances, informal jams, improvisation, “fooling around” with a score and the like. All of these acts are a carrying forward, that is, they make sense of the original cross now, they enact the crossing and by so doing they carry it forward.

The tendency is to think of analysis as removed from performance and composition and vice versa. The structure of the music institution supports this balkanizing tendency, performers, composers and analysts all go to different rooms and are often administrated in separate streams. While intra-departmental and departmental disciplinarity makes administration possible (a university with no departments would be a mess) the corresponding conceptual disciplinarity does not allow for an integrated approach to analytical endeavors that would encourage carrying forward. Lewin wants to think about all musical endeavors as interrelated, the degree of interrelation is thought to correspond to the degree of productivity and value that they have.

To make his point about carrying forward versus consuming, Lewin discusses the idea of a reading-knowledge of a language. He argues that because a reader is versed in some elements language does not mean that they have any idea *of* that language, it means that they know something *about* the language. Knowledge *of* must have the ability to perform somehow in that language. If

there is no ability to perform, there is no ability to cross or carry forward. What reading knowledge means is the ability to play a specific word game with tests of reading knowledge, in the same way that a reading knowledge of music analysis refers to the ability to play a word game of music theoretic terms and signs.²⁹ The ability recognize within a prescribed set of rules and pieces does not involve a crossing or carrying forward, it involves consuming. But consumption for what? The model that Lewin sees our institutions of music study as supporting is a dead-end. As I mentioned above, there would be nothing to say in this conception of the world, and who would want to live in a world that only involved passing text-like “knowledge” from one person to the next? We might call the world without the crossing and carrying forward, a “world given” that need not be found. The world-given is singular, the world found is multivalent; we live in the second and yet often in the conceptual epistemology of the first. Lewin cites Schoenberg as recommending that theory is always secondary to creation, but goes on to quote from the Genesis, where God “responds to his perception by creating something more.”³⁰ William Blake concurs in his *Proverbs of Hell*: “The most sublime act is to set another before you.”³¹

At this point we begin to sense the circularity that Lewin's original loop

²⁹The word-game aspect of theory is considered especially problematic for the notion of the “experienced listener” and perceptual testing in general in Nicholas Cook's article, Nicholas Cook. “Perception: A Perspective from Music Theory”. In: *Musical perceptions*. Ed. by Rita Aiello and John A. Sloboda (New York: Oxford University Press, 1994): pp. 64–95.

³⁰Lewin, “Music Theory, Phenomenology, and Modes of Perception”, p. 381.

³¹William Blake. *William Blake: the complete illuminated books* (New York: Thames & Hudson, 2001), p. 113.

contained. Understanding creation is a new creation. At the same time, we are returning to the insight of perceptual anticipation, but now we are in reverse. A new creation retroactively perceives the perception. Creation is a particular mode of perception, playing something after hearing something “hears” that thing in a new way—it carries that thing forward. There are two related points here, the one is that playing something after hearing it *is* perceiving it as opposed to recalling it, and the other is that playing something after hearing it *is* a new creation as opposed to a “cover” or a copy—copyright lawyers nota bene!

Before we had anticipations as present perceptions—I am actually hearing the resolution that is anticipated before it is sonically present. Now we have present constructions as actually perceiving past performances: Lewin emphasizes this point, “*we are in the very act of perceiving.*”³² So if I leave a concert whistling a particularly striking tune, I am in the act of perceiving: the carrying-forward makes the past present. To be “in the act of perception” is an experience that “dwells” in an aspect. This dwelling is a made possible by the crossing, my whistling, and the crossing carries-forward. Perceiving music is in some sense “outside” of the constraints of “cursor” time.

The second related point says that if I hear a song at the concert and begin to play the song when I return home, I am dwelling in that hearing, crossing and carrying forward, but I am also creating a new song. My new song enacts my hearing of the previous song, but it is new. The song that I heard, and the

³²Lewin, “Music Theory, Phenomenology, and Modes of Perception”, p. 382.

song that I am hearing when I replay the song (even if the instrumentation is roughly or exactly the same) are not without relations, but the original does not predict the hearing(s). When I am playing the song, which is my hearing of the song, the song envelopes that hearing like the word whose reception field gets colored in by usage. This can be more or less interesting: my hearing of the song can be banal and haphazard, it can be an impoverishment of the song heard, the new song can be bad or just uninteresting. But this alone doesn't mean that it is not a new song—it means only that no one is going to be very interested in hearing it or buying it. The uninteresting new song could duplicate hearings in such a way that when another person hears the new song they say: “yea, that's how it goes” or “that's how it sounds”. But there is also the opportunity for the new song to be insightful, such that the hearing is something of a novelty but points to an interesting aspect, here we say something of the order: “Wow, I never heard it *that* way before!” The insightful new song can retain its way of hearing on returning to the original. Like the reception field of the word that gets lit up at the moment that the word hits the situation, the original song gets reheard with the new song and it retains the new hearings. This new hearing can now inform any subsequent hearings: “I'll never hear it the same way again!” As Wittgenstein implores again: “Assume that it constantly changes, but you do not notice the change because your memory deceives you.”³³

With these remarks on language and music we can point to an interesting

³³Wittgenstein, *Philosophical investigations*, p. 206e.

meta-aspect of the musical making. Surely both the words and the song are created when they are crossed and carried forward. The receptor-field of each, word and song are unpredictable and yet contained. But the homology between the two crosses, word and song, ends at these larger similarities. A word goes out into the world and finds its coloring, structure, or otherwise fills its unpredictable receptor field. A song hearing another hearing, as it does when carried forward, is operating at a level that mirrors the process of a word's finding its contextual meaning in the world. The song is a finding of song; it begins and ends as a receptor-field, it is always a finding, a kind of meta-linguistic awareness in materiality. The song tells us about the multivalent operation of language without entering into the realm of the linguistic. We can only come to terms with this aspect of music by locating it at the level of dwelling: being within it as it performs our being.

2.7. The Loop Undone

The loop is not as easy to deal with as a computer language suggests. In both the musical crossing and the anticipation realization pairs, we see the loop as a sphinx or chameleon. The crossing shows us that there is no originary beginning; crossing is always in a process and dynamically responding. The loop of crossing is found in the paradox of appropriate knowing: How we can possibly know what situation calls for a particular crossing if the range and result is always unpredictable? If we already know the result, and are applying this knowledge, then the cross is a redundancy. If we do not know the result, then the question is what sense leads us to make the cross. This kind

of problem is usually written off with recourse to the ephemeral “intuition”. But what is intuition? As an understanding of what kinds of things happen in the cross, we might say that intuition is a knowingness of the order that accompanies the cross. Every crossing has the sense that what is produced is right. It isn’t as if when a cross occurs we sense that the product is wrong or ill-begotten. Yet there is nothing really predictable about the product, intuition must therefore be a sense for the unpredictable quality. This sense is a kind of call that each song answers, and as a call it tempers the circularity of loop. This call would seem to be primary, and not amenable to the rigid structure of a computer language. Of course, Lewin is in the end trying to poetize the computer language so as to undo the art/science divide, so I should be careful not to suggest that he is mistaken; but if poetizing the computer language is what he is trying to do, then the question only returns: What led him to point to and use computer language in such an original way?

The loop is not something to avoid or repress. On the contrary, it seems that in order to get at the “doing” of music, to find it in the act before we attribute structural this or that to it, we should allow the loop free reign. The loop constantly reminds us of our dwelling in the world. In chapter 3 I will try to address its functioning by looking to a moment in a Mozart sonata. The analysis is directed towards the doing of musical processes in a way that attempts to understand the answering that the sonata performs.

A Musical Bridge, A Selective Crossing

Listening through the extant solo violin sonatas by Mozart is a compelling experience. Mozart's familiarity with the instrument's capabilities, its sweet spots and its range in the hand, circumscribes a realm of potential in clever and subtle ways. And yet, in this circumscribed range there are striking moments of ingenuity. In this chapter I take up one of these arresting moments, a fragment that went so far afield it was left undone, a fugitive. By charting musical processes in this work, it is possible to detail concretely how they selectively operate on each other, recursively drawing out implicit aspects—salient elements of perception. I argue that it is the processes' invocation of the background as-structure, the implicit or source-pool that allows for the

production of aspect, is in fact what we are speaking of when we refer to Mozart's style. Appreciation of this self-selectivity of process adds nuance to the conditions of analytical dwelling.

Beginning at the middle, the first two measures of the second movement of Mozart's 1782 violin sonata "fragment" in C major (KV 403) are reproduced (with a few analytical additions) in figure 3.1.¹ We are already in the middle not only because the sonata is three movements and this is the second, but also because this movement acts as a harmonic bridge between the first and last. To give away the harmonic plot, the fragment begins in F-major, and will end up anticipating C-major in a protracted meditation on E-major that almost imperceptibly slips into a dominant-seventh of C (G_5^6). Of course, words like "protracted meditation" may seem out of place here, shouldn't we save such words for Morton Feldman, if not at least Beethoven or Wagner? The state of meditative protraction is partly afforded by the tonal instability. It anticipates a future that stands ahead of it as the trajectory of the past. It is not there yet, but it is now being there, meditating on the present, as a poetic pause on a bridge.

Of course, there is a rich tradition of finding the most disturbing moment "in the middle". Consider Bach's Trios where there is something of the small but uncanny wedged between the artifice of the Minuet—something

¹KV 403 (K. 385c) was composed in 1782; the third movement was left unfinished at his death, and was later completed by the contemporary composer Maximilian Stadler. All the material for this analysis is transcribed from Wolfgang Amadeus Mozart. *Sonaten und Variationen für Klavier und Violine, Wolfgang Amadeus Mozart neue Ausgabe sämtlicher Werke*, (Kassel: Bärenreiter, 1965), pp. 167–8.

Violin

Andante

2 3 4 5

p

Piano

messa voce

F: I 6 3

Figure 3.1: Mozart, Violin Sonata n.38 K.403 ii (andante), mm. 1–5.

that emerges in the clearing that is performed by the Minuet. Similarly, the slow movement of Beethoven’s Op.31 n.2, that transcendent moment of “the ‘star’” that Adorno points towards.² The star pulls us into its own becoming, it suspends the self. But what are we suspended over? Among other things it is a harmonic middle, but it is not a harmonic middle that exists as an object standing before us, it is a harmonic middle that is us already—in the sense that it pulls us into its becoming. How can we account for this being suspended? How can we point to its qualities as a particularity in this violin sonata.

²Theodor W. Adorno. *Beethoven: the philosophy of music: fragments and texts* (Stanford, Calif.: Stanford University Press, 1998), pp. 353–7.

3.1. Putting the Voice

The recommendation in the score, “*mezza voce*”, opens up a particular point regarding the dwelling in the music. The Italian phrase refers to a manner of placing the voice into a note as if that note was a platform. The manner is a controlled and gradual release of volume into the sound by the singer. It is acoustically impossible for a piano to mimic this effect in a single note because there is no control after the string is struck. But understood as a particular affect for a dwelling to enter it becomes more than possible. By putting the voice into the hand of the keyboardist, we tacitly admit to a condition that speaks from the music. Further, by putting the voice into a mechanism we displace it from the transparency of vocality, and in so doing reflect the calling that a voice answers. Let me explain first what is meant by the calling.

The calling that the voice answers: this concept brings us closer to the situation of consciousness.³ When I am about to say something, anything, I know what I want to say, but I am not sure of what form it will take. I nonetheless say this thing that I don’t know exactly. The knowledge of what I want to say before it is said is a calling: I feel the call of something to be said and I answer the call by saying it. The calling is never voiced, but it nonetheless tells us when we are wrong, “that’s not what I meant to say”, and it tells us when we are right, “that sounds right.” The call thus remains in the

³See above §2.5. Also see Bruce Mangan. “Sensation’s Ghost: The Non-Sensory ‘Fringe’ of Consciousness”. *Psyche* 7/18 (2001): URL: <http://psyche.cs.monash.edu.au/v7/psyche-7-18-mangan.html> (visited on 22/06/01).

answer, only it is silent. It seems that the calling is precisely the “unasked question” that Parsifal answers in Wagner’s Opera. It is this invisibility of the call, the unasked and implicit, that is “calling”.⁴ There are other aspects we can note for the calling, its amorphous nature and its exacting specificity—in Parsifal, for example, only the bleeding lance will suffice to answer the call.⁵

But how does the voice turn its attention to the calling when it is displaced into the hands? Firstly, note the transparency of the voice. We speak, hum, fidget, lurch, fall towards, and otherwise employ the infinite nuance of the voice. These gestures of voice are transparent; we don’t “see” them even though they are always there, but we nonetheless know them for exactly what they are. That lilt, that pause, that knowing glance: we know these things for what they do; what they are saying. Deleuze invites us to think of these as the “lines of wandering” in an existence that is made up of lines.⁶

The transparency of a vocal gesture is made apparent in music when we “put the voice” because it displaces the conditions of the operation. We see the transparency only when we are displaced from it. With the voice that is “put” there is a sudden recognition of the putting—the putting that was heretofore transparent. If we understand the calling as that which is answered

⁴The unasked question is described by Lévi-Strauss in his analysis of Wagners transformation of the “Perceval” legend into “Parsifal”, in .

⁵On the qualities of the call, see Eugene T. Gendlin. “Dwelling”. In: *Proceedings of the 17th Heidegger Conference University of New Hampshire*. New Hampshire: pp. 133–152.

⁶Deleuze directs us to, for example, “watch someone walking down the street and see what little inventions he introduces into it, if he is not to caught up in his rigid segmentarity, what little inventions he puts there... not only their walk, but their gestures, their affects, their language, their style.” Gilles Deleuze and Claire Parnet. “Many Politics”. In: *Dialogues II*. Trans. by Hugh Tomlinson and Barbara Habberjam. New York: Columbia University Press, 2002[1977]: chap. 4, pp. 124–148, p. 128.

yet transparent, then displacing the putting is a kind of “voicing” of the implicit calling. Even though we cannot literally hear the implicit calling, by putting the voice we draw attention to its presence.

The discussion of putting, voicing, and calling is a case in point: in attending to the implicit we are already admitting to a dwelling inside of the music’s materiality. I cannot, for instance, see a gesture of a woman walking as a sign. The gesture that is pulling my hair is not a sign, the gesture that is pointing is not a sign. These gestures are not interpreted, they are lived. As a martian, I could make no sense out of a man pulling his hair because I would not be living it, a shrug would be just as unreadable—a second order gesture of what gestures answer would be a virtual impossibility unless I could “live” inside of it.⁷ This sense of “empathic” somewhat broader than a purely psychological understanding. Dwelling is an all encompassing state; it is not only for the person creating the the music, it is the music, it is the space of an implicit being in the world.

Mezza Voce is more than making sing, or, “making sing” is a doing that requires already a being in the implicit. By putting the voice into the hand, we are turning attention towards the calling, towards the nature of the doing. Noting this is a first step to getting inside of the piece as it is a doing.

⁷the example of the martian is taken from Kendall Walton’s article “Understanding Humor and Understanding Music”. *Journal of Musicology* 11/1 (1993): pp. 32–44. See §1.2.4.

3.2. Getting Inside

We were on a bridge, suspended in harmony. We were in the harmony, not viewers of harmony. Putting the voice was a case in point of this “being in” the harmonic structure. The point of contention with the being “in” versus viewing “of” is more than word quibbling. When viewing music as an object, it becomes purely explicit. The explicit nature of the object comes at the expense of covering the “doing” that is implicit. From our putting the voice, we are on track to thinking from the implicit, but we have yet to venture into the territory of the piece as it can be a doing.



Figure 3.2: Harmonic scheme mm. 1–2.

In a routine chordal analysis noted below the first two measures of this middle in figure 3.2, is the manner in which the harmony is all relative to F-major. Alone, the harmonic movement so represented does not tell us much about the piece. Drumming up more examples with the same harmonic profile would not be difficult. What makes this opening more vital than a chord

progression is the manner in which the progression is articulated. That is, the “how” of getting from the numerical to the actual, a space that the listener/player fills in, is what we are after. In fact, the immediately apparent aspect of this opening is the simplicity of its harmonic content. The sparse use of a single chord contrasts with the overall sense of complexity, unbalance, and movement forward into a soft resolution. The complexity can be pointed to by using Narmourian analysis of the melodic content in the upper voice.

The opening three notes perform what in Narmourian analysis is called a Reversal (labeled R).⁸ The reversal sees the intervallic content of the first three notes (descending m6 and rising m2) as grouped together such that they are closural. The Reversal is the opposite of a Process (labeled P) because there is both intervallic change and registral change in direction. The inner workings of this Reversal are illustrated in figure 3.3. The falling 6th expects the rising 2nd, schematically represented by the arrow’s tail which “catches” the implication of the reversal. The *f* does not continue to have implications, there is no direction for it to go in, hence we illustrate it as a closed unit, without another arrow. Narmour’s contention here is that there is a cognitive principle of Reversal that corresponds with the Gestalt principles of similarity, good continuation, proximity and so on. It is possible to stay inside of the work, inside of its movement, and experience this reversal as closural.

The closed aspect of the melodic unit is supported by the influence of

⁸Narmour’s theory is outlined in Eugene Narmour. *The analysis and cognition of basic melodic structures: the implication-realization model* (Chicago: University of Chicago Press, 1990). A brief outline of the theory is in §1.2.1.

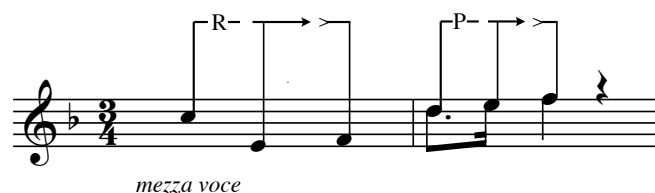


Figure 3.3: Detailed Narmourian analysis (upper voice mm. 1–2).

harmony (a return to tonic in first inversion). Orthographically the score captures some of this grouping in its phrasing of these notes with a slur. Melodically then, we might hear the first measure as aligned with the kind of routine nature of the harmonic analysis—a predictable series. But wait, why is it that the group achieves closure on the third beat of the measure? The third beat anticipates the return of the more stable first beat of a metric cycle. This is our first clue that something is amiss. The first measure achieves a kind of predictable stability, but it is a stability that is on the borderline of the absurd or comic.

This comic element of the first measure is thrown into relief by the second. But even before the second measure arrives, there is a sense of comic. By comic I mean the presence of conflicting states: on the one hand we feel the metric need to proceed, we are anticipating the future (I consider the possibility of a metric multivalence below). On the other hand, the completion of the Reversal contains the stability of an ending. What is funny, or comic, is the fusion that unites these incompatible states (beginning and end), the being in a false

relation.⁹

The lack of closure that the meter has is supported by the Process that is set into motion in the lower voice (fig. 3.4). These parallel thirds initiate a Process of stepwise motion. This Process implies more of the same is in order. If we schematically drew the process it would have a continuation arrow in the manner of the Process in the upper voice of the second measure (fig. 3.3). Complimenting the the forward drive of this lower voice Process is the metric thrust already mentioned.

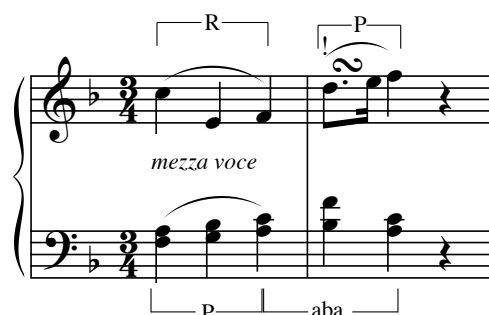


Figure 3.4: Lower voice processes.

The upper voice of the second measure breaks from the staid quality of its predecessor by leaping up a major sixth to the *d* and proceeding upwards to the *f*. This surprise, noted in the figure with an exclamation point, contains something of the free fantasy where the broken aspect casts light on the or-

⁹This understanding of humor is garnered from Lévi-Strauss who used it to illustrate a general feature of musical experience in the “Finale” of *The view from afar* (New York: Basic Books, 1985), esp. p. 656.

dered aspect.¹⁰ The leap that breaks might be thought of as a new Reversal dovetailed with the conclusion of the first, but this alternate reading would imply a duple meter, I consider such a reading below. For now I am hearing the rising from *d* to *f* as a new Process of intervallic motion. After the surprise of the *d*, we initiate a new Process that rushes via rhythmic diminution and a turn figure to complete its trajectory. This Process does not have the closure that the Reversal does, and the meter now corroborates this instability as the Process concludes, due to our “rush”, on the second beat. The difference between these two halves, both of which conclude with the same chord (first inversion tonic), is almost perverse. The same chord realizes two very different states: a contracted closure turns into an rushing forth of anticipation—the same notes have remarkably different characters. Now we are on our way to seeing the inherently simple moment as coexistent with one that is simply corrupted, a break that gives a perceptual complexity.

3.3. The Odd Couple

Look at these two halves! One expansive and one contracted smacked side by side; they look so improbably put together. If I saw these two coming down the aisle at a wedding I might object to the union. But there they are, paired for life in the opening two measures.

There remains the possibility that the apparent instability of the the third beat of the first measure has nothing to do with the meter, in which case I

¹⁰On the eighteenth century fantasy as existing in a dialectic between decay and order see Annette Richards. *The free fantasia and the musical picturesque* (New York: Cambridge University Press, 2001).

could point to the lower voice Process as somehow doing all the work. The metric aspect of this theme becomes more complex as the work proceeds, but for now I should just like to mention the possibility of this dissenting ear. It might be argued that if I am not familiar already with the meter that I could hear the third beat as the stable beat of a duple meter. Let's leave aside the difficult idea that "no one would play it that way" for now and say that it is a perceptual possibility; the phrase "affords" such a (radical) hearing. There are several factors that hold such a reading at bay. If we look at the harmony, it might be argued that we are hearing three bars of duple meter each of which are tonic. This is certainly not the customary use of harmony, which normally changes over the bar line, thereby creating a metrical unit. The move into root position subdominant harmony for the second measure therefore mediates against a reading as duple. The rhythm of the upper voice holds the duple reading afar. The steady progression of quarter notes is itself another Process: the implication suggests that more of the same are on their way. This rhythmic process is illustrated in figure 3.5 where an arrow notes that even though the third quarter note implies another, it does not get it. Instead of continuity, the break already noted in the melody is supported by a break in rhythmic implication. The second measure, here with the turn figure approximated, begins another rhythmic process, this one being a Reversal. The characteristic of the rhythmic Reversal is closural as well, going from a short note value to a long one supports closure.

Yet at the same time that meter seems to drive a wedge between our odd

Rhythm: $\text{P} \rightarrow \text{R} \rightarrow \text{PP}$

mezza voce

3

Figure 3.5: Rhythmic processes (mm. 1–2).

couple, there are aspects that work against this wedge. For instance, I am reading the melodic move over the bar line in the lower voice as a registral return (aba). The registral return is dovetailed onto the Process (see lower voice in fig. 3.4). The dovetailing acts against the metric division because the apparent end of a three note group is being heard as a simultaneous beginning. Dovetailing as such would imply a metric down beat. Similarly, the rhythm of the lower voice proceeds in steady quarter notes. The implication is thus always realized. I read the rhythmic progression as two dovetailed processes as well, so that in tandem with the melodic analysis, they argue against a triple metric division. Thus the possibility that a duple reading still haunts this little beast remains, the multivalence of meter and process turn this apparently simple opening into a complex, comic navigation. It seems that we are dealing

with a progressively odd looking couple.

Let me sum up what I have so far said about this odd couple in a kind of closure matrix. Table 3.1 lists all closural aspects that I pointed to at the arrival of first inversion tonic harmony (I^6) in the first two measures. From strongly closural (C) to non-closural (NC) via a halfway ambivalence (C/NC), the list encapsulates the closure I suggested for these aspects of the opening two measures. As a list, we can readily see that there are multiple degrees of closure, and we can take it to summarize the discussion so far. As a summary, the list does not capture the nuance of the multivalence discussed: both the odd couple that has begun to emerge, and the tenuous nature of the metric assignation have gone missing. However the list gives us a sense of the range of the multivalence that affords multiple paths as we step through the piece.

Table 3.1: Closural matrix (mm. 1 & 2).

Aspect	Measure 1 at I^6 (b. 3)	Measure 2 at I^6 (b. 2)
Upper voice melody	C	NC
Lower voice melody	NC	NC/C
Metric aspect	NC	NC
Harmonic aspect	C	NC/C
Rhythm, Upper voice	NC	C
Rhythm, Lower voice	NC	NC

The oddness of our couple comes replete with many properties: the break that they easily effect, the simplicity that under girds them and the ease with which we can see past them—they are a couple, after all. We might even try to solidify the coupling by trying to gender them, noting that the first is a

voluminous embrace while the second a virulent striving upwards. The she's circle (R) is broken by the he's vector (P). The break is what interests me here. If we can get at what the break does and how it remains silent but holds everything in the music, how it hears the music, then we have found the residual wake of the implicit. We are getting closer to the particular implicit that this piece carries into being. The break that is the particular chaos of the edge of the broken vase that fits with its mate so easily yet is unseen. Where do our pieces fit together?

3.4. The Odd Couple Ties

What brings the odd couple together is found by the violin. The violin picks up on the tail of the second measure with an arpeggiated tonic triad (fig. 3.6). Again, we say “what? *This* is what comes next? A timid triadic ladder? Why?”



Figure 3.6: Violin entry (mm. 2–5).

Our first step in thinking about the violin's opening gesture as directly related to the odd couple is to ask what it says to the odd couple musically. There is an obvious statement of the tonic chord, certainly, so we might argue

that it picks up the implicative questioning of the couple by continuation or extension of the harmony. This is no doubt true from a chordal analytic point of view, but it implies that the violin bears no other relation other than a genetic continuation of the harmonic realm of the opening couple. Recall that the opening odd-couple had a pretty slim originality from the perspective of its harmony. What seems more important here is that it redefines the couple.

The violin gesture rethinks the opening. It unites the odd-couple's oddness, their imbalance is summarily wrapped up in the dyad, $f'-a'$. Each of the subsequent dyads are singular statements. The separation is achieved through the rhythmic element that we noted as closural, the Reversal that is effected rhythmically closes off continuation. As dyads, represented by their interval size (3, 4, 3, and so on) in figure 3.7, these four creatures deny implication—dyads are inert. This silence, we might say, answers the implicative second measure by erasing the question. Taken together, we can hear the dyads as a chain forming an Interval Process, thereby becoming an unbounded process without end. The melodic process is supported by a rhythmic process. But if this inert process is avoiding the question, what was the question that it avoids?

Before we can ask or attribute a question, I suggest that in becoming an answer, the violin creates the question. There was no question before, we had an odd couple, breezily emerging in comic sensibility, and now because of the violin's answer, the possibility of a question emerges—we say retrospectively “you, odd couple, are a question”. But the question, like the other half of

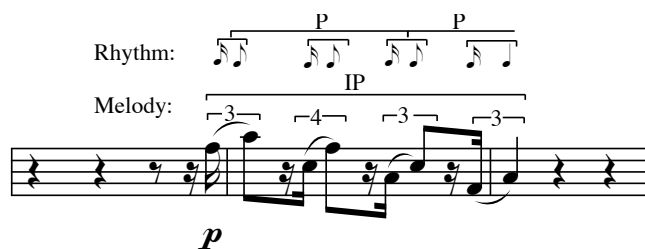


Figure 3.7: Melodic and Rhythmic processes (vln. mm. 2–5).

the broken shard, tries to find exactly where it fits. As it so happens, the question doesn't fit the answer. The question doesn't get posed, it gets tried by a possible answer. The restatement of the odd couple with some important new twists puts an end to the trying.

The four dyads take on a new role as they continue to occur. As a repeated closed structure they begin to imply more in a Process that proceeds down the F-major triad. The Process is non-closural, this is why we can hear the answer as never finding the question. Yet it does try, and in trying it reads a new dimension into the odd-couple, even if it doesn't fit.

We can hear the dyad as speaking, summarily, to the melodic Process of the upper voice in the second measure. He says "this third.", then "this fourth?", and so on, never finding a match for our odd-couple. How it tries though! Suddenly the odd-couple is about a third, now a fourth, now a third again, by now we are becoming desolate, the final third, returning to the original (*f-a*) an octave below, realizes its folly and is cut off by the restatement in the piano of the opening material. We might notice at this point that the four dyads almost find a duple meter, playing this violin part (fig. 3.6) without

the piano's interruption or return would sound like a group of four beats, each preceeded by an anacrusis.

