On Proto-backgrounds:
Material gathered from my UT website (uts.cc . . .)
and from the blog "Hearing Schubert D779n13" (on Google's blogspot)

Supplementary materials for "Thematic Reading, Proto-backgrounds, and Transformations," *Music Theory Spectrum* 31/2 (fall 2009): 284-324.

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Note: Some of the links in this file are bookmarks, effective within this document, some are live links that will take you out to a website or to my blog, and some may be dead links to pages that were stored on now-decommissioned servers.

Links:
> Hearing Schubert blog: introduction

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[INTRODUCTION] Examples of linear analysis using proto-backgrounds

File created 20 June 2009; updated 28 February 2010.

Supplementary materials for "Thematic Reading, Proto-backgrounds, and Transformations," *Music Theory Spectrum* 31/2 (fall 2009): 284-324.

In one important sense, "Schenkerian analysis" is a misnomer, as its practice has little if anything to do with analysis in any scientific sense; that is, the application of techniques such as voice exchange, reaching-over, and the nesting induced by levels immediately and heavily interprets the musical text (indeed, these are already pre-determined by the bias toward lines in the upper voices). Essays based on such readings are most often interpretations in the routine sense of the term in literature studies.

The article does not look to overthrow linear analysis as a practice but looks to options for interpretation through an historical take on the issues involved: it uses an analogy between "theme" in literary studies and "background" in linear analysis (or other hierarchical analytic models) for music. A further distinction, derived from Monroe Beardsley, is made between "theme" and "thesis." The short essays listed below provide illustratiions of these terms and distinctions in literature.

- 1. Explanation of "theme" and "thesis" using a passage from Daphne du Maurier's *Rebecca* -- see the next section in this document.
- 2. Explanation of "theme" and "thesis" using a poem by Rachel Hadas, "Genre Clerk" -- see the second section below in this document.

The central construct of the article is the proto-background, or tonic-triad interval that is understood to *precede* the typical linear background of a Schenkerian or similar hierarchical analysis. Figures typically or potentially found in a background, including the Schenkerian urlinie, are understood to arise through (informal) transformations, or functions, applied to proto-backgrounds.

The repertory of proto-backgrounds within the octave is 9: three unisons, three intervals above ^1, two intervals above ^3, and one interval above ^5. The repertory of first-order transformations is not fixed, but I assume it includes at least LINE, N(eighbor), and their inverses. The article also introduces two registral (rather than linear) transformations: DIV(ision) and ADDINV (see the graphic at the right for a sample).
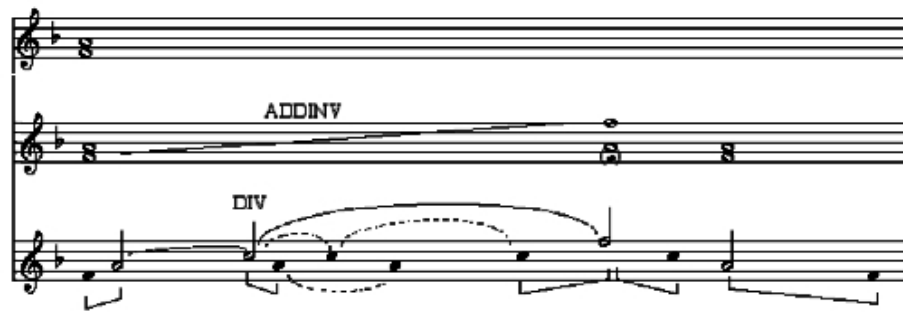
The article offers case studies of a chorale and two of its settings by J. S. Bach. The first web essay listed below provides an example of the construction and evaluation of analyses using proto-backgrounds. The second essay does the same with quick sketches. The third is similar to the first but spends more time on the evaluation stage. The fourth essay focuses on transformation functions in generating/constructing an analysis. The fifth essay uses a method that is compatible with the proto-backgrounds, although its devices (derived from Lerdahl & Jackendoff) are somewhat different.