Of course, animating the passage thus (as a progressive failure to find the the right answer) is not meant as literal in the sense the words imply. We are invited to try out whatever words seem to work, and if they are helpful then so be it. What I am trying to get at here is how the passage attempts to answer and inadvertantly produces the odd couple musically.

There is something new in the violin that doesn't quite get into our analysis of its retroactively making the odd-couple into a question. The timid, pathetic quality of the violin, lost in a slow sweep down the triad. This is a new character waking. We could point to operatic or otherwise dramatic occurrences of this ethos, which would suggest that there is a tokenism—a solitary closural pathos, a sobbing, a lack of recognition, a narcissism, and so on. The list could go on, and to choose a single one and say "this is the one" misses the point that there are many, and the many is the appeal. Secondly, in saying "this is the one", or less dramatically "this could be the one" we are invoking a conceptual architecture of correct meaning which requires that there be a stable sign and referent. In the hypothetical case that I am avoiding, the sign might refer to operatic tradition, it may refer to a particular or general dramatic use. But here is the problem with the reference in music: It doesn't account for the listener or player who has never been to the opera, has never been to a secular cantata or is at all versed in the system lexicon of signs. The theory of the sign would suggest that without that referent, there is no understanding of

that element. I argue that there is, although sometimes it is impoverished and sometimes it gets voiced in poor words, the notion that there is a linguistic-like reference is simply wrong-headed. The preceding discussion of all hearing being a “hearing as” allows for the good fit of a hermeneutic interpretation, but it also says that the hermeneutic interpretation does not tell us much about the experience, it does not tell us how that goodness of fit comes to be. The “answer key” model, where being “in the know” is equivalent to having access to the dictionary or key, is not an accurate picture of the musical experience or musical understanding. While symbolic token studies add nuance, call us back to work, or otherwise enrich our experience, they do not speak of the experience that they enrich. In addition, the conceptual architecture of the sign imagines a permanence to interpretation that simply does not exist. All of this anti-tokenism is a roundabout way of saying that the violin speaks for itself; that it speaks from and with the implicit has yet to be seen, but that is where I am aiming, it is within my sights. I mention the character of the violin because it is about to change.

If it is agreed that the operatic ethos is manifold, that there are several possible understandings, then it looks like the analysis of figure 3.7 is an instance of a singularity. This singularity risks the common assumption that there is a work “out there”, tangible and passive while an interpretation that is relative. Let me temper any such accusation with a second reading of the violin line (fig. 3.8). In this reading I hear a dovetailed sequence of Registral

Reversals that are enveloped by the return of the piano in measure 4.¹¹ The Registral Reversal is a partly closural and partly non-closural process; it reverses registral direction at the same time that it continues an interval process. In the present context, the ambivalence seems even more suited to the ignoring of the question, and of course, there is a chain of reversals that becomes a Process too. The dovetailing also leans towards a reading in duple meter, reading the process as beginning on a downbeat and ending on a downbeat in an out of sync meter that is interrupted by the piano. Reading it groups of three may seem counter intuitive because of the slurring that is performed in a single stroke of the bow; they would be grouped as dyads by the bow. But this bowing also lends itself to the sense of arrival and departure that is the dovetailed processes.

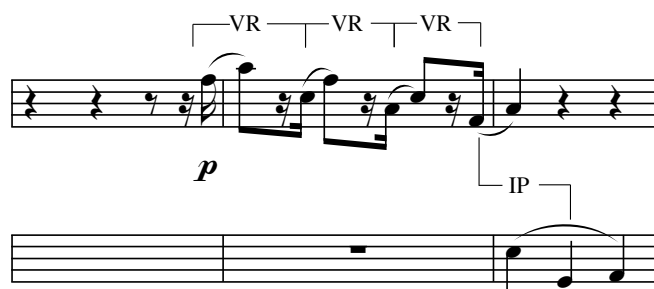


Figure 3.8: Second melodic reading (vln. & pno. mm. 3–5) cf. fig. 3.7.

How do the various violin processes “read” the couple? If we think about

¹¹I have a lot to say about the Registral Reversal in chapter 4, where Susanna’s “hat motif” is constructed out of an identical sequence.

the process that emerges over the break in the couple, taking the beginning middle and end, a large Registral reversal emerges as defining the contour of the couple (fig. 3.9). Reading the violin as a sequence of Registral Reversals gives credence to the notion that it is producing that aspect in the couple. Given the odd couple, the violin pulls them together. As a process of dyads, the violin might be focusing on the aspect that is the process from the opening c' up to the f' of the odd couple. Either way, the violin's seemingly odd response pulls the couple together. By producing a unity between the couple, the violin does not only select an aspect, the selection of the aspect comes bound together with the production of the couple as a whole from which the aspect is selected. That is, the couple did not preexist the violin's selection, the multivalence of the couple is being produced. The piano's subsequent interruption and the return of the couple will further complicate this multivalent production.

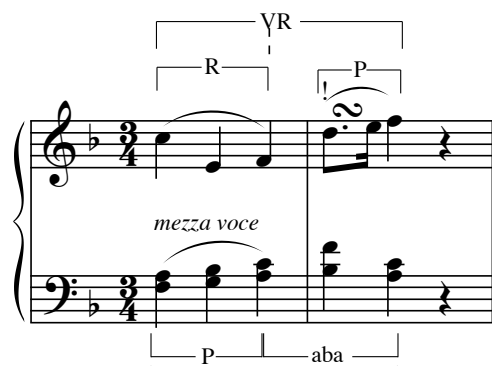


Figure 3.9: Large Registral Reversal (VR) in the “couple” (mm. 1–2 b.3).

3.5. The Couple's Return

The piano introduces some major new quirks to the odd-couple. The initial reversal, the embrace which afforded an understanding of the feminine half, is the same except for the fact that it interrupts the violin's regressive endless process. Of particular interest in light of the above discussion of the break, is the fact that all markers of the break are gone. Our odd couple is brought together in a way that the violin may have tried but failed. Instead of the surprise break, a Process moving up to the *a* is dovetailed onto the reversal in a manner that gives closure and undoes the radical break (fig. 3.10). The closure is supported by an authentic cadence whose form contains the opening Reversal (*c'-e-f*) in the bass voice. The confluence of dovetailed processes increases the presence of a possible duple meter. In the upper voice I note a registral return (*aba*), which adds a sense of closure to what was formerly open.

The possibility remains of hearing measure 6 as part an Interval Process, thus preserving the identity of the couple (fig. 3.11). Here the denial of the registral implication is a kind of soft closure. The Interval Process accounts for the manner in which the *g* of the second half retains a sense of individual identity instead of being enfolded into the middle point of a Process—a sense that is supported by the slur from *g-b*. The reading of an Interval Process is no doubt influenced by the initial break as it was produced by the violin. There could also be a more established meter by now. Yet these kinds of accumulated influences are not sufficient to make the process, they emerge

Andante

Violin

Piano

mezza voce

p

R P aba

P R

Figure 3.10: The break is healed over (mm. 4–5).

simultaneously with the process. As earlier, it is most valuable to begin to embrace the multivalence so that it becomes possible to get a sense of the structural features of the implicit.

R

IP P

P R

Figure 3.11: Alternate reading (pno. mm. 4–5).

3.6. A Trajectory

The detailed discussion of the opening measures is not exhaustive; there remain other approaches to understanding it. The use of Narmourian analysis is particularly valuable for thinking about the multivalence, which in turn gives us a perspective on the manner in which the piece emerges from an implicit sphere. The Narmourian structures allow for a materialist focus on the processes that produce implicit aspects of the work. Alongside its benefits, Narmourian analysis has the drawback of being extremely focussed on musical minutia; I have only spoken of 5 measures. Rather than continue to elaborate the particularities of this piece, I will assume that the kind of emergent process I have pointed towards in the first 5 measures is clear, and will move on to some of the more dramatic moments of the movement.

To get to where I am going first I point to a large scale process that begins on f' and works its way down an octave and a fourth to C (mm. 2–16, see fig. 3.12). The graphic reduction of figure 14 in the grand staff below the sonata employs the Schenkerian styled method of connecting notes with bars so as to bring attention to a larger coherence. Although there are doubtless other ways of drawing the graph, what I want to keep in mind is that a structural representation that it embodies is contrary to how I have been trying to consider the emergence of and from the implicit. Yet in the context of the betweenness that this informs the place of the movement and the break between the couple, I would like to offer it as a way of quickly understanding a trajectory that ends at a particularly knotty place. Below the Schenkerian

graph I plot out a sequence of processes that lead through the descent. In the process reduction, it is possible to think about the larger skips, the thirds, as a separate process that grows out of the original (see mm. 9–12). Rather than forcing the music to answer to a scheme, we can let it perform itself, in this case accelerating and skipping tones. One such skipped tone is the return of $\hat{3}$ (*a*) that belongs to the fundamental line in measure 12. The processural analysis focusses on these kinds of particularities.

The image displays a musical score for Violin and Piano, measures 2 through 16, with a tempo marking of 'Andante'. The Violin part is written in treble clef, and the Piano part is in bass clef. The score includes various musical notations such as notes, rests, and dynamic markings (*p*, *f*, *mezza voce*). A trajectory analysis is overlaid on the score, consisting of several horizontal lines and brackets. These lines connect specific notes across measures, illustrating a sequence of processes. For example, a line connects a note in measure 2 to a note in measure 12, passing through measures 3, 4, 5, 6, 7, 8, 9, 10, 11, and 13. Other lines and brackets are present below the main staff, further detailing the trajectory analysis. The analysis includes labels such as 'F:', '6 6 6', 'I', '[V]', 'IV', 'V', and 'β'.

Figure 3.12: A trajectory, (mm. 2–16).

As a sequence of processes that begins to accelerate the trajectory that is implicated grows out of itself, The increased intervals and increased rate let us understand how even at this larger level of analysis that overlooks the

majority of the content, the piece is finding its own way, focusing in on itself. The linear is finding itself, and in that finding it invites the listener to dwell. But let me turn to this arrival point: we began in the middle, a fissure was opened between two characters and now we have fallen along a trajectory.

3.7. The Drop

Thomas Clifton writes about hearing “tonality as an acquisition of the body” such that we understand it as movement “animated by feeling”.¹² In chapter 4 I consider the Narmourian processes as a species of movement exclusively, but here I would like to pursue the problem of measures 16-19. It is possible to hear this moment “as” atonal, or even as 12-tone. In figure 3.13 I count out the aggregate row (excluding repetitions of course) and divide it up into set classes. If I understand tonality as directly relevant to bodily movement, then what happens at a moment where it is suspended to such a degree that it becomes possible to hear it as the unfolding of a twelve-tone aggregate? The trajectory that moved forward to this point drops off, as if an edge has been crossed. Of course there are other aspects that allow us to imagine a 12-tone work here: the wide ambitus of each of the three gestures and the freely dissonant leaps, the intervallic inversions and cross-relations in pitch.¹³ The section can also be read as a chromatic moment in a tonal piece, moving through the parallel minor of the dominant followed by a secondary dominant

¹²Thomas Clifton. *Music as heard: a study in applied phenomenology* (New Haven: Yale University Press, 1983), p. 34.

¹³The ordered set parsed into tetrachords yields set classes $\langle [0156][0125][0156] \rangle$. Hearing as a butterfly structure is invited.

of some kind? In the two cases of hearing “as”, we select different aspects that in both cases yield a moment of suspense. It is this moment that we seem to have been led to the center of the bridge. If we began in the middle, we have here found that beginning.

Aggregate set: {0 e 5 4 3 6 7 8 2 1 9 t}

Figure 3.13: Hearing *as* “tonal 12-tone” (mm. 16–19).

What of the possibility that this moment that we are led to is a dwelling in the crack between the odd couple? There seems to be a three instances of a Reversal followed by a Process, among other present possibilities, so why not think of this as a drop into the crack?

A first pass through the melody reveals a sequence of Reversals (fig. 3.14). The melodic process is thus a constant ending, each Reversal finding closure. Because the closure is always on a note foreign to the key, the ending is unsatisfactory. It probes an area of wrongness. The Reversals are generally of the form large interval followed by small (semi-tone) interval in the opposite direction, with the one exception being the Interval Reversal at the beginning

of measure 17—the intervals are both in the same direction. This form is the inverse of the opening measure, whose intervals $\langle \downarrow 8 \uparrow 1 \rangle$ arrives on a consonance. The episode here constantly varies the inverted form of the opening, except in the second half of measure 17 $\langle \uparrow 8 \downarrow 1 \rangle$, yet there is a processural invariance in the variety. This invariance becomes a process of a different sort, spanning the course of the three measures.

The image shows a musical score for Violin (Vln.) and Piano (Pno.) across measures 16, 17, and 18. The Vln. part is in treble clef, and the Pno. part is in grand staff (treble and bass clefs). Measure 16 shows a piano introduction with a descending eighth-note scale in the right hand and a bass line. Measure 17 continues the piano introduction. Measure 18 features a violin entry with a descending eighth-note scale, marked with a forte (f) dynamic. Annotations above the notes indicate melodic processes: 'R' for Reversal, 'P' for Process, 'IR' for Inverted Reversal, 'VP' for Violin Process, and 'IP' for Inverted Process. The piano part also has annotations: 'R' for Reversal, 'P' for Process, and 'IR' for Inverted Reversal. The violin part has annotations: 'VP' for Violin Process, 'IR' for Inverted Reversal, and 'IP' for Inverted Process.

Figure 3.14: First pass melodic processes (mm.16–19).

Looking at this moment another way, it is possible to hear several Processes that are enveloped in 3 larger Reversals, and these three large Reversals are as well performing a single large Reversal (fig. 3.15). The second reading hears Processes mainly of the descending variety involving small intervals, the inverse of measure 2, the other half of the couple. We can hear this drop, therefore, as a bringing together, a gathering of the odd couple in a mirror.

This aspect of the couple involves a particularly deep reach into the implicit, the listener experiences the depth in the suspended tonality and the multiple enfoldings, and the couple has become such a complex entity that they almost no longer exist.

Figure 3.15: Second pass melodic processes (mm.16–19).

3.8. The Return

The recapitulation attempts to put the odd couple back together, but like most recapitulations, because of the intervening material, the “putting back together” rethinks the original theme. In this case (mm. 36-48, figure 18), the return is so transformed that to call it a recapitulation seems almost wrong—of course, recapitulation does not mean that it is a “sonata form”, it means that material returns. The first return is a kind of false recapitulation, in c-

minor. There are several important changes: the piano restates the theme in the inverted form (as above in the “drop”); the theme begins with the inverted form of the theme seen in measure 5–6; it moves from tonic to dominant, giving it a new sense of phrase rhythm; the phrase rhythm is immediately answered by a dominant-phrase. The violin’s answer is the same, though in c-minor, but is picked up by the piano and taken to the applied dominant that anticipates the recapitulation in g-minor.

The musical score for measures 36–48 shows a complex interplay between the violin and piano. The violin part (top staff) begins with a rest in measure 36, then enters in measure 37 with a melodic line. The piano part (bottom staff) provides harmonic support with chords and moving lines. The figured bass notation below the piano staff indicates the harmonic progression: C minor (i, V, V, i⁶) transitioning to G minor (g: V⁵, i). The key signature changes from one flat to two flats between measures 43 and 44.

Figure 3.16: False recapitulation and minor recapitulation (mm. 36–48).

The recapitulation speaks to a combinatoriality of a type that has not been addressed here. The theme finds a regularity in the false recapitulation, turning into a phrase of more conventional structure. However, this conventionality is found only in this inverted form of the opening couple, and even that is its healed over form. So even what is conventional is thick with complexity. The conventional is a seemingly easy twist, but it is in that twist that we find the break of the opening at its most apparent.

The recapitulation in g-minor at measure 44 is not a real recapitulation

either, the second statement of the odd-couple is extended into a chromatic descent that concludes on the dominant seventh. Figure 3.17 illustrates this extension in a graph that charts two chromatic descents, below which is a charting of the processes that this long descent engages. What is interesting about the latter is the deceleration of the process in contrast to the acceleration of the opening trajectory. The movement never finds stable ground, both in its tonality and its content, it remains consistently suspended.

The musical score for Figure 3.17 spans measures 44 to 60. The piano part (bottom staff) features a chromatic descent from G4 to D3, with a deceleration in the final measures. The vocal line (top staff) features a chromatic descent from G4 to D3, with a deceleration in the final measures. The score includes a graph of the piano part's chromatic descent and a graph of the vocal part's chromatic descent.

Figure 3.17: Extension of the Couple in the Recapitulation.

The doing that is this piece is the finding of a certain sense of loss. It moves easily into its own implicit, dwelling in it just long enough that we can sense the magnitude of its calling. Our own dwelling is invited into the work's.

3.9. What holds?

In the above analysis I have pointed to a central mechanism in music: that it finds itself. This finding is produced in the world in exactly the way we can select and “perceive as” in the world. The music is its own crossing and at the same time it is an invitation for a dweller to come into that crossing. With this kind of analytical attention, can we talk about the content of the structure which holds the thing that is produced? Can we move to think about the implicit that was performed with each process of the piece?

There are two things that are noticeable about the structure of the implicit. The first is that it seems to house what we call “style”. Although I am making no claims about Mozart’s intent, it seems clear that what we call Mozartian is wrapped up in the navigation of the implicit; it isn’t a particular turn of phrase, approach to sonata form, or some other structural type. Style is in how a composition finds its implicit call. Knowing this we can say that one feature of Mozart’s style seems to be an uncanny ability to reach into the darker regions of the implicit with seeming ease. Above it was seen as the odd couple, where incongruity worked to our surprise, easily pulling us through the leap from crossing to finding. While the above piece is a relatively special moment in terms of what it does, the manner of that doing, the reach, is consistent in the later works as well. In chapter 4 I will consider this leap through the darkness as dramatically used in the culminating point of the opera *Figaro*.

The second thing that is noticeable about the structure of the implicit is

that it contains its own sense of rightness. We know this sense of rightness through the answer to the question that is posed in the body. Gendlin's favored example is the sense that we have for the words of an unfinished poem: when we find the right word, we know it's right because we know that the other words we tried were wrong—they didn't answer the call. The call is felt with the body, we look for the answer in the body. With these remarks we have already entered the nature of embodied perception, the subject of chapter 4.

Chapter 4 will delve further into the understanding of musical processes as their own selective finding as well as an invitation to dwell in that finding, by considering the relation of processes to bodily movement. In the body we begin to get a sense of the intuitive nature of our dwelling in musical process.

*Turn away no more:
Why wilt though turn away
The Starry floor
The watery shore
Is given thee till the break of day.*

W. Blake

4

Finding Time for Roses, Enactive Perception and Musical Time in Mozart's Garden Aria

Introduction

It is customary to distinguish music from the plastic arts by referring to its temporality. Music is time bound, its apprehension taking as long as it takes to be performed while a picture is apprehended in the “blink of an eye”.¹ The case

¹This principled division of the arts was questioned in Etienne Souriau. “Time in the Plastic Arts”. *The Journal of Aesthetics and Art Criticism* 7/4 (1949): pp. 294–307. While Souriau suggests that the temporal is necessary for the plastic arts the subject of his paper has little to say about music. The division of the arts via their apprehension still remains a dominant mode of understanding not only in “folk parlance”, see for instance Vera L. Zolberg. “Displayed Art and Performed Music: Selective Innovation and the Structure of Artistic Media”. *The Sociological Quarterly* 21/2 (1980): pp. 219–231.

of temporality gets nuanced to a degree when critics try to differentiate styles based on an approach to the temporal: some compositions are linear, and some are not, or so we are told. But this definitive gesture places severe limitations on the multivalence of the musical works apparently trapped in linearity land. Lévi-Strauss maintains a more difficult view of temporality. He suggests that in our listening we are enfolded into the past such that we are entering into a “synchronic totality”.² This curious state is how music becomes a “machine to suppress time”.³ Exactly what Lévi-Strauss is getting at in regards to time remains a little unclear, but a consideration of the musically temporal from an enactive point of view suggests a possible explanation.

4.1. Enacting time

The enactive approach to perception problematizes the idea that music is temporal where the plastic arts are not. Enactive perception as recently theorized by Alva Noë, suggests that seeing something is not the mental rendering of an object’s size shape and color, it is the perception of the ways in which all those features will vary according to movement.⁴ The object-hood arises out

²Claude Lévi-Strauss. *The Raw and the Cooked* (New York: Octagon Books, 1979), p. 16.

³This translation is taken from Madlene Dolar’s essay on Mozart Opera in Slavoj Žižek and Mladen Dolar. *Opera’s second death* (New York: Routledge, 2002), p. 7. The 1969 translation refers to the immobilization of passing time via a transmutation of the diachronic into synchronic, a process making music and myth “instruments for the obliteration of time” Lévi-Strauss, *The Raw and the Cooked*. Dolar’s translation of the French “des machines supprimer le temps” is more literal minded such that it avoids the understanding that Lévi-Strauss is referring to an aspect that belongs to the internal structure of music and is therefore more of a mechanism than an instrument Claude Lévi-Strauss. *Le cru et le cuit* (Paris: Plon, 1964), p. 24. The multiple interpretations attest to the difficulty of concept, an aspect this chapter will attempt to understand.

⁴Alva Noë. *Action in perception* (Cambridge, Mass.: MIT Press, 2004).

of my implicit understanding of how the object will respond to my movement (whether I move or not). Thus perception is inherent within the object itself and will require time, the time of movement, for its articulation.

The powerful feature of the enactive point of view is that it tempers the problematic notion of a representation that is interpolated by the mind. If, for example, I point out that the paper you are reading from is a rectangle, you believe that the observation is true even though you cannot see its rectangularity—you see some kind of trapezoid. This discrepancy is normally explained by way of the representation: it is said that you see a trapezoid and you understand it as a rectangle via a mental representation of that form. In other words, you correct the inconsistencies of the world via representations. An enactive account argues that the rectangularity is actually in the trapezoid and that it emerges out of your movement with respect to the figure. The amount of movement that you have to make in order to see a rectangle is actually minimal, the slightest movement is rich with rectangular information.

This movement required to see the rectangle is largely implicit. We already have knowledge of the kinds of movement that produce rectangularity, and it is this implicit knowledge that is enacted in our perception of the rectangle. The manner in which implicit knowledge of movement performs the emergence of a rectangle does not remove the fact that the rectangle is “out there”, in the world. The rectangle is in the object from which the rectangularity is enactively perceived. The implicit element of enactive perception accounts for the sense of rightness that the idea of a mental-representation has, but at the

same time it pulls the mental out into the world. I find the rectangularity of the object *in the world*, replete with all of its variation, messiness and chaos. The environmentally situated understanding of perception diffuses the need to invoke mental representation as a necessary condition of perceiving.

The enactive account of perception is not limited to the perception of geometrical categories; Noë takes it into the realm of three-dimensional space and even into color. Rather than imagining that color is an abstract representational category, Noë argues that the variance of color in different luminous conditions is performed when we move with respect to an object. Thus, a white paper gets whiteness from my implicit knowledge of the way it will darken when moved in any luminous circumstance within the threshold of seeing. In sum, all perception is already in the world, and not in some unique subjectivity. The worldliness of perception contains an alternative to the common notion that is often expressed in favor of ending careful discussion. It is usually of the form: “that’s just *your* interpretation”. Rather than imagining a subjectivity that interprets, we can look further into the material that affords and produces such an interpretation.

4.2. The Roses

If we provisionally take enactivity as our best model of perception, what does it tell us about the temporality of seeing something “in a glance”? It is no longer tenable to maintain that the perception is immediate because it requires the mounting of a mass of implicit knowledge that is temporal: movement. Even though I do not have to perform the acts in which that

knowledge resides every time I view something, the quality of the image is still found in that temporal interpretation. To illustrate how it is that movement in time can reside in an artwork, I will consider a unique still life, Van Gogh's 1890 *White Roses* (figure 4.1).

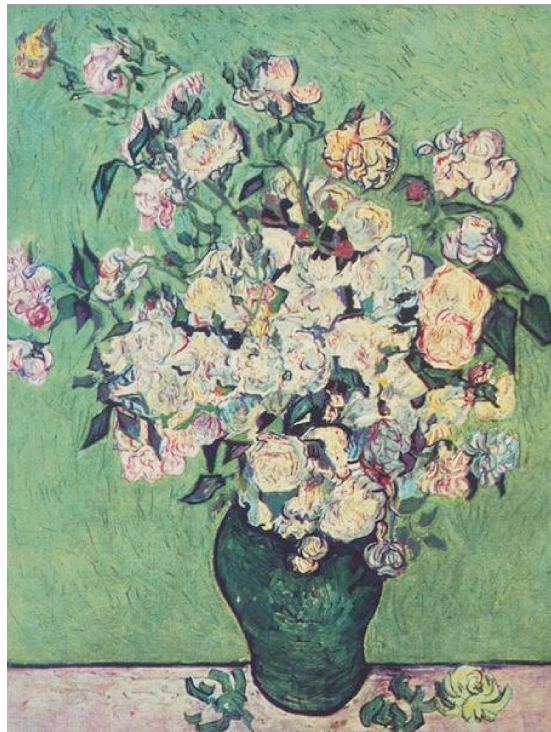


Figure 4.1: Vincent van Gogh, *White Roses* (1890)

Considered enactively, *Roses* performs its own particularly interesting movement. The green background is moving as if the roses are growing into it. In apprehending the roses in the picture it is as if I am moving towards them and they are performing the result of that movement. This dynamism is further supported by the darkness that extends behind the roses in the center of the

painting. This darkness invites us to look behind the painting: “What is back there?” we ask, slightly crooking our necks, but whatever it is doesn’t come out. The mercurial center holds us apart from its form while it simultaneously beckons to us and structures the image. Overall, the roses have a gnarled quality that pushes forward into the green background and structures the central darkness. From the movement the painting implies we can consider possible critical commentary: noticing that there is a living in the roses that is coextensive with the movement forward, while at the same time they implicate a dying that extends beyond the discolored petals and fallen leaves back to the dark centre, suggestively hidden.

I do not see, in a flash, a warped or subjectively distorted picture of a vase full of roses. I see the roses coming forth in a relation to a background that is struggling with their gnarled presence. The interplay between the roses and the background is suggestive of a temporality. The inherent richness of the picture here resides in its affordance of temporal play between the gnarled presence of the roses emerging from and with their receding background. The temporality of this dynamism invites further dwelling in the image. A glance will see the painting, roses and all, but the temporality of that seeing resides in letting ourselves perform the dynamics of light and color. In this particular case, a glance that “sees a vase of roses” misses the manner in which the roses are themselves a complex *doing* that afford their own contemplation. They are finding form in time, and this temporally defined form resides in the painting.

4.3. At last, a moment has come

What I see in an instant requires more time to perform, or enact, making image perception a kind of temporal surplus—there is time surrounding or encasing the perception. This surplus helps us to understand the sense of wholeness that accompanies a known piece of music—I have a sense for a how a piece goes that outdoes its sequence. But this observation alone doesn't tell us what about a musical unfolding is unique. Noë, probably for good reason, never addresses hearing in his account of enactive perception. There are several things that we might consider as enactive in music: timbre and articulation for example are movement oriented.⁵ When we hear a *pizzicato* violin rather than a bowed *arco*, we are hearing the physical interaction with the instrument; a pluck is a kind of needling of the body, a pinch and pull, whereas a bowing is a kind of stretching outwards, a breath. But before we get to timbre, musical time needs clarification in the face of the enactive account. Just how does a thing like a phrase relate to the enactive account of perception? To try and get at this I turn to Susanna's famous aria from the *Figaro*, known as "the garden aria", "Susanna's aria", "*deh vieni, non tardar*" or magic number 27.

This particular aria is of interest in regards to temporality because it is ostensibly about a future event—Susanna is imploring the Count to hurry

⁵Regarding the perception of timbre as a movement I am thinking of the ecological approach that finds physical process specified in the sound, see for instance Gerald J. Balzano. "What are musical pitch and timbre?". *Music Perception* 3/3 (1986): pp. 297–314. For a general description of the ecological or Gibsonian approach to perception see Eric F Clarke. *Ways of listening : an ecological approach to the perception of musical meaning* (Oxford: Oxford University Press, 2005).

into her embrace. Of course, the audience knows that this future event is a fiction contrived to needle her fiancé, Figaro, who has just called on men to open their eyes to the infidelity of women. By pretending to be in a state of open desire for the philandering Count, Susanna hopes to teach her future husband a lesson regarding exactly who is being unfaithful. Susanna's fictive future with the count is being made present in all of its erotic detail.

As we might expect of an object that has so many pet names, much has been said about this aria. Its specific characteristics led Mozart scholar Alfred Einstein to posit that it is "The most magical number of the whole score".⁶ Discussions often turn to elements of its rhythm. Jean de Solliers remarks that the phrases contain a "little deformation that contributes to its secret charm."⁷ Tim Carter speaks of a "wonderfully phrased vocal line"⁸ and Wye Allanbrook discusses the pastoral character of its meter.⁹ The specifics, however, of how the phrases achieve wonderment, deformity, or the erotic have not been discussed. In light of the discussion of enactivity that found aspects of the painting afforded by its materials, we might expect these rhythmic aspects to have a basis in how the musical material affords movement.

⁶Alfred Einstein. *Mozart, his character, his work* (New York: Oxford University Press, 1972), p. 417.

⁷"il y a une petite dformation dans les périodes, qui contribue son charme secret." Jean de Solliers. "Commentaire musical et littéraire". *L'Avant Scene* 21 (1979): pp. 19–125, p. 115.

⁸Tim Carter. *W.A. Mozart, Le nozze di Figaro* (Cambridge Cambridgeshire ; New York: Cambridge University Press, 1987), p. 66.

⁹Wye J. Allanbrook. *Rhythmic gesture in Mozart : Le nozze di Figaro & Don Giovanni* (Chicago: University of Chicago Press, 1983).

4.4. Levarie's trajectory

One author tried to understand the achievements of the aria in terms of the music. In a book length study of the complete opera from 1952, Siegmund Levarie, attempted to locate the interest of Susanna's aria in several ambiguous aspects.¹⁰ These include the ambiguity of its narrative context: To whom is Susanna singing? The Count or Figaro? Another ambiguity is found in the aria's form: Levarie sees it as both ternary and binary. Finally there are particularly musical ambiguities in the melody and harmony: "the main line becomes obscured... a melodic undulation" that moves between harmony and melody.¹¹ Also, there is a particular dissonance that is said to not resolve properly until the conclusion. The sense that that something is amiss is seen as residing in the music, the opening measures of which I reproduce in figure 4.2.¹²

The dissonance that Levarie hears has to do with the *bb* of the second measure. This note, occurring on the second beat of the measure, is said to be the "first obstacle to melodic progress... a free *nota cambiata*... [that] sets off the acme of the fifth [note]".¹³ This note recurs in the consequent (on the second beat of the fifth measure) as the end of the oboe's "diminutive run" creating an "unresolved climax...[that] is playfully covered by the flute,

¹⁰Sigmund Levarie. *Mozart's Le nozze di Figaro : a critical analysis* (New York: Da Capo Press, 1977 [1952]).

¹¹Ibid., p. 213.

¹²All examples are reduced and transcribed from Wolfgang Amadeus Mozart. *Le Nozze di Figaro*, *Wolfgang Amadeus Mozart neue Ausgabe sämtlicher Werke* (Kassel: Bärenreiter, 1973).

¹³Levarie, *Mozart's Le nozze di Figaro : a critical analysis*, p. 213.

Andante

S

1 2 3 4 5 6 7

Deh vie - ni, non tar

Winds
(Fl. Ob. Fag.)

p

Strings

p pizzicato

F:I V 7 1 6 3 V7 1 *p*

Levarie

Acme
skips
filling in begins...
pickup at acme
whoops!

mdg.

Figure 4.2: “*Deh Vieni Non Tardar*” mm. 1-7

which vicariously supplies a temporary resolution.”¹⁴ This motion to $b\flat$ is said not resolve until the conclusion of the piece where all three wind instruments subsequently play a run of sixteenth notes coming to rest on the tonic f .

In the penultimate stave of figure 4.2, I sketch out a more detailed view of Levarie’s position. The underlying thrust of the argument is that the initial triad of the first measure necessitates a filling in. The presumption is that if we are given a line with gaps in it, melodic progress will want to fill in those gaps.

¹⁴Levarie, *Mozart’s Le nozze di Figaro : a critical analysis*, p. 214.

Beneath a broken slur, I indicate those notes that are filling in, with the fifth measure picking up the progress at the “acme” note c' and leading to the high $b'b$. This trajectory that concludes on $b'b$ is anticipated by the bb of the second measure that provides the initial break to the trajectory. But whoops! Why end on a bb ? The trajectory apparently missed its mark. It is this unlikely end that leads Levarie to imagine that a problem has been set up which will not resolve until the conclusion of the piece. We might think of this problem as a virus whose diabolical presence has infiltrated an otherwise perfect trajectory and will require the duration of the piece to be fully removed.

Levarie’s reading is not unlike a Schenkerian sketch with a somewhat unusual interpretation. He suggests that there is an archetype that exists beneath the sounding surface whose dissonant abrogation will be prolonged until the conclusion. Yet Levarie’s analysis predates the rise of Schenkerian studies, to get an idea of how it differs I sketch out a middle-ground Schenkerian graph in the lowermost stave of figure 4.2.

My Schenkerian graph sorts out the voice leading according to a descent from scale degree $\hat{5}$ that shows the antecedent phrase articulating a third via the passing tone bb that Levarie sees as important. The consequent finds the bb as the penultimate note resolving to a in measure 6. Unlike Levarie’s analysis, the graph imagines that there is a conclusive ending to the opening, and in so doing it effectively erases the virus that Levarie imagines.

Rather than getting into an argument about which analysis is right or better, Schenker’s (via me) or Levarie’s, I posit that both are flawed from the

enactive point of view because they rely on a cognitive archetype. Both accounts provide us with a way of hearing “as”, albeit in the radically different modes. Levarie constructs a narrative around a missed mark and the familiar Schenkerian narrative presents a clear trajectory. The two modes of understanding are not mutually exclusive, I can hear “as” an awkward trajectory that misses its mark while at the same time articulating a deeper structural continuity. But to amalgamate the two in a project to specify the nature of our hearing misses the point that both analyses envision an archetype that is somehow beneath the surface waiting to be uncovered by the analyst. An enactive account will hear the surface as itself containing all the deep structures via our implicit knowledge of movement. The Schenkerian reading sees the movement as a simple background unfolding, and without descending into the argument over whether that unfolding is inductive or deductive, we can posit that it is not a satisfactory account of the enactive because either way its generative force is in the paradigm of the fundamental line. Similarly, Levarie’s understanding of the opening contains the implicit archetype of filling in, and in so doing speaks more to an abstract concept than to movement. It seems that both analyses need to better account for movement along the surface before they can reconcile with the enactive.

4.5. Allanbrook’s punctuating contours, implication and realization

An analysis that pays more attention to movement is found in Allanbrook’s reading of the phrases. Allanbrook suggests that Mozart needed to solve the issue of repetitive lengths of poetry in “the end-oriented drama of harmonic

process.”¹⁵ To do this Mozart is said to have used ascending and descending contours to give metric sense to three measure phrases. The descending phrase (like the opening antecedent) is thought to have a “dactylic” effect, while the ascending phrase (like its consequent) is said to have an “anapestic” shape. Thus the opening phrase reverses the normal procedure of open (anapest) to closed (dactyl) and thereby creates a sense of incompleteness. For Allanbrook, this initial inversion is corrected in the second section of the aria, and is concluded by the two descents of the final phrases. Allanbrook doesn’t mention that the final cadence which is effected by the wind instruments is distinctly ascending, arguing instead that the stretto overlapping of the ascending winds, coupled with a descending inner voice, creates a large “iamb” and secures the closure of the final measure.¹⁶

For an enactive account, the advantage of Allanbrook’s reading over Levarie’s is that it more explicitly engages our involvement by attributing anticipation and realization to the melodic contours of the phrase. In Allenbrook’s reading we can begin to see the process of movement in the production of musical phrases: simply put, movement up opens and movement down closes. The association of melodic contour with closure resides in a movement along the contour that implicates a continuation or closure. In this way it is sympathetic with Narmourian implication-realization theory of melody.

Narmour’s theory consists of a small number of archetypes that suggest either continuation or closure. If I hear something that is repeating regularly,

¹⁵Allanbrook, *Rhythmic gesture in Mozart : Le nozze di Figaro & Don Giovanni*, p. 175.

¹⁶Ibid., p. 176 and n.54.

getting increasingly large or increasingly long, I sense that the process will continue. If, however, I see something change such that it is no longer repeating or adding, I sense that the process will come to an end. The former sense of unbounded continuation is called a Process (P) and the latter change to a series is called a Reversal (R). We can outfit the enactive account of visual perception with this Narmourian terminology: if I move around a piece of paper and thereby allow it to perform its rectangularity, my movement realizes the precise mathematics of that shape with an extraordinary combination of Processes and Reversals. I know how it will continue to behave under movement (I sense Processes), and I know how it is bounded in space (I sense Reversals). In Allanbrook's quasi-Narmourian account, she sees the rising contours as Processes that imply continuation, and falling contours as Reversals that imply closure.¹⁷

4.6. The dance instructor and the demon

There remains a significant hurdle for the enactive account of the phrases in this aria. Allanbrook's idea that Mozart solved a problem with contours is difficult for my exploration of how it is that this aria provokes such an abundance of critical attention: a curious little anomaly in its phrases. It seems rash to suggest that a problem is solved in the first place; not only is whatever went on in Mozart's mind of little interest in regards to enactivity, but we might wonder what a solution sounds like anyway? That is, the enactive account that I am working towards here must be able to show how the musical

¹⁷a more detailed discussion of the Narmourian processes is in chapter 1 §1.2.1

work itself, in its unfolding, contains the problem that Allanbrook sees Mozart as solving. To do this, I bring a dance instructor to the stage.

Below the uppermost stave in figure 4.3 I imagine a dance instructor counting out the phrase. He counts in from the anacrusis: and 1, and 2 and 3 and 4 and 1... My instructor gives the usual kind of emphasis on the beat such that the counting to 4 is actually 2 groups of 2, where beats 1 and 3 get greater emphasis than 3 and 4. Yet on listening we can notice a curious feature against this squareness: something goes amiss and my instructor hurriedly begins again on beat one. There is an ellipsis here that needs to be accounted for. It is an ellipsis, after all, that we hear, in the music as it unfolds. This is not an ellipsis in Mozart's compositional process, it is in the unfolding of time. If we rush to the conclusion that Mozart created a structure of three measure phrases and poured a set of melodic contours into it we miss the manner in which that ellipsis emerges as a perfectly sensible thing.

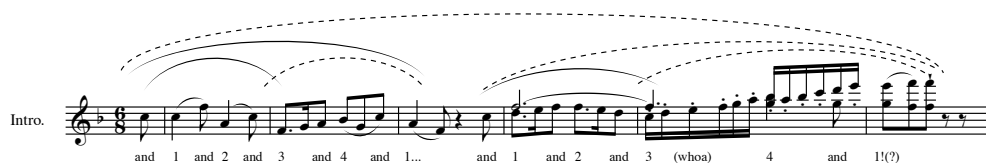


Figure 4.3: The dance instructor counts

To get an idea of how this opening period effects that ellipsis, I will consider another instructor and another melody (noted in the stave below the original in figure 4.4). This new melody is my own doing, it is drab by comparison to the melody we have come to know, but it points to how the ellipsis functions.

The new instructor counts without pause in groups of four and the melody dribbles to a close apologetically. Now we can point to something that was implicit to our initial instructor's ellipsis.

Imagine now that both instructors are counting. One counts with an ellipsis while the other counts on my new melody in groups of four. After the opening phrase, each instructor is wondering if they are in fact counting correctly, a parenthetical demon skeptic haunts them. But at measure 5 they are sure that they are on the right track and the demon expires realizing that its skepticism was unfounded. What is it that just happened? The demon is expired at the moment of metric clarity. Let's bring this demon into view before he disappears.

Instructor A

and 1 and 2 and 3_and4_and 1... and 1_and 2_and 3_and 4 and 1

(3?) (4?) (no, 3 is right!)

Instructor B

and 1 and 2 and 3_and4_and 1 and 2 and 3_and 4_and 1 and 2_and 3_and4_and 1

(1?) (2?) (it must be 1!)

Figure 4.4: Alternate melody and alternate voices

Let's return to instructor A, what is more likely here is that instructor A was counting as instructor B, and that at measure 5 he realized his mistake and revised his opinion of measure 3, adding an ellipsis. But adding an ellipsis at this moment in the game doesn't seem fair, he only has one chance to count, he cannot go back in time and restart his counting! That's physically

impossible given current technology, and certainly not a possibility in the 18th century.¹⁸ So what has happened when we say he added an ellipsis?

The time traveling instructor is in that ellipsis!

What we have identified here is the multivalence of temporal succession in the aria. At measure 5 I identified two possible options: one that confirmed the suspected and another that denied it. Because it is the denial that actually occurs, let's imagine exactly what happens there. When I understand that I am not counting it in groups of 4, the previous measures reorient themselves into a 3 bar phrase with an ellipsis. The ellipsis wasn't there prior to its being found, it doesn't stand outside of the process, it is found in the process. We can say, only after the fact, that the division was already there, how else could we have found it? But in saying that it was there *already*, we move decidedly back into the idea that it is a preordained phrase form that simply gets filled with melodic contours. The aspect of "finding time" is replaced with a block of "time given". To stave off this kind of concretizing idea, we can say that the ellipsis was not "already there", that it was made precisely and only because it was initially absent. This understanding that hears the ellipsis as a product of the rhythmic finding deals with what David Huron refers to as the paradox of anticipation—once we know a piece, how is it that we can experience the subtle shocks of anticipation?¹⁹ Huron believes that the

¹⁸For an account of the technology and energy resources necessary for time travel in Einstein's Universe, see Richard Gott. *Time travel in Einstein's universe : the physical possibilities of travel through time* (Boston: Houghton Mifflin, 2001).

¹⁹David Brian Huron. *Sweet anticipation : music and the psychology of expectation* (Cambridge, Mass.: MIT Press, 2006).

paradox is solved by understanding independent brain circuitry for veridical and schematic functions; the schema is always violated while the veridical (memory) remains in tact.²⁰ The brain solution (or bio cognitive schematic solution), with its recourse to representative schema, is antithetical to the enactive view—here we are seeing the product as found by processes in the work.²¹ It is not the case that “once we have heard it *that* way, we don’t hear the aspect of finding the ellipsis any longer.” The content of the phrase is made by its finding of the ellipsis.

Let’s review what we know about “finding time”. The specific quality of the antecedent emerges in the consequent. The antecedent is thus made present in the consequent. As a thing being made presently, after its presentation in “real time”, it is not a past event. The ellipsis of the antecedent is in the consequent phrase. Finally, the ellipsis that is found presently is a break from the continuity, something is cut off, fragmentized... Exactly what is cut we cannot be sure, but of the presence of the cut, there is no question. We are not imagining this process, it is something that is found in the work. Exactly what kind of movement is doing the finding is still unclear.

Let me reiterate what I have been saying with a new twist. Imagine that the reconfiguration of time that emerges in measure five is in fact a “block”. I have been trying to avoid just such a concretized understanding, but let’s let

²⁰Huron, *Sweet anticipation : music and the psychology of expectation*, pp. 223–7.

²¹The cognitive solution and the enactive are not necessarily incompatible understandings of the phenomenon; coupling with the aspect of rhythm could theoretically have a “veridical” (representation) cognitive counterpart, but it seems unlikely that an organic being would burden itself with the inefficiency that mental doubling would produce.

it in for a moment. Do we want to say that there are two blocks, the first in fours metamorphosisizing into the second in threes with an ellipsis? If we do then a kind of malleable block of time is made manifest; it can be cut up this way or that way. The relative transformation is one of the most interesting aspects of the phrase: the second is pulled out of the first. In moving from one to the other we are in the presence of time becoming time.

4.7. Pushing the problem back to the antecedent

There is a potential objection here. It could be argued that I could have recomposed the opening differently and yielded different results. There are innumerable ways to recompose the piece that will no doubt point to different aspects of the becoming. I recognize this problem, but will defend my particular recomposition as both principled and inconsequential. It is principled by way of the fact that it imagines a simple count of four. Counting in twos seems directly relevant to the body, which walks in steps of mod two, breathes in mod two, claps, blinks, jumps and so on in mod two. Secondly there are many pieces that do in fact perform phrase groups of mod two. Thus my recomposition is principled in twoness. But it is also inconsequential, I can think of many different ways to compose it, all of which would be in two, and all of which would elicit the same middling metric aspect.²² I do not mean to say that Mozart saw my recomposition and worked against it to solve its problem, that is ridiculous, I mean to say that the piece as it stands contains

²²As I show in chapter 5, the apparently mediocre composition can be quite an extraordinary event should we choose to dwell in what it does instead of what it doesn't.

the implicit twoness and draws threeness out of it. An enactive account will see that twoness as present in the becoming of the piece, even though we no longer “hear it” in two.

But there is a larger problem with my recomposition. By turning the phrase into three groups of four it pushes the problem back to the antecedent. It is no longer a metric period in the recomposition precisely because the antecedent remains in tact. Thus we should consider more carefully what the antecedent is doing that contains the tacit foreclosure on hearing in fours.

Above figure 4.3 slurs illustrate the phrasing of the opening period. Solid and broken slurs group the period into four parts, broken slurs attempt to contain the retroactive presence of the past while unbroken slurs indicate a more cohesive presence. In this illustration the first beat of the second measure simultaneously closes a sub phrase and opens a new one. There are two interlocking threes. This sub-phrase overlapping emerges more clearly from harmony: the moment of arrival on measure two is a displacement of dominant harmony which only finds itself in the second beat on the dissonant seventh, and thus anticipates the resolution in the third measure. There is more harmonic movement in the second measure, a suspension into a dissonant resolution, than there is in the opening measure’s triadic outline. But why do I imagine that there is a cross instead of using the bar line, which establishes the meter, as a phrase boundary?

The reason I hear a crossing has to do with a process called a Registral Reversal (VR) illustrated in figure 4.5. The Registral Reversal realizes the in-

tervalic implication (intervals get bigger: big things imply more big things) but denies registral direction (moving in one direction implies continued movement in that direction). Thus the registral reversal is partly closural in that it denies and partly non-closural or implicative in that it realizes. I read the opening measure as a dovetailed pair of registral reversals such that the conclusion of the second one occurs on the first beat of the second bar.

(implies more A but gets...)

Intro

P = Process
 R = Reversal
 VR = Registral Reversal
 IP = Interval Process
 ! = Surprise
 D = Duplication

Figure 4.5: Narmourian Melodic Analysis

Narmourian analysis does not require resorting to a fundamental structure, so even though I may be very tempted to say that the first beat of the second measure realizes the composing out of the f-major triad, I don't actually have to go there. The f-major triad is no less "there", but it is not doing all the anticipatory work. Narmourian analysis places the perception of the work's structure in the work, what Schenkerian terminology refers to as the surface. Of course, to call it a surface is already to imply a deeper level of activity, so we might better call it the music's face, getting rid of the prefix "sur" which implies it is on top of something.

Interlocking (or crossed) processes are making a larger cross of to sub-

phrases in the antecedent. The second half of the cross (m.2 b.1) begins a Process that is new, the stepwise assent to *a*, followed by an Interval Process (IP) on the second beat. The Interval Process begins a new bracket, marking the first time that processes have not been dovetailed. This coincides with the *b♭* that Levarie sees as the unresolved element that haunts the complete aria. We can therefore imagine that Levarie's claim might have been based in an intuitive sense of the halted movement described here in the Narmourian vocabulary, a halt that Levarie accounted for with an uncustomary reading of the voice leading. The Interval Process of the second beat is interlocked with a Process that proceeds downwards by thirds to the *f*. This second sub-phrase is new, but at the same time it carries the reversals forward via its being dovetailed to their conclusion—I return to this notion below. The influence of the down beat, as well as the harmonic movement already mentioned helps to lock the two sub-phrases together. Because the apparent resolution of measure three is part of a Process, we can further point to exactly why it is in an important sense unresolved—processes imply continuation while reversals imply closure. Thus if we understand the initial sub-phrase to be postponed by the dissonance of its initial terminus, the postponement remains, to a degree, unsatisfied—a lack of resolution that is further supported by the rhythmic gesture of long followed by a short. Something, in short, has gone awry already: the tonic in measure 3, what tonal theory regards as the ultimate point of stability, is unstable.

The idea that measure 3 is unstable is a kind of microscopic support for

Allanbrook's argument about the contours. Allanbrook suggests that this opening phrase is in fact closural because it is descending. But in the context of an antecedent, that closural aspect is found wanting, for an antecedent is, properly speaking, an opening for a consequent that will bring the period to a close. While Allanbrook's theory works, it doesn't explain the fact that this phrase never serves as a conclusion. By locating the instability in the postponement of the paired reversals, we are on the way to understanding what it is about the conclusion of this piece that actually performs the closure.

4.8. Mirrored Mirrors

Before proceeding to the second half of the opening, we might focus for a moment on the Reversals of the first measure into the second. For if we have located something that goes awry in measure three that was the unresolved postponement of these Reversals, we might benefit from a review of the source. An analyst might find such obsessing on two beats of tonic harmony absurd, but these two beats have now, perhaps retroactively, become rather important. There are two things that I would like to draw attention to. The first is the sense in which the melody doubles itself. The initial *c'* emerges as a duplication of the anacrusis. This kind of anacrusic repetition is not normally considered a Duplication, but rather a dyad with the interval value unison (1); a proper duplication must have at least three notes. I call this a Duplication because in an anacrusis there is an important sense in which the anacrusic tone picks up midway into a motion. Of course, it might be argued that there is a sense in which the midway might be a process other than Duplication, but simply by

imagining such a scenario reveals that is not sensible in this context. Following the duplication, the leap to the f' and drop to the a performs a kind of turning. For when a group of notes perform a Reversal, a specific length emerges: the end creates two points, itself and a beginning, allowing a length to emerge between them. Thus the ending a “looks” back at the initial c' . At the same time that it “looks back”, it initiates a second reversal that inverts the initial rising fourth into a terminal descending fifth. That is to say again that the two processes are dovetailed in the note a . The second reversal therefore repeats in such a way that we can think of these two processes as doubled.

The second related thing I want to point out is that the doubling that the two Reversals perform is interrupted in such a way that it is extended into the conclusion of the phrase. Above the analysis of figure 4.5 I note that the doubling of the Reversals can be thought of as two statements of A , which in implication-realization theory suggests a Process that will see more of A . This implication is of course not the case; the beginning of the second measure initiates a new process. But this new Process carries the reflection forward, it literally picks up the reflection taking it through the second sub-phrase to the unsatisfactory resolution—the reflection that is the two reversals of measure 1 is distorted.

Now we are back in the drama of our dance instructor. For how is it that something taking place in the initial measure is recreated in the third measure? Is this time travel again? The process is more local in this case, but a lot of the same issues remain. The two reversals of measure 1 are themselves in process

of recreating one another. The axis on *a* is one mirror that locks the two reversals together in reflective intervallic symmetry, but they are also each a kind of self-reflective structure, the *a* “looks back” at the *c1*. Together, with static harmony, measure one effects mirrored movement in mirrored movement. The process that moves out of this coupled coupling is dovetailed onto it but provides enough discontinuity that the bounded nature of measure one becomes more apparent. The arrival in measure three, unstable, further illuminates that bonded nature of measure one. Altogether, we can see how this bond-
edness becomes more acute by virtue of the detachment that the subsequent movements perform.

Once we are clear about the kind of structural face we are moving with, we can note that it affords a diverse range of metaphorical interpretations. For instance, there is a sense that these interlocking processes initiate a reflective pirouette, a turning on the spot that sees itself. But the seeing, or reflection, is untied by the perspective that the processes give. In this moment, Susanna is already being in the arms of her lover, but she is also a little anxious and unsure about it. Meanwhile, Figaro is also hearing his fiancé coupling with another and becoming “undone”, so to speak. It is very much a hall of mirrored beings, Susanna playing Susanna waiting for the count, but perhaps she is actually playing for her fiancé, Figaro’s rage comes out of his being in the place of the Count in Susanna’s charade. The audience is invited to realize both interpretations, with a result that is simultaneously humorous, pleasurable and disturbing—a situation roughly homologous with the generic structure of the

comedy which brings together multiple and conflicting stories. At this point in the opera, we have reached a crucial moment of deception and recognition.

The Narmourian figure and Narmourian analysis in general, points to the way in which a group of notes have their own implicative forces, we are not interpreting them in the sense of decoding or interpolating a structural frame, but rather we are residing in processes that they perform. We are, literally, in the music. This externalized being is moving and being moved. The Narmourian process invites us to understand this dwelling in the environment as emerging from a multifaceted becoming of process, a pulling out of and awareness of some kind of continuity.

Taken together, our unlikely resolution, interlocking groups of three, and undone reflective pirouette allow us some conceptual footing regarding what it is that makes this phrase slightly deformed and charming. As this opening antecedent phrase is paradigmatic for the first half of the aria, we can agree with Allanbrook that the second section of the aria is where there finally emerges a sense of balance—albeit in the key of the dominant. We also have a good sense of why it is that our dance instructor cannot continue his counting for the conclusion of the introduction.

4.9. The Consequent

The consequent of this opening phrase does not behave like a consequent as much as an extension of the lack of closure in the tonic of the antecedent. Of course, the fact that the antecedent concludes on the tonic makes it difficult to call an antecedent in the first place. The consequent of this weak antecedent

carries the weakness forward via a rhythmic process. Of particular interest is the interruption of the rhythm in the fifth measure. Figure 4.6 illustrates a sequence of rhythmic processes whereby a sixteenth note is followed by an 8th note and then a dotted eighth—an additive process. This process is interrupted in measure 5 where we expect to hear another dotted 8th but are taken into the sequence of sixteenth notes instead. This point in the unfolding, recall, is exactly the moment that the meter of the phrase emerges (cf. Figure 4.4). The surprise of the rhythmic interruption reinforces the notion that something of global significance is occurring here.

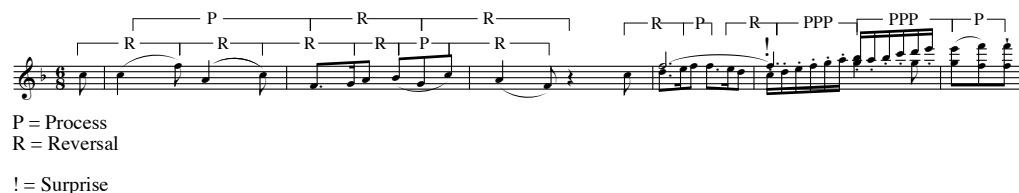


Figure 4.6: Rhythmic processes

At the same time that we are reaching back and finding the time of the ellipsis, we are pulled ahead by the run of sixteenth notes. This run establishes a new set of processes more regular than anything heard up to this point. As a set of processes they implicate a trajectory that has no foreseeable end. When we arrive in measure 6, the rhythm slows, but this augmentation does not reverse the process and imply closure; it reaches ahead suggesting something else is coming. Yet at the same time, the phrase *does* end. In this ending

we hear something unfinished, a characteristic that has been unfolding since the second measure. The lack of cadential closure accounts for Levarie's suggestion that something remains unresolved, and is supported by the overall ascending trajectory of the phrase, which Allanbrook suggests is inconclusive. This character that carries the weak antecedent into an unbounded process amplifies the undoing of the antecedent and has some obvious metaphorical potential as both Susanna and Figaro get "carried away" with implications.

The analysis of the introduction to this aria has exceeded reasonable size; in sum, it has located the the metric movement in a performative or enactive point of view. Thinking about processes as temporal performances locates the meter in the work. The metric process is a becoming, a movement from duple into triple. There are of course other ways to parse the rhythmic processes, but multivalence is not the direct concern here. Of interest is the idea of "finding", for the dance instructor who found threeness retroactively in measure five, found a particularly "undone" sense in that three. How might this finding be taken up by the aria?

4.10. Susanna's Transformation

As I mentioned earlier, Levarie suggests that the form of the piece is ambiguous: it can be seen as either a ternary form or a binary form with an "epode".²³ This apparent ambiguity is said to support the contextual *double-entendre* where Susanna is covertly singing an ode to Figaro while pretending she is dreaming of the Count. Levarie, even after deciding that a binary form

²³Levarie, *Mozart's Le nozze di Figaro : a critical analysis*, p. 210.

is more appropriate, maintains that there remains an ambiguity in the manner in which the epode is considered: it can be a coda (a drawn out cadence) or a recapitulation (returning to ideas of the first half).²⁴ The form thus serves the content.