- 1. Beethoven, Menuet, WoO10, no. 2 [Minuet in G]: list of the proto-backgrounds with commentary and evaluation: WoO10, no. 2.   -- see sections below --
- 2. Beethoven, Menuet, WoO10, no. 1: list of the proto-backgrounds with commentary and evaluation: WoO10, no. 1.
- 3. Application and evaluation of proto-backgrounds for a dance melody from M. Landrin, *Receuil danglaise,* [c1760-1785]: "Blac Danse."
- 4. Reading of Mozart, German Dance, K. 602, no. 4, using proto-backgrounds and transformation functions: Mozart, K. 602, no. 4.
- 5. Rising cadence gestures in the tonal frames of eighteenth and nineteenth century European and American compositions. This essay makes use of "frames," a construct that is compatible with the proto-backgrounds: Go to Rising Cadence Gestures.
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In addition, several early entries in the blog *Hearing Schubert D779n13* present readings using the proto-backgrounds along with comparison and evaluation: First entry on proto-backgrounds. Here is a link to a page that tallies the readings on the blog; it includes a list of the proto-background blog entries: Tally. [NB: this page has been incorporated into the blog itself]

In not looking to overthrow linear analysis as a practice, the *MTS* article and the web essays here assume a position that is somewhat different from that now commonly found in the literature: here, pragmatically, I maintain the generative hierarchical character of the reading (derived from Schenker), rather than work to disrupt the hierarchy through gaps, discontinuities, or ambivalent moments. Nevertheless, I do not think the work contradicts current literature; by undermining the hegemony of Schenker's background types, I am also providing alternative ways to make use of linear analysis and therefore similarly "democratizing" its practice.

Explanation of "theme" and "thesis" using a passage from Daphne du Maurier's *Rebecca*

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(INTRODUCTION) The central construct of the article is the proto-background, or tonic-triad interval that is understood to *precede* the typical linear background of a Schenkerian or similar hierarchical analysis. Figures typically or potentially found in a background, including the Schenkerian urlinie, are understood to arise through (informal) transformations, or functions, applied to proto-backgrounds.

In the article, an analogy is made between "theme" in literary studies and "background" in linear analysis (or other hierarchical analytic models) for music. A further distinction, derived from Monroe Beardsley, is made between "theme" and "thesis."

(THEME AND THESIS) As generally understood in literary criticism and pedagogy, "theme" is a brief description of the central idea of a poem or story -- "what it is about" -- and "thesis" is the argument or opinion being forwarded.

(EXAMPLE TEXT) As an exercise in distinguishing between theme and thesis, consider this relatively self-contained passage from Daphne du Maurier's novel *Rebecca*:

- Beatrice began whistling again, and she rubbed [the dog] Jasper's head with her foot. "I shouldn't have more to do with [Mrs. Danvers] than you can help," she said.
- "No," I [the second Mrs. deWinter] said. "She runs the house very efficiently, there's no need for me to interfere."
- "Oh, I don't suppose she'd mind that," said Beatrice. That was what [the husband] Maxim [DeWinter] had said, the evening before, and I thought it odd that they should both have the same opinlon. I should have imagined that interference was the one thing Mrs. Danvers did not want.
- "I dare say she will get over it in time," said Beatrice, "but it may make things rather unpleasant for you at first. Of course she's insanely jealous. I was afraid she would be."
- "Why?" I asked, looking up at her, "why should she be jealous? Maxim does not seem to be particularly fond of her."

- "My dear child, it's not Maxim she's thinking of," said Beatrice, "I think she respects him and all that, but nothing more very much.
- "No, you see,"-she paused, frowning a little, looking at me uncertainly-"she resents your being here at all, that's the trouble."
- "Why?" I said, "why should she resent me?"
- "I thought you knew," said Beatrice; "I thought Maxim would have told you. She simply adored Rebecca [the first Mrs. DeWinter]."
- "Oh," I said. "Oh, I see."
- We both went on patting and stroking Jasper, who, unaccustomed to such attention, rolled over on his back in ecstasy.

(THEME IN THIS PASSAGE) The story, in brief form, is "Beatrice and 'I' are having a conversation, during which Beatrice pets the dog Jasper. The conversation is about the housekeeper Mrs. Danvers; the two women consider aspects of Maxim's and 'I''s relationship to Mrs. Danvers; at the end Beatrice reveals that Mrs. Danvers 'adored Rebecca'. Both women pet the dog." Because story and plot coincide, this summary could double as a statement of theme, but a more typical theme statement is a condensed abstract, or: two women talk about domestic relationships. Or we might go a bit further and add something of the tone of the conversation: two women talk about puzzling domestic relationships. Another version would add the outcome of the conversation, which is still part of the "about": two women talk about puzzling domestic relationships, in the course of which a revelation is made. We cannot add "startling" as a qualifier for "revelation," because there is nothing in "I''s response to suggest that she is unusually moved-she is (apparently) thoughtful, but not startled. In adding a word like "startled," we would be going outside the passage to rely on our knowledge of the larger context of the novel.