What is Levarie saying here? The listener is imagined as being a categorical mechanism: Listener X tries to place form F into category and finds it satisfying the conditions of two possibilities. This mechanism is striking. Even if we make the dubious assumption that listeners hear form in this way, as a set of conditions to be met, we are still skipping the more interesting question of how it is that those conditions *are* met in the first place. In the context of enactive perception, form is not a mental category; it is something that is perceived via implicit knowledge of how movement will affect and effect the object. To say that the listener files a form according to preformed categories is to suggest that the mind somehow represents that category: this is antithetical to enactivity.

But Levarie is clearly talking about *something*, he isn't just making up a world of forms passed down to him by generations of Platonist thought and arbitrarily applying it the aria. In general terms, something of a radical transformation takes place in the epode, and with a solid grasp of the movement that characterizes unfolding of the introduction, we can speak to it precisely. The transformations rethink the introduction in several novel ways.

In figure 4.7 I collate the melody as sung by Susanna. It is divided up

²⁴Levarie, *Mozart's Le nozze di Figaro : a critical analysis*, p. 212.

The musical score is divided into three sections: A, B, and Epode. Each section contains a vocal melody line and a figured bass line. The lyrics are in Italian, and the figured bass notation is provided below the lyrics.

Section A:

Vocal: Deh vie - ni, non tar - dar, o gio - ja bel - la
 Figured Bass: I _____

Vocal: vieni ove amo - re per go - der t'ap - pel-la
 Figured Bass: V _____ I _____ IV _____ V _____

Section B:

Vocal: Qui mor - mo - ra il ru - scel quìcher - za l'au - ra,
 Figured Bass: V _____

Vocal: ri - do - no i fio - ret - ti e l'er - ba è fre - sca
 Figured Bass: V _____ I _____

Vocal: che col dol - ce su - suro il cor ri - stau - ra,
 Figured Bass: V _____

Vocal: ai pia - ce - ri d'a - mor qui tut - to a - desca.
 Figured Bass: II _____ V _____ I _____

Section Epode:

Vocal: vie - - - ni, ben mi - o tra - que - stapi - a - sco - se,
 Figured Bass: V _____ I _____

Vocal: vie _____ ni Ti vo' la fron - te in - cor - ro - nar - - - di ro _____
 Figured Bass: V _____ I _____ V _____ VI _____

Vocal: Ti vo' la fron te in - cor - ro - nar, _____ incor - ro - nar, _____ di ro - - - se.
 Figured Bass: I _____ IV _____ I _____ V _____ I _____

Figure 4.7: Phrases and form of vocal melody

into three groups labeled A, B and epode. This division agrees with both Allanbrook and Levarie, and emerges primarily from the standard harmonic movement to the dominant and back—a harmonic analysis is given beneath the staves. I use Levarie’s terminology, “epode”, because of its contemporary lack of specificity—clearly there is something here that is not a coda, it may rather be *the* moment of the work.²⁵ The phrases of the A and B sections

²⁵That this section, with its two cadenzas, is the climactic moment of the aria is a relatively standard interpretation, see Carter, *W.A. Mozart, Le nozze di Figaro* and Levarie, *Mozart’s*

are divided according to an antecedent and consequent, they preserve the elliptical structure noted of the introduction—the epode has no such periodic regularity. The epode repeats the phrase three times, each on a little longer than the last. In collating the melody this way it becomes clear that the phrases never repeat the introduction but elements return at the conclusion. This affords the speculation that the introduction contains a process that is a microcosm of the whole aria, but rather than pursue such a scaled approach to the form, I want to come to terms with how the aria rethinks and draws from the opening; how the aria is a processural doing.

The bird’s eye view of figure 4.7 suggests that we are looking at a binary-form in all the objectified and mentalistic ways that I have so far been trying to hold at bay. However, considering the kinds of processes identified in the introductory phrase whereby it reemerged in time, we can consider how the introductory phrase is further transformed each time Susanna cycles through the phrase.

4.11. The erotics of the mirror

A reading of the melodic processes of the first phrase in the A section is found in figure 4.8. Susanna’s first cycle through the phrase repeats the dovetailed reversals of the antecedent, but instead of initiating a process that

Le nozze di Figaro : a critical analysis, p. 211. Michael Steinberg argues that the cadenza, where “Susanna pauses to reflect and take stock of the itinerary from simulation to sincerity”, is the moment of a staged subjectivity that colonizes the musical rest from Mozart to Mahler; something like the apotheosis of modernity Michael P. Steinberg. *Listening to reason : culture, subjectivity, and nineteenth-century music* (Princeton, N.J.: Princeton University Press, 2004), p. 45.

moves away from the self-similarity of the reversals, she duplicates both the rhythm of the preceding beat and the note, *f*. Susanna's phrase, by duplication, stays closer to the initial reversals than the introduction. In the reading I posit a larger intervallic duplication (ID) holding the second half of the phrase together. The stability of such a gesture can be seen as making the moment of arrested and distorted mirrors even more explicit.

Antecedent

Deh vie-ni, non tar-dar, o gio-ja bel-la

Consequent

vieni ove amo-re per go-der t'ap-pel-la

I V IV V

Figure 4.8: Melodic processes in Susanna's first phrase

The consequent has no apparent relation to the consequent of the introduction, it serves to increase focus on the (distorted) mirror structure of the antecedent. It begins with two processes described by Mann as “uncharacteristic heavy breathing.”²⁶ Clearly there is the repetition and circularity that affords a sense of embodied breathing here, but as repeated processes they more generally implicate an unbounded gesture of some kind—the metaphorical potential of such a gesture is perhaps more graphic than heavy breathing. The iterative processes are interrupted by a return to the opening reversals (the mirrors), though this time they are transformed such that they include a step into the sub-dominant and arrive in the dominant on a *g*. This transformation of the mirror changes the second reversal into an Interval Process; a

²⁶William Mann. *The operas of Mozart* (New York: Oxford University Press, 1977), p.433.

change in process that retains the non-closural aspect of the Registral Reversal but moves it into the intervallic domain. An even more fundamental change results from placing the mirror structure *after* the graphic episode and modifying its motion, for here we can see the mirror actually acquiring some of the processes: the mirror is dissolving into the potentially erotic movement of the iterative process. The harmony supports this incorporation by bookending the mirrored reversals with dominant harmony: it is as if the iterative processes in the dominant become the mirror. The consequent is not simply a variation of the theme, it realizes an erotics that becomes implicit in mirror theme.

Taken as a whole, Susanna's first phrase focuses in on the mirror of the introduction: by dovetailing it with a large Duplication it becomes more solidified, and by returning to it in the consequent after repeated processes it realizes a newly engaged mobility. Susanna takes control of the mirror here, allowing it to accept new forms, and easily moving it into the key of the dominant, that place of tonal instability where Figaro once resided.²⁷ It's dirty! The movements afford an erotic understanding of incorporating the other. This movement into a continuity recalls Bataille's understanding of the erotic where "The transition from the normal state to that of erotic desire presupposes a partial dissolution of the person as he exists in the realm of discontinuity."²⁸ Bataille's understanding of eroticism is rooted in the notion that it is at root a confrontation with death because it interrupts our individ-

²⁷The argument for Susanna's ability to control the harmony in her opening duet, leading Figaro out of dominant harmony and back home to tonic is in David Lewin. "Figaro's Mistakes". In: *Studies in music with text*. New York: Oxford University Press, 2006: pp. 5–18.

²⁸Georges Bataille. *Eroticism* (London: Boyars, 1987), p. 17.

ual status of discontinuity. “Erotic activity, by dissolving the separate beings that participate in it, reveals their fundamental continuity, like the waves of a stormy sea.”²⁹ Of course, arguing that this particular point in the music is an erotic moment via the envelopment of the iterative process into the mirror runs dangerously close to admitting that Lévi-Strauss’ “synchronic totality” of all music makes it always a confrontation of death, and thereby possibly an erotic moment. What I am interested in here is the particular manner in which this totality is being articulated, what it is about the mirror theme admitting the iterative process that affords a particularly erotic understanding.

The direction my reasoning is going here is, as mentioned, towards the finding of a larger scale version of the introduction. From my obsessing over the duplicitous, multiply mirrored movement that the first measure performs, we can start to imagine how it mobilizes particular motions—motions that are implicit in it. Susanna’s first phrase is likewise an obsessing over the character of the first measure; it focuses on the mirror in a way that draws out motions which may be understood as an erotic becoming. We are right back at the redefinition of time, time travel and finding time. In her first phrase she is finding, in that opening measure, a new aspect, a kind of dwelling that expands the time of the first measure. How can we let the analytical graphic, such a static looking thing, reveal such a dynamic animal?

²⁹Bataille, *Eroticism*, p. 22.

4.12. Sinking into darkness

The second phrase's antecedent famously moves into the mezzo register, the drop down into a "chest voice" *A*. This movement is at once an embodied disappearance—the voice in this register threatens to break—while still remaining firmly in the grasp of the mirrored reversals. Figure 4.9 illustrates how the mirrors are dovetailed with an "aba" pattern (the registral return) followed by a process down to the *A*. Another reading might see an imbricated scheme that performs a larger reversal, figure 4.10. This second reading would argue that the mirrored reversals are drawn into the lower register—the place vocal disappearance.

Figure 4.9: Melodic processes in Susanna's second phrase

So far I have tried to resist the urge to present alternate readings, largely because it is not my direct concern here to think about multivalence of this sort—I am trying to think about processes and their relation to movement. The case of the second phrase is interesting in regards to how the mirror structure is extended into the lower regions of the voice with its timbral darkness. Steinberg suggests that we might read it as a “descent’ into interiority” but my discussion thus far has tried to avoid this kind of psychologizing.³⁰ This

³⁰Steinberg, *Listening to reason : culture, subjectivity, and nineteenth-century music*, p.

third pass over the opening phrase is another extension of the mirror structure, here taken into the darkness of disappearance. What the alternate reading allows is hearing the movement of the mirror as a larger process, one that sinks into the dark. But this extension of the mirror is not limited to the alternate reading; we don't need to choose between the two. They simply show the multivalence of the movement. The aba pattern stays the mirror, while the larger reversal accepts a process that pulls the mirror into the dark, a kind of “spinning off” for what I metaphorically described as a reflective pirouette.

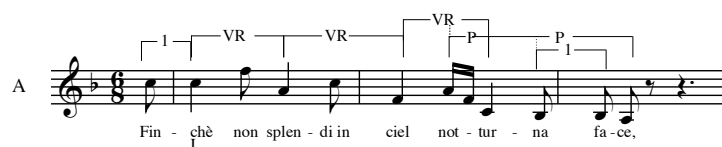


Figure 4.10: Melodic processes in Susanna's second phrase—alternate reading

Mann suggests that the low *A* of the antecedent will “sound like fake passion” because of its register.³¹ In his reading as comic, Mann reads the move into the chest voice as coarse humor that might be thought of as a private communication between Mozart and the first Susanna, Nancy Storace. Yet placing the work in a deliberate category, serious or comic, seems unnecessarily contrained if we understand a movement into a low register that can accommodate either understanding. The psychological reading again misses the very thing that is happening, which is partly the performance of multiva-

44.

³¹Mann, *The operas of Mozart*, p. 432.

lence. In the context of a multiply understood performance (she is supposed to be pretending, she is really being serious *for* Figaro, she gets lost in her thoughts etc.) why would we imagine that the music somehow does or means a single thing? Our particularity at this moment sees a new aspect of the mirror as it is refracted into the lower reaches of the voice.

The consequent to this second phrase is read in figure 4.9 as a series of processes moving upwards that serve to modulate into the key of the dominant. These processes are so radically new that we cannot help but understand them as a movement away from the mirror structure. They are a bridge, yet as a series of processes it would be difficult to account for the sense of closure without resorting to harmony, something that I have yet to associate with the movement of the melody—even though there is obvious harmonic function in each process. The analysis of the consequent suggests that there are two dovetailed retrospective Registral Reversals that give a sense of closure to the sequence of processes.³²

Bringing retrospection into the picture at this point, while considering movement on the face of the melody, might seem counter intuitive. After all, if we are thinking within the presence of a movement, to imagine that it arrives after the fact is a little odd. Of course, I have been trying to show all along a kind of retrospective illumination of the implicit which reaches back in time, or enfolds us into a totality. But this latter idea is a separate entity from

³²Retrospective processes, noted by enclosing the label in brackets, are those that form after the fact, they are corrections of initial implications. That is, initially a process of descent is suggested and the leap out of the descent retroactively understands a registral reversal.

Narmourian processes. The retrospective process is one that could more likely be something other process, but then switches to the more unlikely process. So on hearing $f - e$, we might expect an interval process (for example, g) or a duplication (return to the f) or a process (d), but not a registral reversal. Thus the arrival of the a is something of a surprise, and retrospectively becomes a registral reversal.

Thus we can see a process akin to the mirror structure can be heard as shaping the sequence of processes of the bridge—though still a movement away from the mirrors, it wouldn't be a bridge otherwise. The continuity is distant: the contours are inverted, it is retrospective and there are intervening processes, yet it is hearable. Perhaps it is this passage's continuity and bridging aspect that Levarie refers to when he talks about the ambiguity between melody and harmony; it is not so much an ambiguity as it is a radical multiplicity.

It would be convenient to think of these two phrases of the binary form as trying to solve the problem that the introduction establishes: is it here? Is it down here? Here? But the solution metaphor doesn't jibe well with movement; in order to maintain the focus on the structural face as a process, imagine that the movement is the solution while still retaining the problem.

4.13. Mobility found, the B section

There is an interesting thinning out of the thick multivalence that characterizes the B section. A new sense of mobility is found. The movement becomes clearer, there is more linearity coupled with the motion of the phrases moving

up and down as mentioned. For instance, figure 4.11 charts the clear process of the initial rising antecedent. The second antecedent similarly clearly duplicates a series of processes from and around *b♭* before resolving to *a*. Both consequents involve local reversals, capturing and reinforcing the clarity of the antecedents. In fact, the clarity and movement of this section lends itself to thinking in terms of a process that unites both phrases: a linear descent from *f* 'to *f* with the centre *b♭* being a long moment of repose. In figure 4.12 I sketch out such a descent, including the octave transfer which acts to change the direction of the descent and internally create two arches, the same arches that Allanbrook argues balances the phrases in this section. The octave transfer is also delivered through the one instance of the mirror structure.

Figure 12:

Antecedent

Qui mor-mo-ra il ru - scel qu'is-cher - za l'au - ra,
 ri - do-no i fio - ret - tie l'erba è fre - sca

Consequent

che col dol-ce su - surro il cor ri - stau - ra,
 ai pia-ce - ri d'a - mor qui tut - to a - de-sca.

Figure 4.11: Melodic analysis of B section

The B section is not completely unrelated to the former material in this newfound clarity; the mirror structure reappears in the first consequent in a new position of phrase balance. Similar to the A section's consequent, the

terminal bridge, a larger reversal structures a sequence of processes in the second consequent here. Like the bridge that led to it, this section is a moment of balance and direction that contains a movement of its own that both enfolds and reaches away from the previous section.

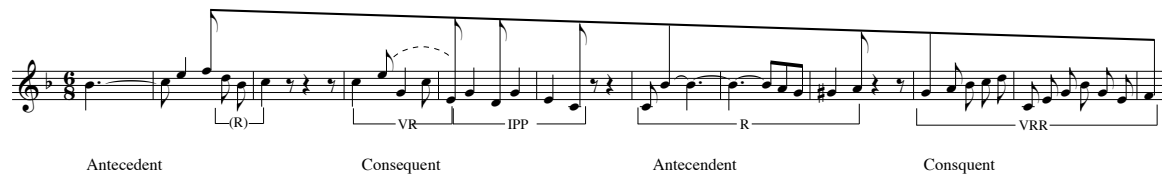


Figure 4.12: Melodic descent

One final note on this octave descent should give pause to the idea that there is a periodic closure in the phrases. The processes argue that closure belongs to both the antecedents, and importantly, it does not belong to the first consequent. The melodic movement therefore acts against the phrase periodicity while that periodicity emerges with new found vigilance. This apparent paradox, a newly closural phrase coupled with a mobile melody should be foregrounded to allow for the sense of finding something and moving further into it. It is this moving further that takes Susanna to her catharsis in the epode.

4.14. The unusual place of the Epode

The epode would frustrate the dance instructor, for in its first phrase, for the first time, a duple hypermeter is established. Two duple phrases are placed next to each other in a way that compresses the established 6 measure periods into 4. Like the B section, there is a thinner, more direct movement up and down. The antecedent phrase moves upward via a reversal, and the consequent moves downward via several processes. Formally it mimics the arches seen in the B section because there is a reversal closing the antecedent and a process closing the consequent, leaving us with another paradoxical situation where the melodic movement is contrary to the phrase. The processes, noted in figure 4.13, summarizes the B section, and thereby opens the door to a conclusion.

Epode

Antecedent

Consequent

vie - ni, ben mi - o tra que - stapian - te a - sco - se, I

Figure 4.13: Four-measure period opening epode

It is the crowning of the count that makes the epode the strangest and most illicit moment of the aria; musically this scene occupies two cadenzas and the first recollection of the introductory 16th note run. The thinning out of the multivalence noted above for the B section is most apparent here (figure 4.14). The processes, Duplications and stepwise motion, not to mention the

increasing rhythmic diminution are very clear, leading up to the return of the mirrored reversals. The reversals are extended such that they are now three in a row leading right to the cadence. The movement, initially complex with multivalence, is gradually thinned until a direct clarity is found, a clarity that leads back into the mirrored reversals. The movement that clarifies is accompanied by the finding of a four-measure phrase (figure 4.13). Now, however, with this newly found clarity that leads back to the mirror of the introduction, we encounter a break in the meter. Like the opening of the epode there is another four measure phrase (Count A above the stave figure 4.14), but this one seems a little off because the mirror straddles its mid point. A second plausible way to count the phrase would see the 4 of the first half extended through the sequence of reversals before returning to one followed by a cadence on 2 (Count B). Similarly it can be imagined as returning to the 6 beat phrases of the opening, but this too leads to a curious stop on beat 2 (Count C). This curious conclusion creates an unfinished phrase, or at least a very unbalanced one. The deceptive cadence and non-closural process aid in the creation of this unbalance. The return to the mirror remakes the opening, the direction and movement of all preceding material realizes its goal in the mirrored reversals, but the realization is marked by a lack of balance.

The lack of balance, a movement left suspended, is picked up with a re-statement of the cathartic moment. The second attempt initially seems to be on the right track, but again, winds up on a 2 (figure 4.15). The second attempt is longer, even more so with the cadenza, and can be counted as a

Count A: 1 2 3 4 1 2 3 4
 Count B: 1 2 3 4 (ext. 4...) and 1 2?
 Count C: 1 2 3 1 2 3 1 2?

Epode

vie - - ni vie-ni! Ti vo' la fron - te in-cor-ro - nar di ro - se, VI

Figure 4.14: Coming into the clear

continuation of the former (Count B) or as a new beginning—from a 1. In either case there is an ending made incomplete by concluding on the upbeat. A reading in three similarly works out with the phrase as a whole, but concludes on the upbeat 3 of three.

Figure 16: Second attempt

Count A: 1 2 3 4 (ext.) 1 2 3 4 1 2
 Count B: 3 4 1 2 3 4 1 2 3 4 1 2
 Count C: 1 2 3 1 2 3 1 2 3 1 2 3

Epode

ti vo' la fron - te in - co - ro - nar, - in-co-ro-nar - di ro - se. VI

Figure 4.15: Second attempt

There are many other options for counting a piece that invokes more than one meter—to describe them all would be pedantic at best. The idea that the piece returns to a three bar phrase (Count C in figures 4.14 & 4.15 would allow a rebarring of the music in 9/8, giving three beat measures. This rebar possibility is considered in figure 4.16. By rebarring into compound triple meter, a hypermeter of three measure phrases emerges. Unlike the three measure

phrases that characterized the first two sections of the aria, these are made up of a triple rather than duple compound meter. With this metric possibility we come full circle to the emergence of a three out of a four that characterized the introduction, except this time, the four measure phrase has been found and a larger metric grouping of three emerges. The multivalence of temporal succession thus returns on a larger scale.



Figure 4.16: Rebar as 9/8, mm37–

The multivalence of the temporality in the epode wards off discussion over which is the right or better way to count it—any particular way is going to have to cede to the improvisatory cadenzas anyway. The temporal play that the work affords is my primary concern in that it allows a peculiar notion of a real finding of time. The manifold and retrograde countings throw the listener into the act of finding. The final measures confirm the multivalent presence by picking the meter up and easily moving back into a duple meter for an extended cadence (figure 4.17). This final movement concludes in a way that affords humor while cycling back to the same material problems of the introduction.

The musical score for measures 48-51 is presented in three staves: Soprano (S), Wind (Wnd.), and String (Str.).

- Measure 1:** Soprano has a whole note with a 'se.' marking. Wind has a half note with a 'P' marking. String has a half note with a 'pizzicato' marking. Chord symbol: (I).
- Measure 2:** Soprano has a whole rest. Wind has a half note with a 'VR' marking. String has a half note with a 'pizzicato' marking. Chord symbol: V7.
- Measure 3:** Soprano has a whole rest. Wind has a half note with a 'P' marking. String has a half note with a 'pizzicato' marking. Chord symbol: I.
- Measure 4:** Soprano has a whole rest. Wind has a half note with a 'P' marking. String has a half note with a 'pizzicato' marking. Chord symbol: V.
- Measure 5:** Soprano has a whole rest. Wind has a half note with a 'P' marking. String has a half note with a 'pizzicato' marking. Chord symbol: I.

Figure 4.17: The winds correct

4.15. Enfolding the whole

In the discussion of the aria's introduction (figures 4.3–4.6) the recount, or emergence of a three-measure phrase and ellipsis occurred in the fifth measure at the moment that the 16th note run began. Recall as well that the movement in the fourth measure was a clear arch of process up and down compared to the opening measures which contained the sequence of reversals that I have been calling “mirrored”. Finally, recall that I suggested the fourth measure extended the mirror by way of its clear movement, and that this motion was caught up in the sixteenth-note run of the fifth measure. Now we can note a

large scale homology between the finding of the introduction and the finding of the complete piece. The A section's dwelling in the first phrase, finding more implicit features of the mirrors; the B section's mobility, thinning of multivalence and finding a phrase balance through the arc or antecedent consequent; and finally the epode, where a new metric count emerged along with the return of the mirrors now in front of the trajectory of processes—only to be placed behind them again in the concluding measures that also returned a duple hypermeter. The complete aria is thus a dramatic amplification of the undoing that occurs in the introduction. The only trouble is, the aria seen this way does not have a terminal resolution—the undone is never done up. Of course, this lack of closure affords the musical implication of the *finale* as well as the dramatic necessity to resolve the relationship between the lovers, but it goes against the grain of analyses that find a musical problem solved or resolved in the conclusion. Rather than seeing a solution or a problem, it sees a finding of multivalence.

It would be absurd to think that this or any analysis of the phrases in Susanna's aria is the final word; history shows us that the aria is able to support many different understandings and can remerge in different guises as context changes. But we are at least in a position to come to terms with the multivalence, to hear how it is a manifold emergence and get a sense of that manifold. As for the impetus of this chapter, we can sum up what it is that makes musical time interesting from the enactive point of view. Firstly, musical time is a manifold phenomenon. Time proceeds at different rates. Our dance

instructor counts in one way, interlocking melodic phrases count in another, harmony counts in another, and rhythmic processes count in still another. This manifold structure is at the local level, when we begin to understand how Susanna's phrases count on a more global level, more and more temporal rates will be added. Secondly, the manifold temporality is *found* in time, it is not an object structure but a finding structure. Thirdly, the manifold temporality that is found in the specific case of Susanna's aria actually seems to be in the act of undoing itself, finding something that is lost—finding an ellipsis.

Seeing musical time in this way opens the door to an understanding of how music might be a “machine to suppress time” primarily because it is a kind of finding that, when found, contains manifold temporalities. The finding of time is somehow outside of time, or, it displaces our sense of singular continuity and thereby pushes us outside of time. In the particular case examined here, the emergence of one time (metric, hypermetric or phrase) out of another articulates the manifold temporality as well as the emergent singularity. The undoing that unfolds and enfolds this aria is not an object, it is something that is found through the course of the piece. That is, the large scale rendering of the introduction over the course of the aria gradually realizes the extent of its own undoing. This is paradoxical, for It takes time to find time.

4.16. Conclusion

The Narmourian analysis allows for an analytical focus on how this particular aria destabilizes time. The analytical technique focuses on processes

in the music rather than archetypes outside of or hidden from the music by way of a surface-depth metaphor. By thinking about how these processes can be equivalent to bodily movements, we can imagine that music's place in the body extends beyond the purely affective corporeal (where the body is the skin of a drum that music attacks) and into the productive—the way in which the body is the instrument of perceptual invariance. That is, the invariance that we couple with in perception is found in the body. The multivalent processes of music, when understood as the result of implicitly known products of movement, engender an emergent and multivalent temporality. The analytical technique pointed to process in the aria whereby an initial mirror structure is undone through a temporal emergence, and this undoing is carried through and forward into a larger temporal emergence in the aria's conclusion. The performance of this undoing affords our dramatic understanding of the scene's vividly erotic, devastating, and comedic elements—and the affordance is *in* the music as an offering to the listener. But what, in the end, does this tell us about the specialness of musical time?

It was suggested that Van Gogh's *Roses* contained a particular temporality in its articulation of the enactive. In seeing the painting this way, we catch it, so to speak, in its *doing*. We see the canvas as it becomes a vase of roses, as it performs our implicit knowledge of movement and the emergence of objects. After this doing the picture is framed; it enters into the domain of the object; it becomes a picture *of* roses. The difference between a canvas that is doing and Susanna's aria is that the aria performs our performance in such a way

that our implicit movements are made manifest in the material. The aria is the doing of doing; it does the doing; it is the active finding of time. If the painting contains time before we frame it, the aria unframes itself in the act of its performance, thereby finding time.

Is this musical finding the domain of this particular aria by Mozart, or is it a more general aspect of musical time? This question serves as the impetus for chapter 5, where a detailed study of processes in another “garden aria”, by Mozart’s contemporary, Vincenzo Martín y Soler, reveals a considerable difference in approach.

The sense that music is finding time is further complicated by the fact that there is no object referent in music, no rose that we can move around.³³ Rather than being an invitation to our implicit sense of movement, the music *is* our moving, and in being our moving, it is being our perception; it is the finding of time, and in that finding it stands outside of a singular linear time.

This transcendence might strike the reader as odd for I have been arguing all along that the work is in the work, not outside of it: that we have located the multivalent content in the work (though I have by no means exhausted that content). How does such a materialist phenomenology stand up to a

³³The lack of referent in music goes against the idea that there is a sign that is interpreted in via decoding. The idea has gotten a lot of use in aesthetics, Lévi-Strauss considers it to be music’s primary difference from language Lévi-Strauss, *The Raw and the Cooked*. A century earlier Eduard Hanslick famously rejected representational affect in favor of an objective structuralist interpretation of the musicality of music’s beauty: “It’s nature is specifically musical.” Eduard Hanslick. *The beautiful in music: a contribution to the revisal of musical aesthetics* (New York: Liberal Arts Press, 1957 [1854, tr.1891]), p.49. While music can be said to have an object referent, as in symbolist readings of Wagner, such a referential case is one of many readings that are afforded by the complexity of its processes.

transcendent “outside of time”? It is just such a critique that Zuckerkandl offers when he maintains Schopenhauer’s understanding that music is only perceived in time, and that its temporality makes it “peculiarly terrestrial, of this world.”³⁴ This is no doubt the case, there is nothing transcendent about finding time, it is as real as real gets. What it is not, is cursor time—that abstraction we know as clock time.³⁵ Cursor time gives a minor inkling as to the degree we are embedded in time; it measures, not arbitrarily, and produces a single linear time. This production is good for getting trains organized and synchronizing satellites, but it is not helpful in regards to understanding the special temporality of music: the finding of a multivalent time.³⁶

In a world that emerges through the invariant properties that movement performs, a world that is the material response to movement, music might be related to what informs who we are as humans at a very general level; answering the question of what it is that somehow brings the human into an awareness of being through that emergent world. The level at which music performs our implicit understanding of the world, or better, performs our coming into awareness of our implicit understanding of the world, locates music at an all encompassing level for our being. In an era that continually places music as a frill, a product object to be consumed when the real work is done, we

³⁴Victor Zuckerkandl. *Sound and symbol; music and the external world* (New York: Pantheon Books, 1956), p.152.

³⁵For a discussion of cursor time see chapter 2, and David Lewin. “Music Theory, Phenomenology, and Modes of Perception”. *Music Perception* 3/4 (1986): pp. 327–392.

³⁶An interesting discussion of the rise of mechanical time as a result of industrialization as well as its relation to perception is found in Donald M. Lowe. *History of bourgeois perception* (Chicago: University of Chicago Press, 1982).

might wonder at what level we are eschewing our engagement with the world. By turning music into a consumer product, it follows that we are producing the erasure of our being, an erasure that could have ethical and environmentally devastating consequences. Heidegger came to a similar conclusion in the 1950s when he considered the error of thinking about material solutions to homelessness as avoiding the real problem: “the real plight of dwelling lies in this, that mortals must ever search anew for the nature of dwelling, that they *must ever learn to dwell*.”³⁷

Bringing the insights of enactive perception to the workshop of music analysis helps us to understand more clearly the place at which Lévi-Strauss found music to be the most adequate metaphor. The analysis of myth, which located myth in a structural web through which we articulate the symbolic mind, utilized music as its modern day manifestation and metaphor. By seeing how music mobilizes the movements from which perception is enacted, we possibly get a glimpse of the place that Lévi-Strauss accorded to music; a place where we find our being. More generally, we can begin to understand how our world is inherently musical, the manner in which it emerges is a musical process, and its multivalent presence is continually musical. We might begin to ask what it is we can do to maintain a sense of harmony and beauty in the world by beginning to listen more carefully in music. In a moment similarly critical of contemporary ideology, poet Jorge Borges sums up the interplay between time, being and rhythm with typical poetic acumen:

³⁷Martin Heidegger. “Building Dwelling Thinking”. In: *Poetry, language, thought*. Ed. and trans. by Albert Hofstadter. New York: Perennial Library, 2001[1954]: pp. 141–61, p.159.

My homeland is the rhythm of a guitar,
a few portraits, an old sword,
the willow grove's visible prayer as the evening falls.
Time is living me.³⁸

³⁸Jorge L. Borges. "Boast of Quietness". In: *Selected poems*. Selected poems (New York: Viking, 1999): p.43.

*To speak or to remain silent: are they to sonority what to show
and to hide are to visibility?*

P. Virilio

5

An Other Garden Aria

Is multivalence and processural self-selection the exclusive provenance of great works? What about “minor” works, those once popular works that exist only on the fringes of musical life today? Many analytical projects (like those of chapters 3 and 4) begin with works that are known to be great, it may be inferred that the greatness resides in the analysis, and that lesser works are missing this element—they are silently “othered” by the analysis. Analyzing a melody from an aria that may be thought of as derivative of Mozart’s garden aria, Martín y Soler’s “Dolce mi parve un dì” from *Una cosa rara*, reveals that a complexity of multivalent musical processes can be heard in it as well. What has changed, however, are the ways in which the piece proceeds and the type of

analysis that it calls for. This “Other” aria’s complexity allows consideration of the element that is missing from analyses which tacitly support the great work hypothesis. By seeing these othered works as complex, it becomes possible to articulate the shape of our engagement with major works via differences between the two heterogeneities. This juncture thereby clarifies the specific value of analysis and its future possibilities.

5.1. In the garden, Martín y Soler’s Garden Aria

5.1.1. A Conversation

Martín, in a private meeting with DaPonte, asks, “Lorenzo, is there a place where we can have a Garden Aria?” Daponte thinks for a moment, and then says, “But of course Vincente, why not here at ‘Dolce mi parve un di?’”

“Any discussion of the music of *Una cosa rara* must begin with melody.”¹ Platoff, in a review essay of the German critical edition of Martín’s Opera suggests that Martín’s style is melodic. Platoff subtly chastises the music’s lack of “dramatic intensity,” suggesting that the lack is made up for by “no end of tender melodies, beautifully shaped and surrounded by skillful and discreet accompaniments.”² A second aspect of Martín’s style is named as a “lack of density”, a peacefulness that pervades the work and keeps us focussed on the melody.

Melody is further restricted, by Platoff, when he begins to compare the

¹John Platoff. “A New History for Martín’s ‘Una cosa rara’”. *The Journal of Musicology* 12/1 (1994): pp. 85–115, p. 94.

²Ibid., p. 94.

other garden aria, Mozart's "Deh vieni, Non Tardar".³ Both are slow 6/8 meters, but Martín's doesn't have the kind of accompanying variety that Mozart's has. The singer is put in charge of making up for this lack: "the success of 'Dolce mi parve un dì' rests more heavily on the singer alone."⁴

Further on we are told again, that because of the formal simplicity, a return to the key and material of the first section, the aria has none of the "climax" of Mozart's. This aspect, the formally "static" is said to create an opacity that the singer fills in: "The aria thus depends much more on its singer to create the mood: in particular to shape each two-measure phrase so beautifully that it hangs in the air, sustaining the listener through the rests until the next phrase begins. Nancy Storace must have been a marvelous singer to succeed as she did in music like this."⁵

Platoff's judicious critique of the composer's aria is a little confusing. The idea seems to be that without complex orchestration and phrasing, the singer must do all the work to make a piece compelling. Because we know that

³This is not the only garden aria, it is the closest contemporary to Martín's and perhaps the most well know. The tradition of being alone in a garden and entering into its order at the same time as one loses agency is an interesting one on its own; the ultimate case might be Euridici's death in *Orpheo* especially in Badini's (1790) version, but also Rinaldo's famous instrumental descent into the charms of Armida (chaconne), or Almirena's "Augelleti che cantate" in Handel's Rinaldo Francesco Badini and Joseph Haydn. *L'anima del filosofo ossia Orfeo ed Euridice, Hob. 13, 1791: Rekonstruktion der Versform und Wortgetreue Deutsche Übersetzung von Georg Feder* (Kassel: Barenreiter-Verlag, 1980); Jean B. Lully. *Armide Vocal Score* (New York: Broude Brothers Limited, 1971); Georges F. Handel. *Rinaldo First version* (Liepzig [Ridgewood New Jersey]: German handel Society [Gregg Press], 1965 [1874]). On the pastoral as a specifically musical theme see both Raymond Monelle. *The musical topic : hunt, military and pastoral* (Bloomington: Indiana University Press, 2006); and Wye J. Allanbrook. *Rhythmic gesture in Mozart : Le nozze di Figaro & Don Giovanni* (Chicago: University of Chicago Press, 1983).

⁴Platoff, "A New History for Martín's 'Una cosa rara'", p. 97.

⁵Ibid., p. 100.

Storace was a famous singer, we must imagine that she was also able to make a piece like the garden aria work, *despite* its flaws.⁶ Consider, for a moment, the implications of this position. For one, it means that Mozart's music is flawless, but we already knew that. More importantly, it suggests that Mozart's music is "outside" of its singer. It is, on its own, able to make good. But Platoff can't mean that Mozart's aria compensates for poor singing! What then, does he mean? One possible interpretation is that the melody and the form of Martín's piece do not have the same degree of complexity in the processes that they perform. Is this a degree of multivalence?

The funny thing is we know exactly what Platoff means, yet we don't have the adequate conceptual vocabulary to express it. Or perhaps we know what he means as something that his words point to, but we "fill in". This would account for why it gets whisked away when we try and point to it here, and why Platoff doesn't go into detail.

Or is it that melody alone is not enough? Not enough of what? That there is something ephemeral, maybe even feminine, about a melody-centric style. This ephemeral style needs a singer to prop it up, to give it shape.

Whatever the case may be, surely we can hear and therefore point to the complexity or ephemerality. Let's turn to Martín's melody and see what it says.

⁶Historical accounts of Storace's fame are found in P. Gidwitz and B. Matthews. "Storace, Nancy". In: *Grove Music Online*. Ed. by L. Macy): URL: <http://www.grovemusic.com/>; and Dorethea Link. *Arias for Nancy Storace : Mozart's first Susanna* (Middleton, Wis.: A-R Editions, 2002).

5.1.2. An Opening

Look at the opening measures of the vocal line, we can ask quite specifically what kinds of processes are being performed utilizing the Narmourian system of implication-realization modeling at the immediate level.⁷ The first two phrases are reproduced thus in figure 5.1. The figure has annotations that describe two processes in each phrase. The tonic phrase contains a Process (P) and an Interval Process (IP), while the dominant phrase contains a Reversal (R) and a species of neighbor note called *aba* (intervallic duplication). The processes are setting the two six syllable (*settenario*) lines text such that there is a one to one correlation between elements of the three part process and the syllabic scansion of the text.⁸



Figure 5.1: Melodic analysis mm. 12–15 (“*Dolce mi parve un di*”)

Seen in this light, we get a first sense of the forward thrust of the tonic phrase, and the continuation of that thrust in the dominant phrase. The two processes (P & IP) of the tonic phrase imply continuation, while the Reversal and *aba* of the dominant phrase imply end. If I sense that something

⁷The full theory is found in Eugene Narmour. *The analysis and cognition of basic melodic structures: the implication-realization model* (Chicago: University of Chicago Press, 1990). For its use as illustrator of multivalence see the preceding chapters; for a more direct discussion of its structure see chapter 1 §1.2.1.

⁸See table 5.1 for a translation and scansion of the Italian text.

will continue, I am in that continual process, ahead of myself. Yet if I feel that something has come to a close, I am in the presence of the past: the movement that continued, which was ahead of me, is now an ending that makes a beginning. But in fact, the processes are a little more complex than this hasty description.

Table 5.1: Scansion and translation of *Dolce mi parve un dì*. Numbers in brackets refer to scansion of text that is repeated or modified by Martín.

	Scansion	Translation
Scene 14		
Lilla		
Dolce mi parve un dì,	6	Once it seemed sweet to me,
un dì mi piacque amor,	6	once love pleased me so,
ma non è più così,	6 no no (8)	but it is no longer so
ma non mi piace ancor.	6	it no longer pleases me.
Finché vicino a te	6	As long as I lived
vivea, mio caro ben,	6	close to you, my dearest,
ch'io ti vedea per me	6	and saw you languishing
languir d'amor (x2) ripien.	6 (4 + 6) (10)	full of love for me,
Dolce mi fu quel dì,	6	sweet was that day for me,
quel dì mi piacque amor,	6	that day that love pleased me
ma non è più così,	6 no no (8)	but it is no longer so,
ma non mi piace ancor.	6	it no longer pleases me.
(Coda)		
enter Corrado		

For one, there is a change on the second beat to an IP, and this has a

different sense of non-closure than a P because the registral direction has been denied; thus the second process is more closural. This partially closural aspect corresponds with the sense that, even though the rhythm has slowed, there is something speeding up, more is taking place here than in the first beat: bigger things are in motion.

Figure 5.2 sketches out what these bigger things might be. At a “higher” level, still rooted in the face of the music, we can imagine that upon arrival at the second process, the d' , we can hear a new process that hooks onto the initial process’s beginning, the $c\sharp'$. This new process now falls to the b , making it an Interval Process akin to the one we are about to realize on the lower level. Finally, the terminal note of the lowest level’s interval process is simultaneously a terminal note for an even higher level Process that moves from $c\sharp'$ to d' to e' . At the conclusion of the phrase three levels of processes are realized together.

The figure shows a musical score for the vocal line of 'Lilla' in G major, measures 12 to 15. The notes are: D4 (quarter), E4 (quarter), F#4 (quarter), G4 (half). The lyrics are: 'Dol- ce mi par - ve un di, un di mi piac - que a - mor,'. Above the staff, several processes are annotated with brackets and labels:

- A bracket labeled 'P' spans from the first D4 to the second G4.
- A bracket labeled 'IP' spans from the first D4 to the first G4.
- A bracket labeled 'P' spans from the first D4 to the first E4.
- A bracket labeled 'IP' spans from the first D4 to the first F#4.
- A bracket labeled 'R' spans from the first D4 to the second G4.
- A bracket labeled 'P or 4?' spans from the first D4 to the second G4.
- A bracket labeled 'R' spans from the first D4 to the first G4.
- A bracket labeled 'aba' spans from the first D4 to the first E4.

 The label 'Lilla' is to the left of the staff, and the measure numbers '12' and '15' are at the beginning and end of the staff respectively.

Figure 5.2: Other Processes (mm. 12–15)

These three processes are not hierarchal in the sense that we hear three things happening at different levels and we can attend to any of the three by

hearing “as” a high or low level process.⁹ Rather than arguing that there is a highly refined selective hearing, I am saying that we hear all three at once in different stages of completion. The snowballing is how the unfolding of a process is a becoming. The higher level process is not a gestalt in the same way that a sentence is: the “meaning” of a P at the lowest level is the same “meaning” as the P at the highest level: both are Processes. We could think of the initial process as a “nested” one, but we should be careful not to think that the nesting is an entity rather than itself a procedural feature of the becoming. As an entity, a nesting is seen as a stable thing that we know, but we only know this entity through its becoming.

As an interlocking tripartite becoming, we can explain that aspect of increased activity, of speeding up. Because each process has three parts, beginning middle and end, in the interlocking tripartite becoming we can note a matrix that shows 3 beginnings, two middles and a beginning, and two ends. The sense of increased activity arises from the manner in which the middle contains the confirmation of at least two different processes, the one that is completed, the one that is initiated, and the one that is mediated. If the first beat was a single process, the second beat suddenly reveals that there were *other* processes that were latent, or implicit, which are emerging in a smooth continuity. This emergence of processes from an implicit changes the

⁹Narmour characterizes these processes as bottom-up in contrast with Schenkerian methods which he sees as top-down, see Narmour, *The analysis and cognition of basic melodic structures: the implication-realization model*; and “Some Major Theoretical Problems Concerning the Concept of Hierarchy in the Analysis of Tonal Music”. *Music Perception* 1/2 (1983): pp. 129–199. It is this directionality which informs reference to “higher” level processes as those that would be considered less local.

character of the opening process, they speak to the structure that the initial process contained implicitly. The increase in activity is the conglomeration of processes that emerge, and these are brought to a close in measure 13. Of course, as the simultaneous close of 2 processes, the implication is that more will follow. Since nothing more does follow, that little space is filled with unrealized implications.

With this melodic analysis of the tonic phrase, it is possible to see the dominant phrase similarly. The anacrusis makes this consequent a different set of processes, but in figure 5.2 I imagine that the becoming is roughly equivalent in terms of the tripartite structure. That is, both phrases are given the same kind of matrix of beginnings middles and ends. A Reversal connects to another Reversal, unfolding into a closed structure, but the closure is offset as the reversal reveals an *aba*, which makes the ending here feel incomplete. The structural movement of the Reversal is closed, but just as that closure is found it is rejected by the lower level *aba*. At the highest level in the consequent, it becomes very difficult to say what is happening because the duplication of the *aba* pattern coincides with the mediary and terminal portions of the process. Before this process can become a process, it *needs* a terminal point. As it stands, I give it a question mark, suggesting that something needs to be filled in unless we hear it as the binary display of the interval of a fourth where the terminal note is duplicated. Either way, the phrase is incomplete.

Hearing the highest level of the example as a fourth (the unlikely choice), still “sounds” incomplete not only because the “fourth is a dissonance”, but

also because of its binary aspect. The threeness of the processes that precede it, at all levels, make the twoness (the binary aspect) of a singular interval at the very least an interruption, and more drastically an incomplete process: we are suspended in the middle. Something is being continued, but where is it going?

5.1.3. A Measure

So far only a particular reading of the melodic motion has been considered. While it is clear that the melody happens in time—and in a sense I already “loaded” the gun with my discussion of tonic and dominant phrases—the analysis of melody so far has been independent of any particular rhythm. I could write the example out in whole notes in a different meter, and theoretically the melodic face would preserve everything that I have pointed to. In order to move closer to the particularity that this melody carries I turn to the rhythm.

12

L

tonic phrase

dominant phrase

Dol- ce mi par - ve un di, and un di mi piac - que a - mor, and

1 and 2 and 3 and 4 and 1 and 2 and 3 and 4

Figure 5.3: Preliminary rhythmic analysis

Figure 5.3 maps out an initial rhythmic description of the first two phrases. I am using Christopher Hasty's typography for a projective rhythm.¹⁰ The typography consists of three signs, the bar (|) the back slash (\) and the forward slash (/). The reason Hasty uses this new typography is because the characters are not equivalent (exactly) to the traditional short and long foot notation—or at least they are a rethinking of that notation. Much like the three part structures of Narmourian theory, the bar represents a beginning and the back slash represents a continuation. The beginning does not imply anything until there is another beginning, at which point that new beginning projects a potential continuation. The forward slash represents an anacrusis, which is a continuation that in some sense doesn't have a beginning—it picks up midway. Hasty's analysis of rhythm already contains meter, not in the sense of a container but in the sense of a meter that is emergent from a process. So the reading of the example is a kind of downbeat upbeat analysis, but the downbeat doesn't arise until the upbeat continues it. The continuation implies, or projects a rhythm that is either realized or not.

Figure 5.3 only considers the binary aspect of the compound meter, paying special attention to the onset of the dotted quarter note. Thus the example sees the initial note as a beginning that projects a dotted quarter, and is then continued half way through the measure. But the continuation is also an onset, or beginning, so it gets both a bar and a backslash. The process confirms the presence of the meter by recursively emergent continuations and

¹⁰Christopher F. Hasty. *Meter as rhythm* (New York: Oxford University Press, 1997).

beginnings at simultaneous levels. In this example I am confirming the metric given that I already implied in my suggested grouping of the two phrases in a relation of tonic and dominant. But the emergence of those two phrases was not dependent upon my prior understanding of phrase structure. The process that the example describes is one of a gradual amassing of rhythmic projections. It should be read as emergent, the big beginning bar, or the bar at the highest level doesn't emerge until measure 14, when a new beginning becomes a much larger continuation. But what happens when we look a little closer at the level of the eighth note?

Figure “zooms in” to see the emergence of the meter as it happens on the face. The example repeats the projective process of figure 5.3, but we can now see how the same process undergirds that emergence. However, the sixteenth note of the first beat is seen in figure 5.3 as a continuation and in figure 5.4 as an anacrusis lead in to the following note. The anacrusis does not have a beginning; it implies a beginning that doesn't actually occur.

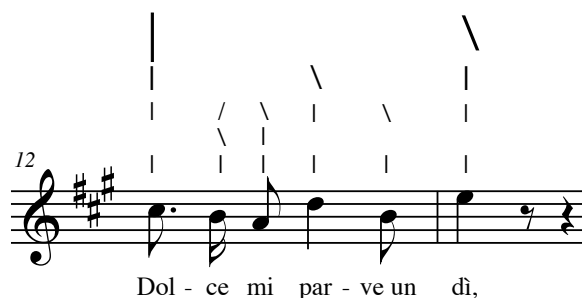


Figure 5.4: Preliminary rhythmic analysis

The multiply defined sixteenth note can reinterpret the first two thirds of

the beat as anacrusic. In this reading the onset of the second beat becomes a more local continuation of the first. Compare figures 5.4 and 5.5. Figure 5.5 hears the “down beat”, or beginning, on the last third of the opening beat—the retroactive aspect of the anacrusis is noted by bracketing the forward-slash. This second slightly heretical reading preserves a lot of the structure noted in 5.3, but at the same time it offsets the phrase from the “clock” meter of 6/8. Importantly, it adds extra weight to the continuation that is implied in measure 13. Additional evidence suggesting that this is in fact a plausible reading arises from the fact that the sixteenth note that sets it into motion has no precedent in the instrumental introduction (mm. 1–12). This is the first occurrence of the rhythmic figure. As a completely new feature, it would seem more likely that its surprise element would reset the phrase.¹¹

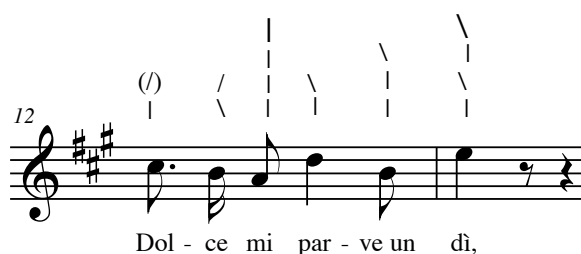


Figure 5.5: Rhythmic reading as anacrusis

Some might argue here that “we don’t *sing it* like that, the general understanding of diminution as practiced in the eighteenth century didn’t explain

¹¹There are certain problems with figure 5.5 resulting from the unevenness of the continuation—the continuation is unrealized when the second note has a longer value. Below I will introduce projection more carefully.

it like that, and thus we don't, or oughtn't, *hear* it like that." To the first of these observations, I would suggest that if we don't sing it like that it doesn't necessarily follow that it isn't there. The argument would suggest that we sing it according to how it is notated and counted. But this kind of counting is for beginners.¹² The counting is a kind of rhythmic training wheel, once we have learned the figure we no longer use these training wheels, and in fact, when people *do* still use the training wheels, we can hear *that* aspect and it sounds awkward in the same way as it is awkward to watch a child riding a bicycle with training wheels.¹³ Imagine the performer who counts: 1 (2) *and* 3, 1 (2) 3, 1. When we hear this kind of performance we shudder.¹⁴ The pedagogy of the rhythm is not equivalent to the performance of the rhythm. The same applies to the contemporary theory of diminution. The pedagogy of diminution does not necessarily conform to the practice of playing and singing—thankfully.

Of course, it would be crass to sing the phrase with *undo* emphasis on the off-beat, but here we can return to Hasty who reminds us that the theory of projection is not conditional to emphasis.¹⁵ The projected rhythm is in the music; a machine that played every note with the same dynamic articulation

¹²An early argument against this kind mechanical counting-out performance occurs in a 17th century theory text. Thomas Mace argues that once a metronomic rate is established the performer advances to take liberties for the Graces. Thomas Mace. *Musick's monument* (Paris: Editions du Centre national de la recherche scientifique, 1966 [1676]), pp.78-80.

¹³The training wheel metaphor comes from Dreyfus' discussion of expert knowledge and coping mechanisms in Hubert L. Dreyfus. "Overcoming the Myth of the Mental". *Topoi* 25/1 (2006): pp. 43-49, p.47.

¹⁴Zuckerkandl makes this same point when arguing that meter is not obtained from emphasis except in the most dismal performance, Victor Zuckerkandl. *Sound and symbol; music and the external world* (New York: Pantheon Books, 1956), pp.160-65.

¹⁵Like Zuckerkandl, Hasty comes to regard accent as derivative of the production of meter Hasty, *Meter as rhythm*, pp.103-7.

alternative of a dyadic fourth was exactly the problem encountered in the initial reading of the dominant phrase (cf. fig. 5.6). The option of a fourth, in the previous case, only served to bolster the incongruity. Here as well, imagining the end as a dyadic fourth bolsters the rhythmic sense of continuity: the dyad cuts short the groups of three (two interlocking “triads”) that precede it. The presence of such an interpretive problem with the application of Narmourian archetypes affirms the condition of multivalence and it also points at how the phrases lock together not only by harmonic movement, but also by melodic movement

Having dove-tailed the melodic processes in the tonic phrase, there is reason to continue such a technique for the dominant phrase. Note that the dominant phrase is clearly introduced by an anacrusis, but it is now included in the group because the rhythmic structure of the tonic phrase interpreted with an anacrusis (♪♪) is maintained. This reveals something of interest regarding the structural homology of the phrases: this anacrusic element reinterprets the rhythmic make up of the preceding parts, or carries those elements forward. I will take up this notion of being carried-forward below.

As dovetailed melodic processes, the dominant phrase contains exactly that process we saw in the tonic phrase. We arrive at an incomplete process, one that is in the mediary stage. I will not repeat the drama of wondering if this questioning could be solved with a dyad. A dyad is exactly what we get, the problem is it gets its dyadness only after interrupting a process. The “interrupt” remains in the dyad. I put the second question mark in brackets

to suggest that it is no longer as apparent, there is the possibility that it is now an expected interruption.

But what happened to the manifold processes, the strata, or levels that I suggested were always present simultaneously in the melodic face? In figure 5.7 I engage such a multi-leveled reading. Of course, the presence of interlocking groups is already quite a complex becoming where ends are beginnings, triadic continuation ruptured and so forth. Why do we want to add to this complexity already fraught with interpretive difficulties?

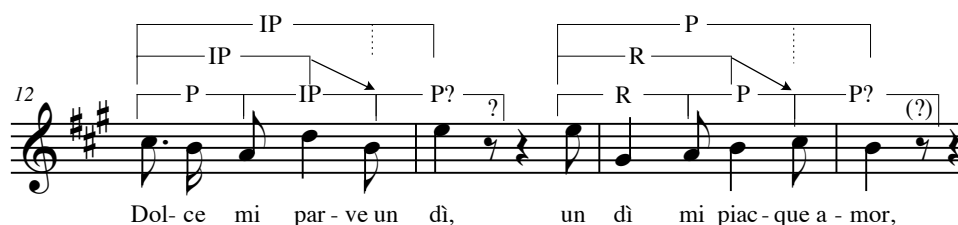


Figure 5.7: Higher levels in second reading

Keeping these difficulties in mind I suggest one possible parsing in figure 5.7. Using the beginning note of a structure as a cue for higher-level processes, we wind up with an imbedded Interval Process in the antecedent, and a sequence of reversals that articulate a Process in the antecedent. Comparing this to figure 5.2 reveals that the two readings are roughly contiguous; both envision high level Processes in the tonic phrase and a half hearted Reversal in the dominant phrase corresponding to our sense of semi closure. The two readings are not therefore exclusive, but rather coproductive. In this kind of contiguity we begin to see multivalence as multiple processes that are graded.

In apprehending graded relations between processes we begin to get a sense of melody as dwelling in relations rather than sequences.

5.2. Excursis into multivalence: pointing to the aspect-structure

The use of multivalence here is somewhat out of the ordinary. It is often thought that multivalence is the idea that we can listen to a piece of music and hear different elements: I can listen to the rhythmic becoming (as in chapter 4), the melodic, the harmonic, the formal, and so on. It is of course true that we can listen in these modes, it is the most obvious case for “hearing as” that selects a particular aspect to hear. But the way I am using the term here is a little more complicated. I am suggesting that there are multiple processes moving hand in hand in the face of the music.¹⁶ These multiple processes are shadowed by other multiple processes, and we implicitly know them. Both sets of processes are present, we aren’t confronted by one and then the other and forced to decide which one is more right. It is not an ambiguity in the sense of choose one or the other reading. The musical experience never says “hear me like this, play me like this.” It says, “I am chameleon”. As a chameleon its future its past are unknown (though there is at least the evidence for a possible understanding of a hearing in the past), but we do know that it will be different, and we know this because we recognize the multivalence. If we recognize the multivalence we are recognizing the structural face, and, importantly, the order that affords that face. The multivalence is not a figment

¹⁶Structural face is used to think about an unfolding that doesn’t imply the depth that is brought along with the idea of surface. If the surface contains the depth then there is no need to invoke the two with the “sur” of surface. Hence face is used alone. See above §4.7.

of the imagination, it is the imagination.

To appreciate degree to which multivalence affords a dynamic and continual engagement with the work, growing with and responding to our engagement, we must already have a sense of the structure that the dynamic growth resides in. The multivalence is a performance of the structure that affords it. Our awareness of this structure is only as strong as our awareness of the multivalence, and there is no definitive end or singularity to its transformative prospects.

Recall that both Narmour and Hasty are pointing to things that are in the world. Hasty doesn't need a preexistent notion of "meter" in the head to be confirmed by the music, the meter is emergent from the rhythmic unfolding. Narmour's theory of melodic movement doesn't need to have a preexistent understanding of harmony; he is pointing out extremely basic implication structures. Both are geometric features—patterns that are demonstrated in the world.¹⁷ There is no need for us to think that there is a subject who comes prepped with an inventory of structural shapes; all of the shapes and rhythms are already there, and they afford our appreciation of multivalence. This is why our understanding of the music begins in our dwelling in the material world, and our recognition of the multivalence of the music is a particular care taken towards dwelling. In music, if we can start to adumbrate this structure that affords multivalence, or, this structure that is brought into existence through

¹⁷I have maintained throughout that these patterns are in the world. There is a cognitivist side to Narmour's work that argues the patterns are related to the architecture of the brain. While there is no doubt that the brain can recognize the structures, it is more ecologically feasible that these features are actually in the environment.

multivalence, we are then presented with a unique opportunity to look directly at the elusive quality of existence; to colonize, so to speak, this frontier.