(THESIS IN THIS PASSAGE) The thesis is harder to contain within the passage, as we complete the statement, "The author wants us to believe that. . . ." Now, "author" of course is a fraught term, but we need not take a lengthy detour into questions of authorship, narration, and readers in order to come up with a workable thesis statement for the present purpose. Phrases like "the narration guides us to believe that . . ." or "the reader gathers cues to conclude that he or she should believe that . . ." are adequate substitutes, if necessary, but I will use the simpler form here. "The author wants us to believe that, even in the most comfortable domestic circumstances, extreme (and perhaps dangerous) emotions may lurk." Note that this is an abstraction: although it might describe the cumulative effect, there is nothing in the passage that explicitly states any of this. Consider "insanely jealous," for instance. It could mean what it literally says, and therefore be a direct expression of the thesis, but if so it seems oddly out of place-one more readily concludes that it is just a version of a common intensifying expression, such as "marvelous" or "too fabulous," as in "insanely great." In any case, whatever force "insanely" might have is progressively eviscerated; first, "insanely jealous" drops to merely "jealous," then to "resents," which sets up "I''s final pair of mildly perplexed "Oh"s.

(REWRITING THE THESIS) Note further that we could rewrite this thesis in specifically ideological terms. The easiest is a feminist reading: "The author wants us to believe that, even in the most well-established and apparently benevolent patriarchal system, the disruptive power of lesbian relationships can be active." In this case, the thesis points us toward something else in the passage: the pairs that sit on opposite sides of the patriarchal divide (Beatrice and "I" versus Mrs. Danvers and Rebecca). This passage is poor in motifs (objects in the environment that acquire significance through recurrence); they are replaced in function by characters. We can consider Jasper-or, strictly, the petting of Jasper-as a motif (note the repetition strategically placed at formal nodes, beginning and end of the passage). The irony of Jasper's simple canine "ecstasy" in comparison with the women's more complex, subdued moods could easily be a critic's entry point for an analysis of this passage (as David Bordwell puts it, "the critic's rule of thumb [is] that referential anomalies furnish good cues for implicit meaning" (*Making Meaning* 12)).

(NOTE ON MUSICAL THEME) It is important to recognize that "theme" here does not mean the main melody of a musical composition -- that usage is properly labelled a "motif" if we are using literary terms.

Explanation of "theme" and "thesis" using a poem by Rachel Hadas, *Genre Clerk*
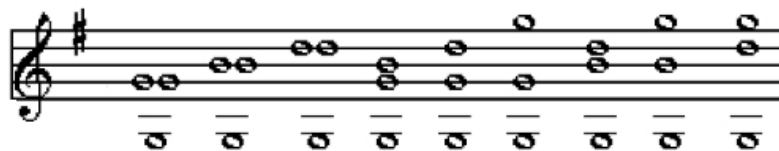
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(THEME AND THESIS: SECOND EXAMPLE). Consider the following unrhymed couplet:

- Was the ensemble of paramount importance
- or will you zero in on one detail?

(THEME) To make a thematic statement about this couplet (which for the moment is being treated as if it were a complete poem), we leap immediately to a generalization, returning to the text to test options against details. Version 1: "The theme is a challenge thrown to a reader/listener/interpreter." This form jumps too quickly to implicit meanings and to a thetic statement, as if the stark opposition of "ensemble" and "detail," conveyed and reinforced by design (two lines, two clauses), reveals an authorial tone of voice that demands a choice be made. On the other hand, version 1 lines up nicely with the details of the text (the multisyllabic words of line 1 set against the (mostly) monosyllables of line 2, the breadth (and vagueness) of "ensemble" against the tight, sharp action metaphor of "zero in," the passive voice of line 1 against the agent ("you") and active verb of line 2, past tense against future tense), and therefore we might achieve a usable thematic statement by just toning down version 1. Thus, version 2: "The theme is the split vision (or the opposing options) encountered by anyone reading (listening, interpreting)."