5.2.1. Carried-forward; Moving the aspect-structure

The notion of “carried-forward” discussed earlier (see especially §0.4.3; §2.5) and utilized here relates to this idea of the sense of the as-structure. In this section I want to explain it directly as it occurs in music. “carried-forward” points to more than music: we can speak of it on any scale and in any domain.¹⁸

The basic form of being carried-forward is the making current of something previously latent, yet it isn’t the latent that is carried-forward, it is the structure that is revealed by that aspect becoming apparent—a revelation of sorts, what Wittgenstein refers to as the “dawning of an aspect”.¹⁹ Some thing X has implicit aspect (n) and in making that implicit (n) aspect current, for instance (c), X is carried-forward. But in carrying forward X , we are not “finalizing” its state, on the contrary, we are making that state concrete, but it achieves its concreteness by virtue of our understanding of the order that allows concrete formations. This is an extremely important observation because it lets us know that the concrete, the hearing as “ c ”, is really hearing a universal structure in which aspect “ c ” can be pointed at. Pointing at, or hearing the “ c ” aspect is not pointing at “ c ”, it is pointing at the structure

¹⁸Though I discussed this notion of carrying forward in chapter 2 in regards to Lewin’s discussion of any form of theorizing, here I am taking it into a specifically musical domain and considering what it might tell us about a universal structure.

¹⁹Ludwig Wittgenstein. *Philosophical investigations* (Oxford: B. Blackwell, 1953), part II, section xi.

that delivers “*c*”, the structure that makes it salient. Aspect “*c*” exists not as a concrete aspect, but as an emergent aspect that sets a universal structure into motion. Thus on hearing some aspect, we are hearing the aspect producing structure.

A common example can be seen in the apprehension of the “cadential 6-4”. At the moment we understand it as displaced dominant harmony at a cadence it becomes one of the most salient features of Classical music. Was it not there before? No, it wasn’t. Has the definitive understanding of cadence been reached? No, it hasn’t. Rather than close out the contents of hearing, recognizing aspect draws us further into the aspect-structure where we are certain that the past and the present hearings maintain a good relation to each other. The recognition of the aspect is not solitary but dependent on the good relationship of past to present, and that good relation is carried-forward by the aspect-structure.

In this configuration it is an impossibility to hear aspect without hearing a universal aspect-structure. The possibility stems from thinking that in hearing we are hearing a thing that contains aspect “*c*”. There is, properly speaking, no container. There is only the presencing of aspect. And the aspect that is presencing admits to a larger order. By presencing a second aspect, the larger order reveals itself through its accommodation of that aspect. The larger order is given a face at the moment of this aspect revelation.

The face that is revealed at the moment of aspect-revelation is indeterminate, we haven’t seen the last of it. We have a sense of its structure, but we

With this perversion, it becomes possible to hear more exactly how it is that an identical rhythm is made manifest in the dominant phrase. Firstly, there is a duplication over the bar line. This duplicated e' takes the (relative) resolution aspect of the e' in the first measure and turns it into an anticipation aspect—it becomes anacrusic. Secondly, by putting them side by side, we can see how the two phrases are part of an anticipatory whole. This connection is further made by consideration of a compound melody in second species counterpoint. A single melodic line is moved forward in two parts. In the lower stave of figure 5.8 (labeled b), I imagine what that would sound like were there in fact two singers. This contrapuntal interpretation further illustrates the relationship that the two phrases have. The change in status of the e' (from beginning to anacrusic) is emphasized by the inversion of the consonant interval from a third to a sixth that is found in a drop in the reverse direction. As a united whole, we can see how the two phrases both perform Processes together, a state whose non-closural aspect anticipates more.

Of course there is more to come, but before we turn to that, let me point out how it is that this fusing together of two phrases is a carrying forward. What I have tried to identify here is that these two multivalent phrases are really part of a singular movement that anticipates more. This quasi paraphrase of the first two phrases is formed by the second reinterpreting the first. The rhythm is identical but the character has changed due to its placement in melodic processes. The motion to b of the first is repeated by the second phrase but approached from g instead of a . The second phrase extends the Process of the

first, ultimately leaving the terminal note stranded and somehow dissonant. The first phrase is thus carried-forward in the second via the accommodating, shifting, and emerging structure. I will speak more to the general properties of this structure below, for now we can note that it is remarkably accommodating to general rules of similarity given that the two phrases, multivalent as they have been shown to be, are really quite different. But this is not to say that it can accommodate anything. It is relatively easy to show this, consider the bungle of figure 5.9, which, while keeping within the harmonic and rhythmic character of the piece manages to break every relation to the opening, whoops!



Figure 5.9: (whoops, dropped the ball)—going outside of the accommodating as-structure

5.3. Concluding phrases

With multivalence and carried-forward pointed at in the first two phrases, we can move through the conclusion of this section quite rapidly. In figure 5.10 I present an initial melodic analyses of the concluding phrases—I refer to them as the sub-dominant and cadencial phrases. The figure presents the sub-dominant phrase as a Process whose medial points are extended via a duplication (D), and extended by another process. The cadencial phrase sees the same gesture except that the direction is reversed and it is compressed via rhythmic diminution, the removal the duplication, and the grace note

anacrusic *f*. How simple! What a breath of fresh air! We're tempted to say: "Processes up, Processes down, expansion and compression, it's a breeze." This is arguably the case, except for the extension of the sub-dominant phrase, "no, no," that pushes the anacrusis to the cadential phrase into measure 18 as a grace note.



Figure 5.10: Melodic processes, concluding phrases (mm. 15–19)

The double negation “no-no” of measure 17 is the first deviation from the six syllable (*settenario*) structure of each line; Martín’s first mining of the text’s play to interrupt the repetition. For imagine that the two nos are erased and the grace note is pulled back into the preceding measure, as in figure 5.11; such a change doesn’t do much to the phrase structure, it all still works fine—disregarding some new text setting issues. So where does that leave the *d'* of measure 17?

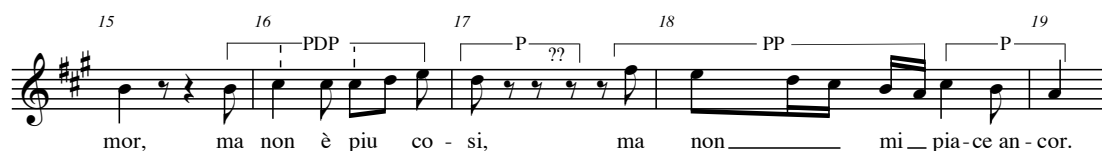


Figure 5.11: Erasing the phrase extension and compression (no-no)

Again we are in the presence of a multivalent aspect. Is it not possible to think of this *d'* as the realization of some process as was the case in the

earlier phrases? In figure 5.12 I extend the Process with an aba, dovetailing a new process onto this collection. This reading notes that the arrival at the d' is the realization of a process, an aba, and the beginning of a new process. Even though the process that is dovetailed onto the end of the phrase falls within the metric boundary of the phrase, it actually extends the length of the phrase. How is that?

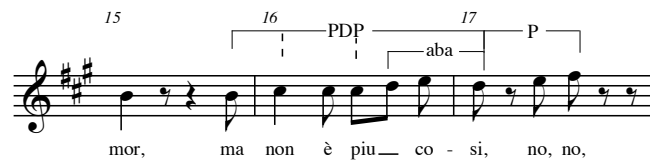


Figure 5.12: Revised reading of extension

What this “no-no” insertion does is give voice to what has hitherto been the silent aspect. There have been two phrases of four beats where the fourth beat has always been silent, in the “no-no” insertion, that silent aspect is “pushed ahead” by the Process. This Process continues the trajectory of the phrase up to the highest note so far of the melody, and in place of the expected anacrusis on the last eighth note of the bar, a questionable silence is relieved by a grace note in the next measure (m.18). The “no-no” has an odd effect, it pushes the phrase forward, it leads to this new silence, and it recognizes the silent beat four that has driven the two prior phrases. The “no-no” starts a lot more than it stops: it recognizes phrase structure, extends it, instigates a new process (upwards and non-closural), all of which culminate in the awkward re-stablizing of the cadential phrase.

The complexity of this phrase as a multivalent gathering and culmination

process is not satisfactorily evident in the analysis of figure 5.12. The problem is that the anacrusis is behaving as the beginning of a process at the expense of its being the middle that finds its beginning in the next measure. Without arguing that it is also a beginning, consider a competing analysis that presents it as an anacrusis (figure 5.13).

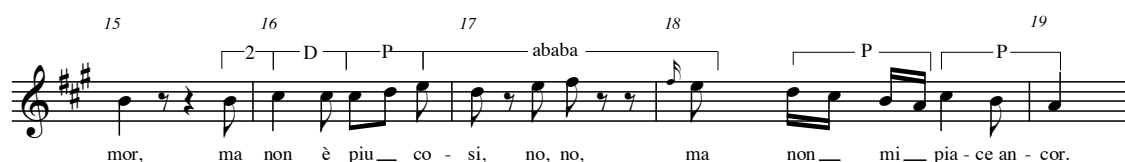


Figure 5.13: Second reading concluding phrases cf. fig. 5.10

In this reading (figure 5.13), the anacrusic element is preserved, and a new dimension of the multivalence is suggested by a series of registral returns (aba) that interlock the phrase with the conclusion (the cadential phrase at m. 18). The anacrusic *b* is a dyad second (2), followed by the duplication of the *c*[#] that begins a Process leading to the unresolved “false ending” on *d*'. The lack of resolution is then toyed with, “no-no”, in an aba chain that ultimately stumbles into the concluding phrase. The advantage of hearing in this way is that it lets us understand a connection to the previous measures: the dyad (a-b) which linked the tonic and dominant phrases, is here continued from the *c*[#], whose duplication accentuates its presence. The concluding phrase can now also be read as anacrusic, where the *e*' acts as anacrusis to the *d*', initiating a process that quickly summarizes the tessitura of the melody. Again this is a slightly odd reading of the phrase, but when thought of alongside the text, which

tonic phrase dominant phrase sub dominant phrase extend compress cadential phrase

12 13 14 15 16 17 18 19

Dol - ce mi par - ve un dī, un dī mi piac - que a - mor, ma non è piu - co - si, no, no, ma non mi - pia - ce an - cor.

Legend

- projective (potentially meaningful duration)
- projected (potential of potentially meaningful unit)
- x - denied
- ? - unknown beginning (anacrusis)
- | - beginning
- \ - continuation
- / - anacrusis
- || - break

Figure 5.14: Collated metric processes mm. 12–19

quickly reorients all the preceding amorous feelings as lost, it becomes more relevant.

To illustrate the metrical complexity that undergirds these two concluding phrases and summarize the metrical content of the first quatrain, in figure 5.14 I return to Hastian analytical rubrics. The sense in which the sub-dominant phrase is extended is seen with the large backslash—a continuation in the context of an early ending. But where does this continuation lead to? The cadential phrase becomes a large anacrusis that finds its beginning only in the penultimate beat. The figure also introduces the notation of metrical projections beneath the stave. The notation of projections, their denials and realizations of both initially projective and then projected durations adds a degree of finesse and explication to the onset-continuation notation. This birds eye view of the metric processes allows the observation that the projective durations increase over the first three phrases only to be cut back suddenly by the cadence. This metric mapping supports the melodic extensions and compressions described above.

In figure 5.15 I summarize some of the melodic and rhythmic processes that have been discussed so far in a single illustration. Here we get a clearer picture of how the second two phrases are involved in drawing out implications from the first two (becoming in some sense “thinner”). The initial process is dovetailed with a high level process that is attenuated in the subdominant phrase and led into the rhythmic complexity of that phrase’s extension. The high level anacrusis of the cadential phrase is a kind of summing up of the high level pro-

cess of the first three phrases—the summation is descending rather than rising. By taking the ascending processes of the first three phrases and compressing them into a single anacrusic descending process, the cadential phrase carries all three forward. At some level, we can say that there is a rhythmic process that carries the opening anacrusis into the conclusion, whereby the conclusion turns the anacrusis from lead in to lead out. Of related interest is the gradual compression of the process that leads into a metrical question, launched by Lilla’s “no-no” (labeled with a question mark in brackets in figures 5.14 and 5.15).

The musical score is written for a single melodic line on a grand staff (treble and bass clefs). The key signature has two sharps (F# and C#), and the time signature is 6/8. The score is divided into three systems. The first system begins with a measure marked '7' and a bracketed '5' above it. The second system begins with a measure marked '12'. The third system begins with a measure marked '12'. The lyrics are written below the staff: 'Dobemipare un dì, un dì mi pique amor, ma non è piu co-si, no, no, ma non mi piæe ancor.' The music features various dynamics including *p* (piano), *pp* (pianissimo), and *f* (forte). There are also performance markings such as slurs, ties, and a large diagonal line indicating a continuation or a specific performance technique. The score ends with a final measure marked '6' and a bracketed '5' above it.

Figure 5.15: Combined Rhythmic and Melodic reading (mm. 12–19)

At the level of analysis suggested in figure 5.15 it may seem to be easier to just use Schenkerian notation. But there is a big difference. In figure 16 I perform just such an analysis with the odd addition of the “inner voice” rise from a to d' . The difference is firstly that the focus on an interrupted descent erases the gradual attenuation of the ascent. Secondly, the complexity of the rhythm is erased by the apparently uniform four bar phrases. The multivalence is, if not erased altogether, seriously suppressed. These erasures are not merely a function of the graph’s inadequacy—I understand that the example might be read as a “five line” with an opening rise to scale degree five. But even if the archetype was changed and the rising inner voice was removed, the suppression of multivalence would remain; the problem is not analytical as much as it is systemic. The graph looks to the manner in which the piece elaborates an archetype rather than finding an archetype that allows the piece a particularity. The movement in figure 5.15 is all process finding complexity and multivalence, the Schenkerian graph of figure 5.16 is finding a distinct lack of multivalence.

5.4. Temporary conclusions

5.4.1. Multivalence, Performance, and the “right way”

The above analyses are always open to question and explication (that is what analysis is, in the end, about). The analyses in this case were trying to come to terms with Platoff’s characterization of the melody: the notion that Martín was at once a master of melody, but it was melody lacking in accompanimental density. The singer was put forward as the one who could

Doke mi parve un dì, un dì mi piac - que a-mor, ma nonè piu co-si, no, no, ma non mi__ pia - ce an - cor.

I V I IV V I

12 13 14 15 16 17 18 19

I 6 6 V 6 I [V⁴₂] IV⁶ 6 5₃ 6 6 V⁴₄ 5₃ I

Figure 5.16: A Schenkerian interpretation of the opening

fill in those spaces. But the above analysis has been without a singer, and has shown that there are multiple musical processes that carry forward. What position do we want to put the singer in with respect to multivalent processes? Or what does a multivalent analysis of the “carried-forward” tell us about performance? For a temporary conclusion, if we are to embrace the “open to question” aspect of analysis, then we should firstly allow that a performance will never be determined. A best performance will be one that is richly meaningful for some particular time and setting, and this could mean that the analytical questions are moot, that new questions are raised, or that another valence is added. Whenever something is carried-forward, we are given a sense of this particularity and indeterminacy of meaning.

As for the idea that the job of delivery rests in hands of the singer, when is it not the case that this is true? Our best performance, one that is richly

meaningful, carrying something unthought forward, is always in part the responsibility of a singer, but it also the responsibility of the audience and the context—every particular performance is a crossing of these elements. What is interesting about both Narmourian and Hastian analytical techniques is that they are particularly suited to thinking outside of the epistemological confines of “the right way” to do something. The idea that there is a “right way” is functional at the level of the beginner; we say “do it like this, no, not like *that*” and so on. But this beginner’s right way is equivalent to a set of training wheels that will be taken off when it comes time to make music multivalent and to carry forward the implicit. If there was a “right way” to carry forward the implicit, then there would be no such thing as the implicit, only an explicit; and while the world is continually seen as somehow explicit and copyrighted, this is not a world that could produce the kinds of radical shifts and insights that it has so far done. To imagine a “right way” to carry the implicit forward is to obliterate the implicit—a kind of dynamite for the eradicating careful performance. If a right way is a single way, an ideal historically informed way, then nothing is carried-forward because there is no sense of the response of the as-structure. Without the relative variety of response there is no grist nor the possibility of awareness.

These techniques, Narmourian-Hastyian are still suitable for living in a way that doesn’t begin from a deadly boring “right way”. The “right way” imagines that the production of the music is somehow a mechanical articulation of the knowledge that one has of the “right way”. It is a “head-centric way”; it says

that the knowledge is in the head as an ideal that must be performed. But the implicit must be “found” outside of the head, there is no other way for the implicit to work. Because it is found outside, it is as volatile as the rest. Tomorrow the finding might be something else entirely, just as it might be something else yesterday.

Narmourian processes are always outside of the cognition that they apparently depend on. They are demonstrations in the world, pointing at aspects of melodic motion in the world.²⁰ The tools that Narmour developed are like rulers in their worldliness. Rather than asking how a piece of music conforms to an idea, the answer to which is always interesting, Narmour’s ruler gets applied to the music and we see how the music measures. This worldly measure is why I have been using the notion of geometric. These are very complex rulers, and their application to music, clearly the most recalcitrant of the arts, is difficult or at least evasive of mechanical formulation. So even though these processes are worldly in origin, they seem to require a being-in-their worldliness, a resident analyst who sorts out this and that usage. This being-in the worldliness of a tool is what I have been thinking of as dwelling, our residing in the tool as it performs in the world.

Hasty’s projections are equally rooted in the world, and this is bizarre for a theory that talks of a projective sense. For a projection is outside of the present, and by this account, one realistic conception of the world might see

²⁰An explicit relationship between bodily movement and Narmourian process is discussed in chapter 4, but all along I have maintained that the processes are outside of the head—they are environmental relationships.

it as false or “head bound”. Does the world care about the future? Doesn’t it simply “world” according to physical laws of harmony? As a physical world that does not project, a division emerges with a world on one side and an imaginative being on the other.²¹ But this world without projection would be so strange that we would not know how to live in it. The world is rich with projection: the tree cares about the future as it branches and shields the ground from the sun and simultaneously uses the sun’s energy; as it creates a space of refuge in its shade, as it fruits, saps, grounds and dies it projects and cares for the future. The wave that breaks cares about the future. Could it break any other way? Every moment that the wave unfolds tips outside of itself: the ripples talk to the wind, a flash of light to the sun, every moment projects and cares for the future. It is a fiction of man’s plundering the world’s resources that we alone can care and project, we are very much not alone. There are many levels in which we can talk about musical time, but every one of them is found in the terrestrial world.²²

As worldly, these analytical tools call us into the dynamic and indeterminate chaos of complexity. The idea of *the* “right way” is simply not an appropriate question in the context of the worldly. A good performance, filled with rightness, is not equivalent to the “right” performance, nor is any analysis. And so we find ourselves on the brink of collapse: What? no right way? Are you nuts? the world will descend into anarchy! But here I propose we

²¹The “two worlds” view is discussed in more detail in chapter 1, §1.2.3 ff.

²²On the terrestrial nature of time see Zuckerkandl in Zuckerkandl, *Sound and symbol; music and the external world*. Zuckerkandl’s position is complicated by my understanding of musical “finding-time” in chapter 4.

shift our focus from manufacturing a singular order to engaging the larger order that affords our movement in a multivalent structural face.

5.4.2. The problem of simple twos growing out of a complexity: a seductive return to the aria

Let's begin with this problem of phrase length. As Platoff suggests, we can distinguish Mozart's *Garden* aria because of its three measure phrases versus Martín's which "are nearly all of two measures."²³ On what grounds are they two measure phrases? If we look at the score and count the measures, each seems to take up two, but the phrases when considered in their complex becoming appeared as a growth where each successive phrase realized more than the last. In tandem with the processes, I suggested that each phrase carried-forward the previous. How can we reconcile the notion that the phrases are equal "twos" when they are organically growing?²⁴

There are two problems here; the first has to do with multivalent hearing. Do we hear the bars? And do we still hear the bars when we hear, or better, perform the complex becoming? A strict phenomenalist might be inclined to argue that we only "hear the bars" after the fact, and that these bars have more to do with the notation of the score than they do with the music. For

²³Platoff, "A New History for Martín's 'Una cosa rara'", p. 97.

²⁴Organicism is normally a term used to talk about the mastery of the underlying form; that is, it is a Schenkerian term referring to a particular understanding of a "root" the *urlinie* and the surface, where the organic refers to the wholeness of the unfolding, *ur-structure*. This is the sense of organicism that Kerman rubs against when looking for a way out of analysis, but here I am using it in a way that needn't preclude works outside of the classical tradition, it is the recognition of a structurally sound system (Joseph Kerman. "How We Got into Analysis, and How to Get out". *Critical Inquiry* 7/2 (1980): pp. 311–331, p. 320).

this view, the bars are “epiphenomena” or abstractions that get in the way of the music’s music, so to speak. This kind of orthodoxy to “pure listening” is surely unwarranted and simplistic. The interest of the phenomenalist is in a singularity, but the multivalence I have so far discussed puts any thought of a singularity at rest. In hearing a multivalent becoming, we are not choosing one hearing over the other—that is how to hear it as an ambiguity. Hearing a multivalent structure is hearing a becoming-other where a process reaches out of itself and gives voice to the structure. But there is also a real, phenomenal apprehension of simultaneous metrical becomings. The bars are present not only because the meter has been established in the introduction, but also from the steady ticks of the harmonic progression, which, like Mozart, occur at the passing of a bar. We hear both, and analysis invites us deeper into that hearing.

Yet at the same time that we can hear a heterogeneity of processes, when we choose to focus on some aspect, we extract a single phenomenon: “That becoming is a two-measure phrase!” The extraction of aspect comes with the objectification of the phenomenon and leaves invisible in its wake the complex becoming that gives rise to it. Perhaps the strength of the aspect-structure, its robust quality, contributes to the sense of rightness that accompanies the observation “two-bar phrase”. This answers of hearing simple twos out of a dynamic growth: the becoming of one into another is already a case of carrying-forward. Even at the minute level of two measures we are in the presence of the implicit structure. The implicit structure is everywhere! The

question is, how is it possible to illustrate such a global phenomena?

The implicit structure is not possible to illustrate in the traditional sense of illustration because it is implicit, and because it is an indeterminate, yet always exact, finding. The task is thus to see it in operation, to catch it as it disappears into the concrete. At this level of analysis, we can begin to see what it is that we are sinking our teeth into when we speak of stylistic difference or individual voice. With this sensuous promise let us return to the garden for the second quatrain.

5.5. B: Centering on a displacement

The B section, wherein the second quatrain is set in the key of the dominant, begins with a phrase that inverts the direction of processes in the beginning. Instead of a rising third, there is a descending third labeled as a large process downward in figure 5.17. The harmonic and melodic relations to the opening seem to be missing something. The B section is not as rich with multivalence. Perhaps as a result of the strong relation yet thin multivalence, the initial phrase ends with more finality. Why might this be?

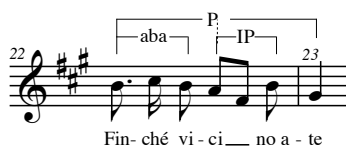


Figure 5.17: B section melodic processes, first phrase (mm. 22–3)

One plausible understanding is that downward motion is more conclusive than upward, perhaps a connection to the articulation of a question versus a

statement.²⁵ Another understanding might point to the harmony, which in the former moved to the less-stable first inversion of the triad where here it is in root position. This second possibility is unlikely, it seems just as likely that the harmony was added in such a way to make the melodic difference more present. Even if the harmony came first (which I doubt), we could say that the melody is constructed in such a way to hold the effect constant. Either way, what I am thinking about here is the melody, which always has a harmonic sense to it that is derived from the melody. A simple test of the inversion thesis is to play and sing the song with different harmonic configurations—the inversion of the chord does not change the melody. If, however, you play the wrong harmony, the wrong factor rocks against the melody. From this simple experiment we can rest assured that melodic process is harmonic more so than harmonic process is melodic. Or, the exact sense of a melody's harmony is other than the harmony's particular voicing.

This notion of a melody's harmony is not the same as a compound melody because it does not argue that the melody is implying a harmonic frame. It is something far less specific than a harmonic implication that emerges simultaneously with an understanding of melody. The melody's harmony is implicit to the melody. On harmonizing a melody, really playing and hearing a harmony, we are making the implicit explicit, but there remain other ways of harmonizing that would equally tug at the melody's implicit structure. So what we want to know here is not easily explained by the harmonic change.

²⁵On the relationship to conclusiveness and registral direction see discussion in chapter 4, §4.5 of Allanbrook, *Rhythmic gesture in Mozart : Le nozze di Figaro & Don Giovanni*.

The melodic change still remains unspoken. The change might be accounted for by the question: How is it that the melody does not evince the same plurality as the opening?

Recall that the opening got significantly shaken up by the various degrees of anacrusis that were assigned to the first beat. The interval process only became apparent when the process began on the last eighth note of the beat (figure 5.6). The rhythmic aspect shed light on the interval process. But if we imagine the same thing here, there is no equivalent emergence. There are two reasons for this apparent sterility. First, the “aba” does not have the same quality that the Process has: it duplicates an interval, and it returns to a pitch. There is a stronger sense of rest or belonging in an “aba”. The belongingness mediates against the possibility of thinking that the third note is the arrival from an anacrusis—though it doesn’t exclude the possibility, there are many cases of a dotted figure being anacrusic (e.g. Beethoven’s Op.119 n.1). The second reason is that if we imagine that the aba is dovetailed onto the following 3 notes (a Process) it doesn’t make sense in terms of the phrase’s relation to the opening, which in neither of the two cases considered contained a Process at the lowest level (cf. Figures 5.2 and 5.7). Imagining a competing series of processes here would seem to argue for a nonsensical relation; in light of the preceding observations it would be an unwarranted break in the implicit structure of the piece.

The relationship between the opening phrases of the two sections is not a transformation in a mechanical sense that pulls them towards each other.

Although at the highest level, we could talk about a Process of a third that initially rises and is subsequently inverted so that it falls, this reading would be a symbolic interpretation of the figures that misses the important differences between them. In figure 5.18 I compose a situation that is a more literal transformation. The high level Process of a descending third is still present but the relationship to the opening is made paltry. The reader is invited to sing or play both examples and hear the simplicity of the recomposition. The missing *b* from the *aba* and the Interval Process corresponds with the lack of development in the recomposed version. We could think of what actually happens as a “developing variation”, or a developing inversion, but unless the development is accounted for in terms of the continuity between each process it is a moot point. Of course, it is already an anachronistic stretch of the term “developing variation”, which is typically utilized to discuss the developing processes characteristic of the 19th century, so to start and think about it as at play in a composition of this sort is to risk defusing the term’s meaning altogether.²⁶



Figure 5.18: More “exact” (hypothetical) transform of m. 12 into mm. 22–3

²⁶Schoenberg’s term is discussed in Arnold Schoenberg and Leonard Stein. *Style and idea : selected writings of Arnold Schoenberg* (London: Faber, 1975). Schoenberg found the term to be applicable to all “homophonic” music, but it has largely come to be applied to the drama of Romantic music from Beethoven to Brahms; see for instance Walter Frisch. *Brahms and the principle of developing variation* (Berkeley: University of California Press, 1984).

If we look at the relationship between measures 12 and 22 (figures 5.1 and 5.18) in terms of processes there is a similarity that is greater than in the actual composition. It is more plausible to hear a multivalent anacrusis in the recomposition than it is in the original (compare figures 5.17 and 5.18). This thinning of the multivalence in measure 22 makes the connection to measure 12 stronger: it has more differentiation and concretization and this aids in its attraction to the original by way of its drawing on the original's implicit. Measure 22 is a musical finding; it finds an implicit aspect of measure 12 without threatening to co-opt its well of multivalence. The multivalent saturation of Interval Processes in m. 12 is being pointed to by the thinning of m. 22. This thinning is what affords the greater sense of resolution to the phrase beginning in m. 22.

The Interval Process is beginning to take shape as something that is in itself a richer performance. It is more complex and suggestive than a Process and this may have more to do with a multiplication of possibly implicative trajectories coming together than it does with the closural ambiguity.²⁷ The Interval Process saturated m. 12 at many levels. The complexity of this saturation is thrown into relief by the restraint of m. 22. While there is nothing predictive about the initial processes, that is, there is no aspect of m. 12 that implies m. 22, the latter is no less responsible for making m. 12—throwing its multivalence into relief. By isolating the Interval Process, m. 22 contains

²⁷Closural non-closural is a key element of Narmour's discussion of these processes, and with an interval process there is both the reversal of registral direction (closure) and the projection of intervallic process (non-closural). See Narmour, *The analysis and cognition of basic melodic structures: the implication-realization model*.

a strong relation to m. 12, but this relation is not one of motivic equivalence any more than it is a “processural” equivalence. What, then, is it?

As defined above, the activity between m. 12 and m. 22 is a large scale presence of a carrying forward. A dormant aspect of measure 12 is made manifest in measure 22, carrying forward the implicit structure of the original. There are a few properties of this movement that we can point to. I have already mentioned that there is a much stronger sense of completion in m. 22’s phrase, and I suggested a couple of possible reasons for it (registral direction and harmony). To these suggestions I add that the movement of the interval process into a beat puts it into a neat package of “three” versus a complex package of multivalent and denied twos. The threeness allows for centering movement that focuses on an aspect of m. 12; it moves towards and reinforces a “sense of center” (to use an Alexanderian term).²⁸ Secondly, we can say that there is a “smooth” quality to the movement of carrying forward. We can illustrate this quality by placing them beside each other as in figure 5.19. Sung together as figure 5.19 suggests, they form a unity that creates a larger period. Each phrase reinforces the other, clarifying the particularity of the carried-forward.

The centering of the phrase via the Interval Process contains a complexity which remains undefined, the carried-forward is rich but not singular. The

²⁸Alexander’s explanation of living structure would require more space than I have here. The general notion is that there are 15 properties which account for structure preserving transformations in both nature and art, one of these properties is the creation of centres. See Christopher Alexander. *The process of creating life: an essay on the art of building and the nature of the universe* (Berkeley, Calif.: Center for Environmental Structure, 2002). Below I consider a parallel metric centering.

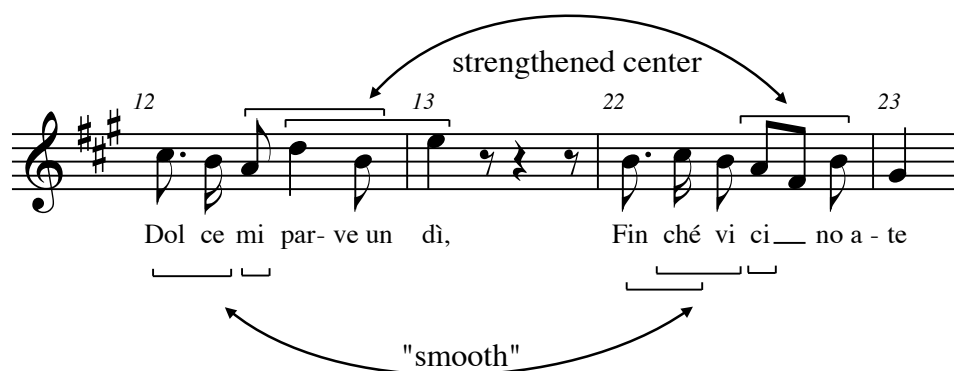


Figure 5.19: Aspects of transform become a self-selective phrase

centering provides a certain amount of impetus for the reading of the following phrase (figure 5.20). Here I create two possible readings, one that privileges the aba and another (on the second stave down) that focuses on the Interval Processes preceded by a dyadic second. As a multivalent structure, it combines both the processes of m. 22 (aba and IP) into a series of dovetailed structures that can be heard as both an aba and an IP, and in both cases there exists a higher level descending Processes. The complex multivalence extends the phrase, which in turn envelopes the next phrase—that of m. 26. The third phrase acts as an extension and cadence for the first two, the B section is thus a very different animal than the first quatrain, creating a three phrase period with a focus on the center, or middle phrase.

The three phrase period of the second quatrain deserves some formalization. Figure 5.21 charts the projective meter for this collection. As in the case of the first quatrain, the first beat of m. 22 is heard as anacrusic, which then frustrates all attempts to establish a reliable meter for the phrase that is bro-

22 23 24 25 26 27

Finché vi-ci_no a-te vi - ve-a mio ca - ro be-ne, ch'io to vede-a per me.

22 23 24 25 26 27

vi - ve-a mio ca - ro be-ne, ch'io to vede-a per me.

Figure 5.20: Melodic processes (mm. 22–7)

ken off in m. 23, but continued in such a way that the second phrase, for the first time, realizes a larger phrase rhythm that incorporates the third phrase. We shouldn't really call the third phrase a phrase, because it ultimately acts as an extension. This extension is a high level anacrusis that therefore has an imaginary, or questionable, beginning. At this level the extension is a retroactive anacrusis. The large scale anacrusis informs the consideration of reading the first beat of m. 26 as an anacrusis—all successive phrases have had this element thus far so it is arguable that by this point one expects is.

What is it that a phrase extension does? With a graphic in hand, the illustration is clear enough—it extends the phrase. In figure 5.21 the extension is the realization of a measure long projection beginning in m. 25 that is also the realization of the projected duration (dashed line) from m. 24. The projection and the emergence of a metrical entity that rubs against any possible two-measure phrase rhythm is a becoming, it never stands as still as it does in the graphic. The becoming in this case picks up on a latent feature of the second

Figure 5.21: Rhythmic processes in three measure phrase

phrase, a projected duration, and fits the third line of text, what would be the third phrase, into it. Note that in this case the projected duration is set into being via the phrase's closing on the second beat of m. 25—the same rhythmic feature that the third phrase had in m. 17 at the “no-no”. Figure 5.22 recomposes measures 25–7 so that the third phrase does not become an extension. To gain identity as a phrase proper, I trimmed the previous phrase back into a single beat (m. 25 b.1) and added an anacrusis to break the possibility of realizing the latent projection. To give the phrase its own movement forward without offending the harmony I took out the cadentialesque processes and replaced them with a more linear motion up to the $f\sharp'$. Of course, this new phrase would have to continue in order to be viable, but I elliptically cut it off because its purpose is only to try and get at what it is that a phrase extension is doing. What is counterintuitive is that the extension is the realization of a latency in the rhythm, a projection, and this realization is there by virtue of

its *not* being cut off. In this demonstration the phrase regularity is formed by interrupting what would otherwise be an expanding process.



Figure 5.22: Recomposing mm. 25–7 to erase phrase extension

As an interruption, the metric becoming is really more of a dissonance, reversing the usual understanding of an extension as dissonant. What this begging for nuance suggests is that the consonance dissonance metaphors are perhaps not as well suited as we may have hoped in discussions of meter. The technique of pointing to what it is doing by erasing features with a recomposition that is another kind of doing does not really speak about a consonant or dissonant “thing” in terms of a definitive category any longer.^{footnote}Of course, consonance and dissonance are not arbitrary categories until theorists imagine them so, in actuality they are descriptions of process in the world, as relations between sounding bodies. By recomposing we are looking, so to speak, from within and hearing the process. But this only returns to the original question, What is it doing?

The sense here is that the extension reinforces the phrase that is extended. By composing a new phrase that “breaks” the rhythmic trajectory, it becomes possible to point to how the original phrase “fills in” and gives more weight to the center of the preceding phrase. The reinforced phrase develops three

centers, a larger central one flanked on either side by processes (figure 5.23). We could call the middle center the point of greatest metrical buildup, where there are increasingly larger durations being projected. Of course, what is being reinforced is a point of instability—a displacement. The greatest point of instability is located in the $f^\sharp$ of m. 27. This unstable point is a resting on the dominant of the dominant, realized on $\hat{2}$ in the key of the dominant. By reinforcing this center (a harmonic instability) in the first three lines, the final phrase is setup to prolong this state by finding a resolution.

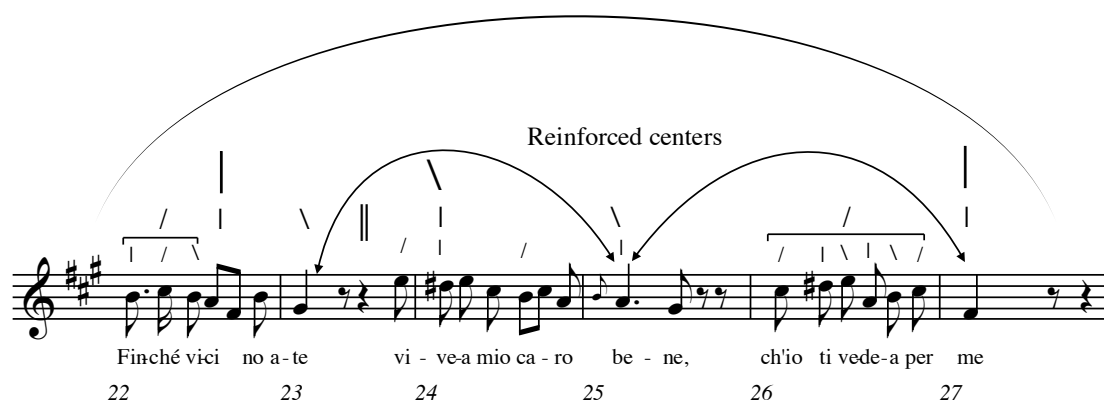


Figure 5.23: Six measure period acquires metric centers (mm. 22–7)

The final line from the second quatrain is set to a repeated “*lamento*” figure, the descending chromatic fourth.²⁹ But before getting too excited about the presence of a musical symbol, the ultimate mode of arresting a musical doing, notice how this particular phrase essentially continues the metric accre-

²⁹A detailed study of the *lamento* chromatic fourth is in Peter F. Williams. *The chromatic fourth during four centuries of music* (Oxford: Clarendon Press, 1997). Clearly it was a standard device for illustrating longing and there are good ecological reasons for it affording such an understanding: it is a sobbing sound, but it also goes outside of the tonal domain thereby breaking away from the invariance of the key.

tion that the first six measures of the B section perform.³⁰ Figure 5.24 shows how the onslaught of rhythmic regularity allows for the projection of a two measure phrase that can only find its realization in the vague realm of the fermata—I read it as not realized, literally, although it is very possible that it realizes *something* in that fermata, something like a lack of realization.

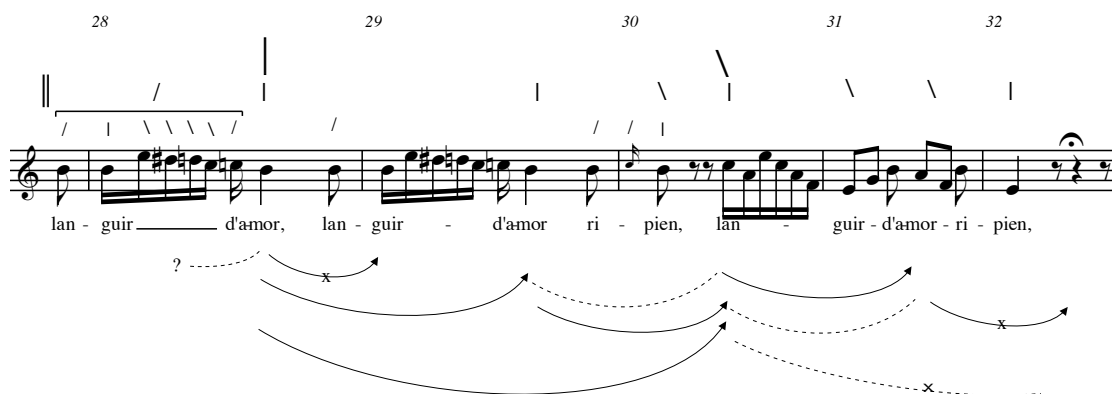


Figure 5.24: Metric processes in extended phrase, (mm. 28–32)

Melodically, this final line continues to reinforce the unstable centers, delivering a resolution only after the virtuosic passage work of mm. 30–1. Rather than regarding m. 28 as a resolution, Figure 5.24 argues that it becomes anacrusic to the center that has been established, the offbeat applied dominant of m. 28 is in fact the point of rest. This point of view allows the formation of large rhythmic projections that define the onset of the passage work (m. 30 b. 2) as a continuation whose conclusion is found in the fermata

³⁰Platoff remarks that this moment is where the aria “fully lives up to the atmosphere achieved in [Mozart’s] ‘*Deh vieni*.’” Platoff, “A New History for Martin’s ‘Una cosa rara’”, p. 97 Beginning again from Platoff’s reading, I am here wondering if we can’t find more concrete evidence of a material location for what we refer to as atmosphere—it must be more than the timbre of instrumentation.

of m. 32 (or more precisely, it is found “wanton” because the fermata doesn’t actively define a point of contact for the projection). There is a melodic process that corresponds to this large rhythmic projection; figure 5.25 sketches the processes of the final line (mm. 28–32) such that there appears to be a high level Duplication afforded by the two repeated lamenting Processes. Like the extension of the first section, in the third phrase, we can note that there is a thinning of the multivalent complexity that accompanies a rhythmic accretion. The busy ending arrests the thin processes and sets up the undefined implication, a “wanton” space, for the fermata. In addition to being the thick space of metric denial, the fermata now contains the questioning of a process that has been initiated without any follow through.

Figure 5.25: Supporting melodic processes (mm. 28–32)

Hearing the B section as a process of finding centers adds a good deal of nuance to the idea of a prolongation. The final phrase prolongs the instability found in the extension of the second, but that instability is a center, a place that calls for resolution yet in many senses already has the resolution it calls for. A center emerges as a point around which there is a gathering, and through this it has a sense of strength or reinforcement. This kind of process affords dramatic understanding as well, Lilla is languishing in a manner that

dwells in its lack of resolution, and the listener is invited to dwell in that space as well. Seeing the apparently linear processes as the reinforcing of a center allows further reflection on the manner in which the piece is a dwelling in the implicit. In hearing this dwelling we begin to get a sense of the productivity of the “rests”, ultimately leading up to the unmeasured rest of the fermata. The rests contain a good deal of the action in this aria, a quality that may have led Platoff to accuse them of “threatening the forward motion of the piece.”³¹ Yet here the rests are more productive of the piece’s doing than they are threatening its undoing.

5.6. Coda

The above analysis suggests that the piece contains its own systematic processes that are doing most of its productive work in the instability of silence: a phrase extends, gets lost, or is truncated in silence. The first moment of silent prowess was marked by the “no-no”, Martn’s repetition of the text. The coda makes the “no-no” moment the crowning of the piece. Here, the instrumental run up the scale carries the vocal melody back to “no-no” territory (figure 5.26). Without drawing yet another analysis it should be clear that in terms of multivalence, this is the thinnest moment of the piece. Not only does the voice instantiate a clearly iterative processes in the measure (on “no-no”), but the three measures are also repeated. The “no-no” has here ceased to be a moment of metric instability or challenge in favor of becoming its other, a stable phrase. The crowning moment thus draws a stable point from the

³¹Platoff, “A New History for Martin’s ‘Una cosa rara’”, p. 97.

multivalent beginning, but just how stable is it?

Figure 5.26: Coda, crowning excerpt (mm. 40–3)

I call this moment the “crowning” because of its relation to Mozart’s “garden aria”, which culminates in the imagined crowning of the Count (with roses). Of course, the Mozart moment doesn’t involve metric or melodic stability, it is the moment of disintegration.³² Yet there is a similarity that pulls the two arias towards each other while at the same time revealing a very different approach. The Martn gets into a stable period but at the same time proclaims “no it doesn’t please me!” The moment becomes absurd after the first repeat and we can begin to suspect that there is some sort of indecision, something that haunts the repeat. Even without invoking Freud’s repetition-compulsion disorder, it seems clear that something is wrong.³³ Musically the phrase has concluded (no-non mi *piace* corresponding to dominant tonic harmony), and there is nowhere left to go. But the instrumental run simply picks it up and leads to a repeat, and again, and again. The playful return of the instrument undermines the credibility of the rejection of pleasure. We are

³²See chapter 4.

³³Repetition-compulsion is the idea that one attempts to master the uncontrollable by performing or revisiting a familiar loss, the concept is found in Freud’s essay *Beyond the pleasure principle* (New York: Norton, 1989).

brought to a point of paradox where, like Susanna's finding herself a little too involved and lost in her explicit imaginations, Lilla's certainty becomes its own uncertainty through performance.

This kind of dwelling on two high notes, for a competent soprano, is bound to be a compelling experience. If she can resolve the notes with ease it will afford multiple understandings by crystallizing into its own paradox: conclusiveness and repetition. The crystallization is found in the world, in the voice and its performance. The paradoxical finding belongs with listeners too, who equally perform the repetition and thereby pull their own selves into the paradox of negation and desire.

5.7. Post-Coda

In summary, the processural nature of this aria involves rhythmic processes growing increasingly large alongside a corresponding thinning of the multivalence in the melodic processes. It is an organic process whereby many centers are established through increasing differentiation and individuation. The unfolding is found *in* the processes, it is the processes *themselves* that are finding organicism.³⁴ This organicism contrasts the usual understanding of musical organicism not only because it is located in the "face" of the music rather than a foreground-background relation but also because it argues that the production of the organic is internal to the process of the piece. It is a small step

³⁴For an account of organicism in Schenkerian research see for instance William Pastille. "Music and Morphology: Goethe's influence on Schenker's thought". In: *Schenker studies*. Ed. by Heide Siegel (Cambridge ; New York: Cambridge University Press, 1990): v. and Ruth A. Solie. "The Living Work: Organicism and Musical Analysis". *19th-Century Music* 4/2 (1980): pp. 147–156.

away from thinking that the process is finding an archetype and a larger step away from thinking that an archetype is finding a process. It is a process that produces its own finding process.

By identifying these processural features we are a long way away from two-measure phrases and singer-dependent melody. The piece is clearly very different from Mozart's in how it finds, and looking at the two together is productive in terms of pointing out difference, but to find difference as deficient is something else altogether. Characterizing something in terms of a deficiency gives voice to a power structure that precedes critical engagement rather than the music that affords the engagement. Yet the power structure that is given voice does not literally speak, and nor is it referenced—it simply is. The strength of this power is measured by its lack of explicit recognition. By recognizing the covert programs of our analyses I don't mean to get rid of them, only to use them as leverage into what it is that music does.

The tenor of the power structure that precedes is not limited to the musicologist, it has become something of a necessity in a lot of modern music. The composer who can argue that they know what Mozart or Martín was doing, or what he *has* done, clears the terrain for creating the “next” great thing. But at the same time that terrain is cleared (or leveled) the piece is placed into a world of objects. The next great thing is based on the notion that we cannot repeat, or copy, and we must *add* to an ever-growing field of objects. What I am saying here is that we do not yet know, on a musical level, what it is that makes them incredible. And perhaps not knowing could get us out from

underneath the modernist march of progress. Rather than using ideology to clear terrain, the conceptual equivalent to blasting, we might today start to think about preserving the terrain in a way that is meaningful to the current era. A first step towards such a project is to try and come to terms with the manner in which a piece is not an object, and the multiplicity of processes that set it into motion are still only barely understood.

By inviting the recognition of this lacunae in analytical work, I don't intend to reject all social realities: the making of Mozart, the power of continued presence, and the articulation of meaning. Rather, I am positing that there is a material basis within which those realities unfold, and our current frameworks almost explicitly reject that reality. Nor am I arguing that current analytical practices are wrong. They are as right as they relate to and produce interesting and novel hearings, but when they imagine themselves as complete or definitive, they foreclose on what it is that is valuable about them: their ability to invite further reflection and respond to uniquely valid circumstance. Far from rejecting musicological practices, I am trying to understand where they can take us.

*...you'd need to hear the bell ring before he has pulled it, and if
you're a minute late, away he flies into the most towering rage.*

M. Proust

6

Conclusion: Observations on where things went and where they might go

Over the course of this dissertation there have been several moments of conclusion, notably in the second chapter. This final section brings together those conclusions, points to the apparent cracks that need mending, and suggests what kind of future projects they imply.

6.1. From dwelling to self-selective production

6.1.1. Setting the stage, a reoriented method

By resisting the urge to understand a singular experience of musical aspect and reduce that to even more parsimoniously refined information, the first

chapter established a heterogeneous approach to analysis. In order to embrace the heterogeneity it was argued that an empathic approach to the material was necessary. The empathic, with its attention to the “being in” of analysis with an array of analytical tools was called dwelling. It was perhaps frustrating in its lack of a central concern or conclusion, but this lack of specificity was structurally important for the continuation of the dissertation. The first chapter opened up a space in which analysis was asked to embrace multiple understandings and nuanced tools for their articulation.

Chapter 2 attempted to lay some conceptual groundwork for the exploration of musical heterogeneity. There I charted agreement between the work of music theorist David Lewin and the conceptual tools of a “crossing”, a “selection” and a “dawning of aspect” which I use to “poeticize.” My conceptual tools were freely borrowed from philosophers Heidegger, Gendlin and Wittgenstein. Of particular note, for this chapter, was the “loop” that one gets in when trying to characterize the heterogeneity of expectation and revision. The paradox of expecting some resolution and thus already being in that resolution experientially alongside its displacement and then being in the displacement at the resolution which includes being in the resolution which includes... etc. Lewin posited a global solution to the loop where a watchdog notices things spiraling out of control and puts an end to it. I noticed similar loop structures in the production invoked by the language of a theory, but rather than posit some solution, I argued that leaving the loop open allows dwelling to get a sense for the structure that affords multiple aspects. Rather

than close the paradox within a system, effectively buttoning it up and pushing the perceiver away from dwelling into abstraction, I argue that the leaving it open allows us to get a sense for how theories are a dwelling's response to the as-structure.

The first two chapters set the stage for the more practical applications of the following three chapters. On this reoriented stage various interesting musical aspects began to crop up. The stage that is set, the position of dwelling has seriously shaken up my understanding of the value and procedure and goals of analytical activity—a reorientation of analytical methodology.

Of greatest importance to the change in the orientation of methodology is the focus on musical process as a property that is produced in the world and are thereby referred to as geometrical.¹ Listeners are invited to couple with this geometrical property. Because geometrical processes are external, the methodology moves away from a brain centered, cognitive approach. The degree to which we enter into these processes, is indexed according to the degree of our dwelling—there is nothing forcing us to hear in a particular way, or even to pay attention at all. In this orientation, process suddenly has a lot of conceptual importance regarding higher order formal structures and archetypes. In an external process-oriented understanding, form is made available to perception via a processural phenomenon. Although large scale form was not the focus of my analyses here, I looked at two complete arias

¹This is Alexander's usage of the term "geometrical" (Christopher Alexander. *The process of creating life: an essay on the art of building and the nature of the universe* (Berkeley, Calif.: Center for Environmental Structure, 2002), esp. ch. 6), in the application here it metaphorically summarizes the notion of the practical demonstration of processural shapes.

and a middle movement, and could thus extend the microscopic observations to larger wholes.

6.1.2. three analyses, three observations

Three related things strike me as unique observations from the three analyses of chapters 3–6.

1. The doing of a piece of music involves a process whereby it reaches into the implicit and selects latent aspects of itself. The selection can be many many things, a rhythmic aspect, a harmonic positioning, a processural realization and so on—all these aspects are related. By being a thing that is finding latency in itself, musical processes are what I call *becomings*; they are productions of self-finding. Secondly, the discovery of a piece that is reaching into itself is indicative of an understanding that is recursive rather than linear in terms that we normally understand, a sequence of discrete objects in time between which transformations are effected. The recursive understanding moves towards what it is that affords the latency, for in reaching in and realizing a latent aspect we get a sense of the conditions that are being probed, the *as-structure*. A sense of the *as-structure* is different from an understanding of transformation that relies on a single “seeing as”, like a transposition of notes, inversion and so on. To hear a transformation “as” a transposition, for instance, requires that we understand the *as-structure* producing a rational (mathematical) result. By contrast, understanding the content of a latency, in my analyses, involves a less rational and more accommodat-

ing as-structure. Though a transposition does rely on the as-structure, it analyses from the abstraction of points in harmonic space rather than the dwelling in process.

The sense of the as-structure that a found latency produces is further suggested to characterize what we call style in the sense of a particular musical voice. Mozart was seen as being able to navigate incredibly large leaps in the as-structure, pulling “twelve-tone” tonality out of an unlikely pair of processes, “the odd couple.” Mozart’s contemporary, Martín, had a very different approach; the latency found in Martín’s aria had a more closely combinatorial relationship characterized by smooth transitions and unstable centers. The style of Martín is more accessible, but it is an accessibility that is distinct from the evaluative notion of simplistic. On the contrary, there is a complexity of processes. While it would be foolhardy to claim that the key to style is found in the analysis of selective process, such analysis affords one way of thinking about it.

Another related observation regarding the self-selectivity of processes is the fact that in all cases the opening was rich with a multivalence that was ironed out over the course of the piece. This is partly due to the fact that the self-selection was most easily illustrated by reconsidering the opening and thus adding another layer to the multivalence, but it is more than an artifact of the theory and analysis. It is in part a fact of perceptual experience that a beginning has a privileged status, but the compositions looked at here are utilizing this fact to dramatic

effect. With the exception of twentieth century music it would seem like this gives partial explanation for the typical ordering of a piece: a fast or busy beginning, a slow and deliberate middle, and a fast ending. For example, first and second themes in a sonata, the *da capo* aria, the psalm tone bookended by antiphons, the minuet and trio and so on. Their are counter examples too, like the so-called French overture form with its slow homophonic beginning followed by a fast imitative polyphonic section. And there are many examples of forms that are often graced with slow introductions. So ultimately this observation would require a lot more time and support to be fleshed out, but it nonetheless seems prominent at the level of analysis that has been done here.

2. The temporality of a phrase emerges from multiple temporal processes. Like melodic multivalence, temporality is something found by dwelling in the piece and testing what it affords. In Mozart's garden aria, the phrase was seen as a retroactive recalculation that is instigated by an interruption. This elliptical quality is a finding of a three measure phrase in an interrupted four, and it is repeated on a grander scale in the conclusion of the aria, where a duple hypermeter is potentially heard as supervening a triple meter. The interruptive quality and the sense of "finding time" are at odds with the critical assessment of Mozart's music as balanced and sweet. Yet perhaps it is the ease with which Mozart's phrases find time that creates the sense of rightness that characterizes the experience. The idea that phrase is emergent from the interruption and constraint on

what would otherwise be naturally expanding was made apparent in the analysis of Martín's aria. In a very different way than Mozart, Martín extended and compressed phrases in a way that shifted and reinforced centers. Yet these various extensions were erased by Platoff's analysis that saw them as regular two bar phrases. My understanding that reversed the notion of metric dissonance is compelling primarily because it emerged from a processural and external approach—it was as if I put a ruler into the world and the result was unlike the expected. The notion that there is a violence associated with regularity might prove to aid in the understanding of many musics that employ regular meters.

3. The move away from singular structures to multivalent processes is a technique that reveals much in terms of the unique finding of a piece. Even more interesting is the attempt to understand how it is that these architectures of multivalent processes work together. To this end, the attempts to understand “smooth” relations, or the “creation of centers” is a step towards an entirely new way of thinking about process and the aesthetics or sense of rightness. Understanding the geometric relations of processes this way was only just begun (see §5.5 especially figures 5.19 and 5.23), but the varied toolbox that is presented by Alexander's fifteen properties presents a promising project for further study. Christopher Alexander. *The process of creating life: an essay on the art of building and the nature of the universe* (Berkeley, Calif.: Center for Environmental Structure, 2002) Establishing a vocabulary for talking about

processural relations would be a good way to allow various theoretical orthodoxies to explicitly confront how their theory gathers and explains the world.

6.1.3. Larger conclusions: A systemic change in thought

The introduction suggested a methodological shift with a change in thinking that is systemic. The dissertation has been “living” this other mode of thinking without deliberately reflecting upon it, and while any mode of thought cannot be adumbrated in full, a few simple characteristics have emerged:

1. The environmental context finds aspect.² The finding *creates* the two aspects of a metaphor or cross by bringing two . Simply put: It is the child who creates the parent—metaphors find aspects in the parent parts.
2. The finding is in the material world. We do not stand outside of the material, our thoughts and most poetic readings are directly involved in the material world. We are in the world already, navigating material processes and selecting aspects that are contextually meaningful.
3. The change in the direction of the metaphor means that our interactions with the environment in some sense produce it. From the creation of engineered landscapes so popular in suburban California to the cityscapes of the world, we are producing a constructed vision of the environment.

²Finding is a different thing than locating in this case. I have been using “finding” and “found” all along to talk about the production of some aspect. Locating it would imagine that it is already there, and its location needs to be pointed to, a finding is something that is active and directed, it contains the forces that guide the process.

4. The contextually appropriate nature of selection is not infinitely relative.

We all agree that we are in a single shared environment, and even though it is a manifold of processes, it is not arbitrary. The context of the selection cannot be predicted, but the ethics of the selection is a direct response to the context.