The hierarchy, with thesis (the argument) at the top, theme (high level description or summary), design level and elements, can be constructed more or less as below:

- (thesis) None yet
- (theme) Split vision; opposing options of the receiver/reader
- (design level) two lines, two clauses; parallel construction:
- verb-noun-prepositional phrase/

-     modal verb-pronoun-(verb)-prepositional phrase
-   (elements) passive-active/past-future: "Was"/"will you zero in"
-     multisyllabic-monosyllabic: 1-1-3-1-3-3 / 1-1-1-2-1-1-1-2
-     rhythmic pairings: "Was the ensemble"/"or will you zero";
-      "paramount importance"/"in on one detail"
-   word pairs, opposed: "ensemble"/"detail"; "importance"/"zero in"

(THESIS) Drawing a thetic statement out of this couplet requires imposing a strong inter-pretation, as we did in inventing a challenge to the reader in version 1 above. That thesis was unconvincing since it already implied an answer (that is to say, a reading with symp-tomatic meanings), given that the (deliberately) flabby pretentiousness of line 1 all too ob-viously compares poorly with the active and familiar voice of line 2. If we nevertheless fol-low the idea up, the thesis might be something like "In aesthetic experience, live for the ex-quisite moment, not some grand synthesis."
(CONTEXT OF THE POEM) In its original setting--a poem by Rachel Hadas, "The Genre Clerk" (*Indelible* 61)--this couplet is one of a series of such contrasting pairs; the poem re-serves its thetic statement for the traditional position of the final line(s):

- . . . . And you-
- looking at options, making up your mind,
- leaning on the counter, indecisive
- are part of this unfolding story too.

(THESIS REWRITTEN ON THE BASIS OF THAT CONTEXT) The poet has whimsically inter-posed a bureaucrat between author and reader--someone who manages the desk of reader-ship, as it were, offering options in direct speech and finally reminding the reader of his/her role in reception history. Version 2 of the thesis statement for the analysis above, then, might read "The reader's activity and choices are important to the reception history of a text."

Beethoven, Menuet, WoO10, no. 2 [Minuet in G]: list of the proto-backgrounds with commentary and evaluation

File created 16 August 2009; updated 28 February 2010.

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Introduction

The Menuets in WoO10 were composed for orchestra in 1795 or 1796; the piano arrangements might have been made by Beethoven himself, but there is no conclusive evidence that this is true. The occasion for which the dances were written is unknown, as is their function for dancing or listening (of course, it could easily have been both). The fact that the opening key does return at the end but by means of an implausible move (D major -> C) undermines the notion that the menuets were meant to be played as a continuous group, but they might well have been played in order with breaks in between.The score used here comes from the first Beethoven complete works edition: *Werke. Vollständige kritisch durchgesehene überall berechtigte Ausgabe* (Leipzig, Breitkopf & Hartel (1864-90)), Series 18: *Kleinere Stücke für das Pianoforte.*

The nine proto-backgrounds within the octave identified in the *Music Theory Spectrum* article are reproduced below in G major: three unisons, three additional intervals above ^1, two above ^3, and one above ^5. In the essay below, I apply each of the nine proto-backgrounds to the menuet in turn, adding textual commentary and evaluation. These should be regarded as thematic sketches made to get to a general point quickly, not as detailed analyses that work out any one reading exhaustively.

Here is the score for the Menuet, without its trio. I have added notes about the partimento schemata of Robert Gjerdingen. I am by no means proficient in identifying these standard devices of eighteenth-century music, and the notes should be taken in that spirit. The identifications were made as a way to locate salient features that might help guide the analyses, but since Beethoven aligns the schemata with phrases, I'm not sure the work was really necessary. Sol-Fa-Mi is a figure that moves through the scale degrees indicated, here with a simple support of root-position chords. The Prinner is a figure in parallel tenths with one voice charting the degrees ^6-^5-^4-^3, in this case in the dominant key (or the "modulating Prinner"), but the figure seems to collide with a cadential schema that rushes down the scale toward a cadential dominant (the Cudworth usually runs an entire octave, hence the "?" here). In the second half, Do-Re-Mi moves through ^1-^2-^3 most often with ^1-^7-^1 in the bass; the latter takes that path in mm. 9-11 but the upper voice jumps down an octave for its concluding ^3. After the Half Cadence, a Mi-Re-Do figure moves in a leisurely way down to the final ^1.