This way of thinking about the environment has been elemental to my analysis of music. Musical processes are material processes, they are demonstrations in the world, and they are many—opening to infinity. It is systematically different way of thinking about music in that it does not present closed structures and fixed explanations. It allows the music to be an opening to exploration. This systemic change in thinking does not need to follow the dead-end of aesthetic relativity in fixed systems; in place we have the beginnings of a discussion about the real qualities of dynamic and responsive systems which we are imbedded within.

Noting the presence of a new way of thinking about music analysis, it follows that it could be applied to a general educational program that integrates the study of science and math with music. Musical processes could be taught as discoverable, as a way to coax the student or students out into the environment and experiment with objects, their properties and processes. The value of such a plan would be twofold: it would challenge the institutional irrelevance of music and it would open up a more creative and experimental side to science and technology.

The systemic change in thinking is sometimes difficult, words and techniques become tools for what might seem to be an ad hoc construction or bricolage. Yet by moving in the direction that is more poetic than analytic we admit a particular humanity into analysis. This poetic dwelling in the text that is fundamentally human requires a certain amount of personification because we are admitting that the technologies of text, words, graphs, and so on are not only the productions of an individual, but are in a dynamic play in the world that feeds back into the individual. The technologies in some sense animate our being, and so allowing them a little agency of their own will resist a return to authorship drained of authority. It is standard practice to think of analysis as being strengthened by pasting over all of the dynamics that make it happen, we clean it up to make it reasonable but in so doing we wash out the human engagement. As difficult as it may be, the dissertation tried to work along these lines that coax the human into analysis.

6.2. Difficulties

The main difficulty that I have found with the techniques of analysis in this study is the tendency towards thinking about minutia. This is perhaps a function of the kind of detail that Narmourian techniques produce. Narmour himself spent a complete article analyzing the first phrase of Mozart's famously over-analyzed piano piece K.331.³ My attempt to use the Narmour's technical tools to articulate a heterogeneity of processes is bound to increase the

³Eugene Narmour. "Some Major Theoretical Problems Concerning the Concept of Hierarchy in the Analysis of Tonal Music". *Music Perception* 1/2 (1983): pp. 129–199.

quantity of analytical pros and suffer from a similar myopia. On top of this, I have utilized other theoretical practices, from Schenkerian graphs to Hasty's rhythm/metric charts, as well as other personalized comparative modes, like recomposing a phrase or imagining it recombined or imagining multiple dance instructors. Although I endeavored to realize this collection of methods in an unconventional manner, looking to larger processes and thinking about complete movements, the cost is many hours and many pages.⁴ It remains a challenge to come up with a method that consumes less space without succumbing to the "elegant simplicity" of a monolithic tool. The analytical technique that has been employed here requires the fine grain that a finely nuanced collection of analytical tools offers—including the ability to forge new tools.

There is a deeper dilemma here that is only beginning to become apparent. This has to do with the intellectual leaps that I make throughout. For instance, in §4, there are parallels made by stepping from movement to the understanding of process to the hearing of a phantom dance instructor to being in the world. Compressed into a single sentence these leaps seem incoherent, possibly unrelated and speculative. Can we argue that there is a parallel between biological systems that enable life and artistic products that enable culture? Why would I assume that they are the same? What if they are speaking completely different languages? A word can never be said to speak to itself, it is a language and speakers that utilize words. So why would I say that music is multiple processes that we couple with and attenuate as invited listeners and

⁴The attempt to look a larger scale can be seen for instance in §3.6 especially at figures 3.12 and 3.16.

then at the same time argue that the processes are their own finding, they are self-selecting?

The holistic assumption that allows for extreme relationships to be discussed seems to need to be made more manifest so that it can potentially be revised or made stronger. This kind of assumption usually contains elemental forces that are being brushed aside by the self evidence of the assumption. It may therefore be asked, What story is being told by the seeming lack of narrative alongside the holistic assumption?

The kind of heuristic analysis that allowed the interrogation of minutia and plurality here can be seen as hyper-reflexive, always looking to its own emergence as a kind of abstract rendition of the Narcissus myth. In many ways this reflexivity seems homologous to new music where systems are devised for their own articulation, where access to those systems is difficult at best, and finally, where the music seems to fade out of existence faster than it appears. What might this larger relation mean? There are two things here: first, the emergence of a musicology that is unafraid of contradictions that threaten its truth content, and second, the possibility for rethinking the experience of modern music not as articulation of some new and unique form or formula, but as the embodiment of loss or de-articulation: the loss of coherence, the end of narrative.

To a musicology that isn't afraid of its own erasure we can look at Kevin Korsyn's argument.⁵ Korsyn suggests that fractured world of musicology could

⁵Kevin Ernest Korsyn. *Decentering music : a critique of contemporary musical research* (Oxford: Oxford University Press, 2003).

follow his example of dialogic versus monologic studies. This method would fully represent, rather than repress, competing modes of inquiry. Our specialized languages and discourses might begin to recognize their own working, as Korsyn puts it: “maintaining a distance to ones own technical terminology, treating it with a sense of its contingency.”⁶ This new development towards a way of thinking about the field and its methodology, perhaps deeply related to current networking technology, is suggestive of many more applications.⁷

6.3. Future applications

How else might the techniques developed here be applied in the future? One way would be to start thinking about larger formal coherence. The analysis of a single aria was argued as an important one in *Figaro* but it also begs for a more complete thinking through of the opera as a whole. The role of Susanna’s mirrored reversals, for instance, sometimes referred to as the “hat motif”.⁸ The motif is seen as exclusive to Susanna, but understood and heard as mirrored reversals it is quite clearly heard at other points in this opera. What might the notion of an embodied finding in several instances add to our understanding of this opera and some of the much larger processes that it

⁶Korsyn, *Decentering music : a critique of contemporary musical research*, p.185.

⁷The idea of looking to multiple stories at once is interestingly studied by Hilary Lawson in Hilary Lawson. *Closure : a story of everything* (London: Routledge, 2001). Lawson looks to the manner in which a narrative brings about closure in a way that allows him to avoid monologic discourse. Korsyn’s work builds on that of Ruth Rosengarde Subotnik, see for instance her *Developing variations: style and ideology in Western music* (Minneapolis: University of Minnesota Press, 1991). A more recent collection that attempts to build upon Subotnik’s work is in DellAntonio, Andrew, ed. *Beyond structural listening? : postmodern modes of hearing*. (Berkeley: University of California Press, 2004).

⁸The so-called “hat motif” is noted by many, see for instance D. Heartz. “Susanna’s Hat”. *Early Music* 19/4 (1991): pp. 585–589.

performs?

The notion of self-selection that sees a process finding a multiplicity of processes obviates a study of theme and variation. Theme and variation is normally considered to be a transformation, or diminution. As a diminution, a theoretical structure is posited as a ground which is then decorated. The process oriented, geometric self-selection view explicitly rejects the idea that we interpolate a cognitive ground, preferring to expose the processural invariance as something that exists in the environment. Thus even though the diminution theory appears to explain many examples, a processural view would nuance the explanatory power of diminution. Further, the processural view would be able to confront examples where diminution is only partially satisfactory—a famous example being Beethoven’s *Diabelli variations*.⁹

It has long been a particular interest of mine to think about “findings”. In this thesis I have been using the Gendlinian sense of “finding” in predominantly musical situations. There are many other cases where a finding happens: when we solve a riddle, realize a poetic metaphor that works, when a contrapuntal canon is realized and so on. In all cases, a finding answers a question that was unspecified yet had clearly “felt” answers in the body. It was this idea of finding that led me, in part, to a study of the cavatina, which relates to the cavata, whereby a kind of aria is excavated, or found, during the course of a recitative. It would be interesting to return to these little operative moments and think about them more holistically and processurally: what kinds of processes to

⁹This element of the *Diabelli Variations* has been discussed in depth by William Kinderman. *Beethoven’s Diabelli variations* (Oxford: Clarendon Press, 1987).

they perform, how do they change and eventually disappear over time, what needs do they serve? For it looks like the cavatina is a product of dwelling whereby the singer comes across a distinct sense of the implicit. The text is being delivered and then something gives way, an answer is found, a crack is exposed, and the combination is realized by a cavatina. This movement into the cavatina is perhaps the explicit acknowledgement of the implicit, and here might be another place where opera continues to enthrall and stun its doers.

One last difficult application for the future would be to apply the ideas developed in this dissertation to composing new and engaging music. This would involve constructing musical works that seek to illustrate the notion of “finding time” as developed in chapter 4, or the complexity that results from self-selection as discussed in chapters 3 and 5. This project might be in part an intellectual answer to Alexander’s 15 processes while at the same time a musical work. By uniting the intellectual and intuitive in a project to create anew, it would be a good example of carrying forward in a productive manner and at the same time of uniting the fields of scholarship and creativity.

Bibliography

- Abbate, Carolyn. "Music—Drastic or Gnostic?". *Critical Inquiry* 30/3 (2004): pp. 505–536.
- Abbate, Carolyn and Richard Parker. "Review: Dismembering Mozart". *Cambridge Opera Journal* 2/2 (1990): pp. 187–195.
- Adorno, Theodor W. *Beethoven: the philosophy of music: fragments and texts*. Stanford, Calif.: Stanford University Press, 1998.
- Alexander, Christopher. *book 2, The Nature of Order. The process of creating life: an essay on the art of building and the nature of the universe*. Berkeley, Calif.: Center for Environmental Structure, 2002.
- *book 1, The phenomenon of life. The process of creating life: an essay on the art of building and the nature of the universe*. Berkeley, Calif.: Center for Environmental Structure, 2002.
- Allanbrook, Wye J. *Rhythmic gesture in Mozart : Le nozze di Figaro & Don Giovanni*. Chicago: University of Chicago Press, 1983.
- Badini, Francesco and Joseph Haydn. *L'anima del filosofo ossia Orfeo ed Euridice, Hob. 13, 1791: Rekonstruktion der Versform und Wortgetreue Deutsche Übersetzung von Georg Feder*. Kassel: Barenreiter-Verlag, 1980.
- Balzano, Gerald J. "What are musical pitch and timbre?". *Music Perception* 3/3 (1986): pp. 297–314.
- Bataille, Georges. *Eroticism*. London: Boyars, 1987.

- Beach, David. "A Schenker Bibliography: 1969-1979". *Journal of Music Theory* 23/2 (1979 1979): pp. 275–286.
- "The Current State of Schenkerian Research". *Acta Musicologica* 57/2 (1985 1985): pp. 275–307.
- Bigand, Emmanuel, Barbara Tillmann, and Francois Madurell. "Local versus global processing of harmonic cadences in the solution of musical puzzles". *Psychological research* 61/3 (1998): pp. 157–174.
- Blake, William. *William Blake: the complete illuminated books*. New York: Thames & Hudson, 2001.
- Borges, Jorge L. "Boast of Quietness". In: *Selected poems*. Selected poems. New York: Viking, 1999.
- Briggs, John. *Fractals: the patterns of chaos: a new aesthetic of art, science, and nature*. New York: Simon & Schuster, 1992.
- Brown, Matthew, Douglas Dempster, and David Headlam. "The ♯IV(♭V) Hypothesis: Testing the Limits of Schenker's Theory of Tonality". *Music Theory Spectrum* 19/2 (1997): pp. 155–183.
- Carpenter, Patricia and Christopher Davia. "Mind and Brain: a Catalytic Theory of Embodiment". Manuscript. Oct. 2005.
- Carter, Tim. *W.A. Mozart, Le nozze di Figaro*. Cambridge Cambridgeshire ; New York: Cambridge University Press, 1987.
- Clark, Andy. "Natural Born Cyborgs?". *Edge* 1/80 (Jan. 2001): URL: http://www.edge.org/3rd_culture/clark/clark_index.html (visited on 20/06/3).
- Clark, Andy and David Chalmers. "The Extended Mind". *Analysis* 58/1 (1998): pp. 10–23.
- Clarke, Eric F. *Ways of listening : an ecological approach to the perception of musical meaning*. Oxford: Oxford University Press, 2005.
- Clercq, Raphael De. "Aesthetic ineffability". *Journal of Consciousness Studies* 7/8–9 (2000): pp. 87–97.
- Clifton, Thomas. *Music as heard: a study in applied phenomenology*. New Haven: Yale University Press, 1983.
- Cook, Nicolas. "Perception: A Perspective from Music Theory". In: *Musical perceptions*. Ed. by Rita Aiello and John A. Sloboda. New York: Oxford University Press, 1994: pp. 64–95.

- Cook, Nicolas. "Words about Music, or analysis versus Performance". In: *Theory Into Practice: Composition, Performance and the Listening Experience*. Ed. by P. DeJans. Leuven BE: Leuven University Press, 1999: pp. 9–52.
- Cross, Ian. "Music Analysis and Music Perception". *Music Analysis* 17/1 (1998 1998): pp. 3–20.
- DeBellis, Mark. "Musical Analysis as Articulation". *Journal of Aesthetics and Art Criticism* 60/2 (012002 2002): pp. 119–135.
- Deleuze, Gilles and Claire Parnet. "Many Politics". In: *Dialogues II*. Trans. by Hugh Tomlinson and Barbara Habberjam. New York: Columbia University Press, 2002[1977]: chap. 4, pp. 124–148.
- Dell'Antonio, Andrew, ed. *Beyond structural listening? : postmodern modes of hearing*. Berkeley: University of California Press, 2004:
- Dennett, Daniel. "Cognitive Wheels: The Frame Problem of AI". In: *Minds, Machines, and Evolution: Philosophical Studies*. Ed. by Christopher Hookway. New York: Cambridge University Press, 1984: pp. 129–151.
- Dennett, Daniel. *Consciousness explained*. 1st ed. Boston: Little, Brown and Co., 1991.
- Dreyfus, Hubert L. "Overcoming the Myth of the Mental". *Topoi* 25/1 (2006): pp. 43–49.
- *What computers can't do: a critique of artificial reason*. Cambridge, Mass.: MIT Press, 1972.
- *What computers still can't do: a critique of artificial reason*. Cambridge, Mass.: MIT Press, 1992.
- Dreyfus, Hubert L. and Harrison Hall. *Husserl, intentionality, and cognitive science*. Cambridge, Mass.: MIT Press, 1982.
- Einstein, Alfred. *Mozart, his character, his work*. New York: Oxford University Press, 1972.
- Fink, Robert Wallace. *Repeating ourselves : American minimal music as cultural practice*. Berkeley: University of California Press, 2005.
- Fink, Robert. "Going Flat: Post-Hierarchical Music Theory and the Musical Surface". In: *Rethinking Music*. Ed. by N. Cook and M. Everist. Oxford: Oxford University Press, 1999: pp. 102–137.
- Freud, Sigmund. *Beyond the pleasure principle*. New York: Norton, 1989.
- Frisch, Walter. *Brahms and the principle of developing variation*. Berkeley: University of California Press, 1984.

- Garner, Wendell. "Good patterns have few alternatives". *American Scientist* 58/1 (1970): pp. 43–79.
- *The processing of information and structure*. Potomac, Md.: L. Erlbaum Associates, 1974.
- Gendlin, Eugene T. "Crossing and Dipping: Some Terms for Approaching the Interface between Natural Understanding and Logical Formulation" (1995): URL: <http://www.focusing.org/gendlin.html> (visited on 05/2005/01).
- "Dwelling". In: *Proceedings of the 17th Heidegger Conference University of New Hampshire*. New Hampshire: pp. 133–152.
- "The Responsive Order: A New Empiricism". *Continental Philosophy Review* 30 (1997): pp. 383–411.
- Gibson, James J. "On the concept of 'formless invariants' in visual perception". *Leonardo* 6 (1973): pp. 43–45.
- *The ecological approach to visual perception*. Boston: Houghton Mifflin, 1979.
- Gibson, James. *The senses considered as perceptual systems*. Boston: Houghton Mifflin, 1966.
- Gidwitz, P. and B. Matthews. "Storace, Nancy". In: *Grove Music Online*. Ed. by L. Macy: URL: <http://www.grovemusic.com/>.
- Gleick, James. *Chaos: making a new science*. New York, N.Y.: Penguin, 1988.
- Gott, Richard. *Time travel in Einstein's universe : the physical possibilities of travel through time*. Boston: Houghton Mifflin, 2001.
- Handel, Georges F. *Rinaldo First version*. Vol. 71; 71. Leipzig [Ridgewood New Jersey]: German handel Society [Gregg Press], 1965 [1874].
- Hanslick, Eduard. *The beautiful in music: a contribution to the revisal of musical aesthetics*. New York: Liberal Arts Press, 1957 [1854, tr.1891].
- Hasty, Christopher F. *Meter as rhythm*. New York: Oxford University Press, 1997.
- Heartz, D. "Susanna's Hat". *Early Music* 19/4 (1991): pp. 585–589.
- Heidegger, Martin. *Being and time: a translation of Sien und Zeit*. Trans. by Joan Stambaugh. Albany: State University of New York Press, 1996.
- "Building Dwelling Thinking". In: *Poetry, language, thought*. Ed. and trans. by Albert Hofstadter. New York: Perennial Library, 2001[1954]: pp. 141–61.
- *Poetry, language, thought*. Ed. and trans. by Albert Hofstadter. New York: Perennial Library, 2001[1971].

- Heidegger, Martin. "The thinker as poet". In: *Poetry, language, thought*. Ed. and trans. by Albert Hofstadter. New York: Perennial Library, 2001[1926]: pp. 1–15.
- Hénaff, Marcel. "Ceremonial gift exchange and logic of recognition: contribution to a political anthropology of the social bond". Manuscript published in course reader for Prof. Hénaff's course "Struggle for recognition: Subjectivity, Identity, and Otherness" (Winter 2004, UCSD literature). 2004.
- Honneth, Axel. *The struggle for recognition: the moral grammar of social conflicts*. Cambridge, Mass.: Polity Press, 1995[1992].
- Horner, James and Will Jennings. *Celine Dion - My Heart Will Go On Lyrics*. 1999. URL: <http://www.seeklyrics.com/lyrics/Celine-Dion/My-Heart-Will-Go-On.html> (visited on 29/07/06).
- Huron, David Brian. *Sweet anticipation : music and the psychology of expectation*. Cambridge, Mass.: MIT Press, 2006.
- Kerman, Joseph. "A Profile for American Musicology". *Journal of the American Musicological Society* 18/1 (1965): pp. 61–69.
- "How We Got into Analysis, and How to Get out". *Critical Inquiry* 7/2 (1980): pp. 311–331.
- Kinderman, William. *Beethoven's Diabelli variations*. Oxford: Clarendon Press, 1987.
- Klumpenhouwer, Henry. "Review of *Tonal Pitch Space*". *Journal of the American Musicological Society* 58/2 (2005): pp. 488–496.
- Korsyn, Kevin Ernest. *Decentering music : a critique of contemporary musical research*. Oxford: Oxford University Press, 2003.
- Kramer, Lawrence. *Classical music and postmodern knowledge*. Berkeley: University of California Press, 1995.
- Krumhansl, Carol L. "Music Psychology and Music Theory: Problems and Prospects". *Music Theory Spectrum* 17/1 (1995 1995): pp. 53–80.
- Lakoff, George and Mark Johnson. *Metaphors we live by*. Chicago: University of Chicago Press, 1980.
- Latour, Bruno. "Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern". *Critical Inquiry* 30/2 (2004): pp. 225–248.
- Lawson, Hilary. *Closure : a story of everything*. London: Routledge, 2001.
- Lerdahl, Fred. *Tonal pitch space*. New York: Oxford University Press, 2001.

- Lerdahl, Fred and Ray Jackendoff. *A Generative Theory of Tonal Music*. Cambridge, Mass.: MIT Press, 1983.
- Lerdahl, Fred and Carol L. Krumhansl. "Modeling Tonal Tension". *Music Perception* 24/4 (2007): pp. 329–366.
- Levarie, Sigmund. *Mozart's Le nozze di Figaro : a critical analysis*. New York: Da Capo Press, 1977 [1952].
- Lévi-Strauss, Claude. "Finale". In: *The Naked Man*. Vol. 4. Introduction to a science of mythology. New York: Harper & Row, 1981[1970]: pp. 625–96.
- "From Chrétien de Troyes to Richard Wagner". In: *The view from afar*. New York: Basic Books, 1985: chap. 17, pp. 219–235.
- *Le cru et le cuit*. Paris: Plon, 1964.
- *The Naked Man*. Vol. 4. Introduction to a science of mythology. New York: Harper & Row, 1981[1970].
- *The Raw and the Cooked*. New York: Octagon Books, 1979.
- *The view from afar*. New York: Basic Books, 1985.
- Levinson, Jerrold. *Music in the moment*. Ithaca, N.Y.: Cornell University Press, 1997.
- Lewin, David. "Figaro's Mistakes". In: *Studies in music with text*. New York: Oxford University Press, 2006: pp. 5–18.
- "Music Theory, Phenomenology, and Modes of Perception". *Music Perception* 3/4 (1986): pp. 327–392.
- Link, Dorethea. *Arias for Nancy Storace : Mozart's first Susanna*. Middleton, Wis.: A-R Editions, 2002.
- Lowe, Donald M. *History of bourgeois perception*. Chicago: University of Chicago Press, 1982.
- Lully, Jean B. *Armide Vocal Score*. New York: Broude Brothers Limited, 1971.
- Mace, Thomas. *Musick's monument*. Vol. 1; 1. Paris: Editions du Centre national de la recherche scientifique, 1966 [1676].
- Mangan, Bruce. "Sensation's Ghost: The Non-Sensory 'Fringe' of Consciousness". *Psyche* 7/18 (2001): URL: <http://psyche.cs.monash.edu.au/v7/psyche-7-18-mangan.html> (visited on 22/06/01).
- Mann, William. *The operas of Mozart*. New York: Oxford University Press, 1977.

- Marsden, Alan. "Listening as discovery learning". *Contemporary Music Review* 4/1 (1989): pp. 327–340.
- Marsden, Alan and Anthony Pople. "Modelling musical cognition as a community of experts". *Contemporary Music Review* 3/1 (1989 1989): pp. 29–42.
- Martel, Yann. "The time I heard the Private Donald J. Rankin string concerto with one discordant violin, by the American composer John Morton". In: *The facts behind the Helsinki Roccamatios and other stories*. Toronto: A.A. Knopf Canada, 1993: pp. 85–129.
- McAdams, Steve. "Prolog". *Music Perception* 22/2 (2004): pp. 171–172.
- McClary, Susan. *Conventional Wisdom: the Content of Musical Form*. Berkeley: University of California Press, 2000.
- *Feminine endings: music, gender, and sexuality*. Minneapolis: University of Minnesota Press, 1991.
- "Paradigm Dissonances: Music Theory, Cultural Studies, Feminist Criticism". *Perspectives of New Music* 32/1 (1994): pp. 68–85.
- Merleau-Ponty, Maurice. *Phenomenology of perception*. London: Routledge, 1962[1945].
- Meyer, Leonard B. *Music, the arts, and ideas: patterns and predictions in twentieth-century culture*. Chicago: University of Chicago Press, 1994.
- Monelle, Raymond. *The musical topic : hunt, military and pastoral*. Bloomington: Indiana University Press, 2006.
- Mozart, Wolfgang Amadeus. *Le Nozze di Figaro, Wolfgang Amadeus Mozart neue Ausgabe sämtlicher Werke*. Kassel: Bärenreiter, 1973.
- *Sonaten und Variationen für Klavier und Violine, Wolfgang Amadeus Mozart neue Ausgabe sämtlicher Werke*, Kassel: Bärenreiter, 1965.
- Narmour, Eugene. *Beyond Schenkerism: the need for alternatives in music analysis*. Chicago: University of Chicago Press, 1977.
- "Some Major Theoretical Problems Concerning the Concept of Hierarchy in the Analysis of Tonal Music". *Music Perception* 1/2 (1983): pp. 129–199.
- *The analysis and cognition of basic melodic structures: the implication-realization model*. Chicago: University of Chicago Press, 1990.
- Noë, Alva. *Action in perception*. Cambridge, Mass.: MIT Press, 2004.
- Pastille, William. "Music and Morphology: Goethe's influence on Schenker's thought". In: *Schenker studies*. Ed. by Heide Siegel. Cambridge ; New York: Cambridge University Press, 1990: v.

- Patton, Michael Quinn. *Utilization-focused evaluation : the new century text*. 3rd ed. Thousand Oaks: Sage Publications, 1997.
- Platoff, John. "A New History for Martin's 'Una cosa rara'". *The Journal of Musicology* 12/1 (1994): pp. 85–115.
- Rachels, James and Stuart Rachels. *The elements of moral philosophy*. 5th ed. Boston: McGraw-Hill, 2007.
- Richards, Annette. *The free fantasia and the musical picturesque*. New York: Cambridge University Press, 2001.
- Riskin, Jessica. "The Defecating Duck, or, the Ambiguous Origins of Artificial Life". eng. *Critical Inquiry* 29/4 (2003): pp. 599–633.
- Schellenberg, E. Glenn. "Expectancy in melody: tests of the implication-realization model". *Cognition* 58/1 (1996): pp. 75–125.
- Schoenberg, Arnold and Leonard Stein. *Style and idea : selected writings of Arnold Schoenberg*. London: Faber, 1975.
- Scruton, Roger. *The aesthetics of music*. New York: Oxford University Press, 1999.
- Solie, Ruth A. "The Living Work: Organicism and Musical Analysis". *19th-Century Music* 4/2 (1980): pp. 147–156.
- Solliers, Jean de. "Commentaire musical et litteraire". *L'Avant Scene* 21 (1979): pp. 19–125.
- Souriau, Etienne. "Time in the Plastic Arts". *The Journal of Aesthetics and Art Criticism* 7/4 (1949): pp. 294–307.
- Sousa, Ronald de. "Sex, drugs and Mahler. Reflections on Martha Nussbaum's Upheavals of Thought". [draft essay, March 5, 2004]. 2004. URL: <http://www.chass.utoronto.ca/~sousa/UPHEAVALS-APA.pdf> (visited on 13/07/06).
- Steinberg, Michael P. *Listening to reason : culture, subjectivity, and nineteenth-century music*. Princeton, N.J.: Princeton University Press, 2004.
- Subotnik, Ruth Rosengard. *Developing variations: style and ideology in Western music*. Minneapolis: University of Minnesota Press, 1991.
- Thompson, William F. "A Review and Empirical Assessment". *Journal of the American Musicological Society* 49/1 (1996): pp. 127–145.
- Žižek, Slavoj and Mladen Dolar. *Opera's second death*. New York: Routledge, 2002.

- Waldoff, Jessica and James Webster. "Operatic Plotting in *Le Nozze di Figaro*". In: *Wolfgang Amadè Mozart: essays on his life and his music*. Ed. by Stanley Sadie. New York: Oxford University Press, 1996: pp. 250–295.
- Waldrop, Mitchell. *Complexity: the emerging science at the edge of order and chaos*. New York: Simon & Schuster, 1992.
- Walton, Kendall L. "Understanding Humor and Understanding Music". *Journal of Musicology* 11/1 (1993): pp. 32–44.
- Webster, James. "The Analysis of Mozart Arias". In: *Mozart studies*. Ed. by Cliff Eisen. New York: Oxford University Press, 1991: pp. 101–200.
- Wertheimer, Max. "Laws of Organization in Perceptual Forms". In: *A source book of gestalt psychology*. Ed. by W. D. Ellis. New York: Harcourt Brace and company, 1938 [1923]: pp. 71–88.
- Williams, Peter F. *The chromatic fourth during four centuries of music*. Oxford: Clarendon Press, 1997.
- Wittgenstein, Ludwig. *Philosophical investigations*. Oxford: B. Blackwell, 1953.
- Yes. *Tales from topographic oceans*. sound recording. Atlantic SD 2908, 1973.
- Zarlino, Gioseffo. *Dimostrazioni harmoniche. A facsim. of the 1571 Venice ed.* New York: Broude Bros., 1965.
- Zbikowski, Lawrence. "Conceptual Models and Cross-Domain Mapping: New Perspectives on Theories of Music and Hierarchy". *Journal of Music Theory* 41/2 (1997): pp. 193–225.
- Zolberg, Vera L. "Displayed Art and Performed Music: Selective Innovation and the Structure of Artistic Media". *The Sociological Quarterly* 21/2 (1980): pp. 219–231.
- Zuckerkandl, Victor. *Sound and symbol; music and the external world*. Vol. 1; 1. New York: Pantheon Books, 1956.