All in all, the various schemata confirm the prevalence of linear figures, the significance of phrase-starting intervals that are extended in time, and the role of contrasting registral play in the beginning of the second half. Much the same can be heard in a continuo-style realization that maintains the bassline and matches the upper-voice shapes to it: see below. This realization especially brings out the persistent linear motion down in the first half, as well as the registral contrast after the double bar.

The nine proto-backgrounds applied to WoO10n2

^1-^1: In this Menuet, a unison ^1 sharply -- even radically -- skews the reading toward the end; that is, the piece is heard as strongly teleological, with everything but the final chord as some kind of elaborating prefix. Whether such a mode of hearing is even possible except in the moments just after the piece ends is doubtful. In any case, it seems out of place for this Menuet, which opens in such a stable manner and even makes use of a reprise (hardly a dramatic or teleological device, indeed in many ways its opposite).
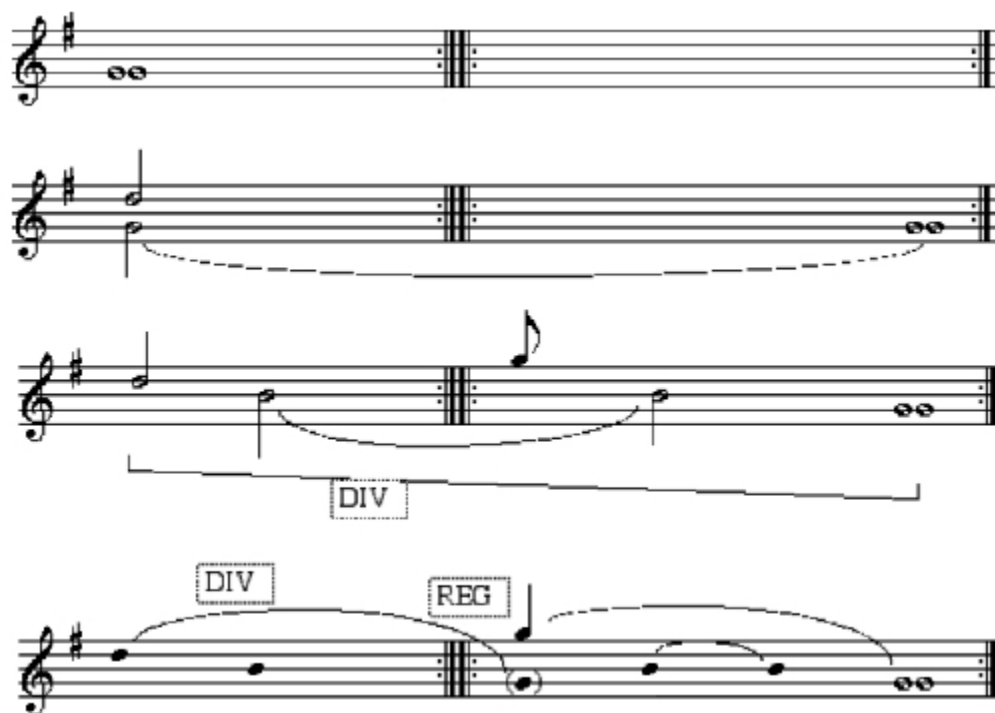
^3-^3: This reading has many strengths, including a good alignment with the second and fourth phrases (the latter being the reprise), and a good match with simple oscillating Neighbours that could be at the core of the third phrase (it is easier to hear a thematic unison with strong and close figures -- such as Neighbours -- surrounding its pitches). The parallelisms in the frame are also intriguing (the opening ^5 down to ^3 is mirrored at the end by the formula cadence that follows the last ^3). If one insists on giving status to the final cadence, of course, then it's a weakness, not a strength. The tie to the registral contrast is vague at best, but the problem is at the beginning -- the interpreter would be put to the test justifying attention to the second rather than the first phrase as thematic focus of the Menuet.
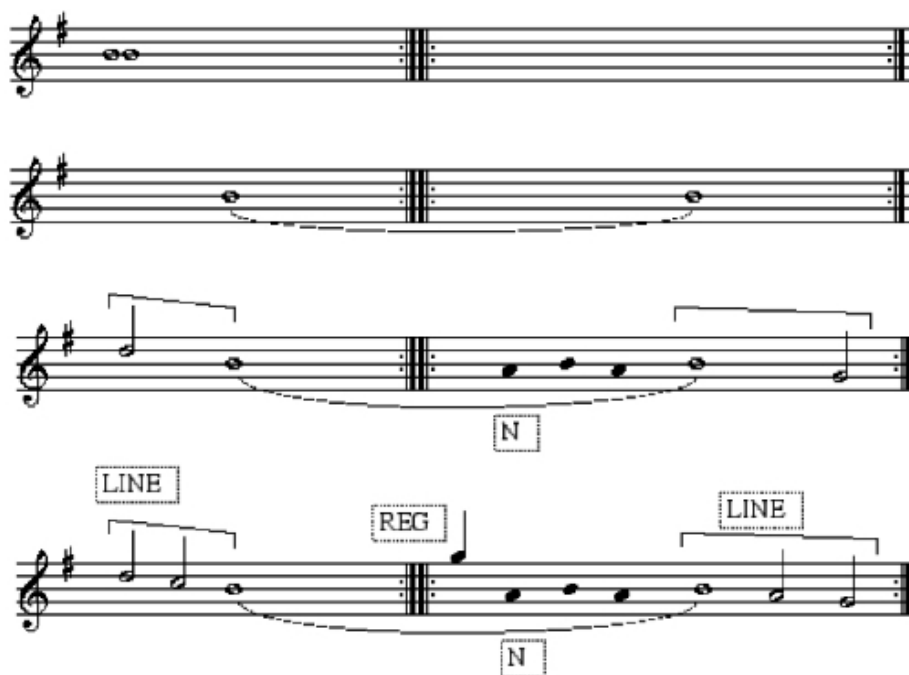
^5-^5: Here, the reverse of ^1-^1: all the attention goes to a generating unison, and everything else in the piece flows smoothly out of it. The weak point is at the end: it's difficult to see how anything but an elaborating performance (common enough in social-dance situations) can place the ^5 plausibly in the ear at this point. Still, reminiscences are perhaps inevitable outcomes of generative hearings (since everything after the beginning is in effect a reminiscence of that beginning).
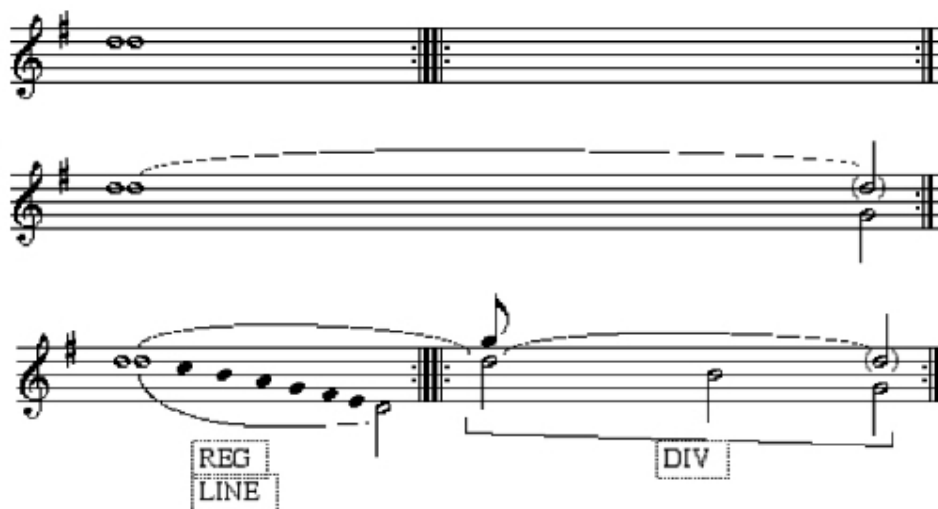
^1-^3: This has the strengths and weaknesses of the unison ^3 but adds the characteristic pastoral third and in so doing gives a better account of the registral contrast as a simple interval inversion. The final partial staff shows how this inversion can apply to the end as well. To my ear, the most satisfying reading so far.
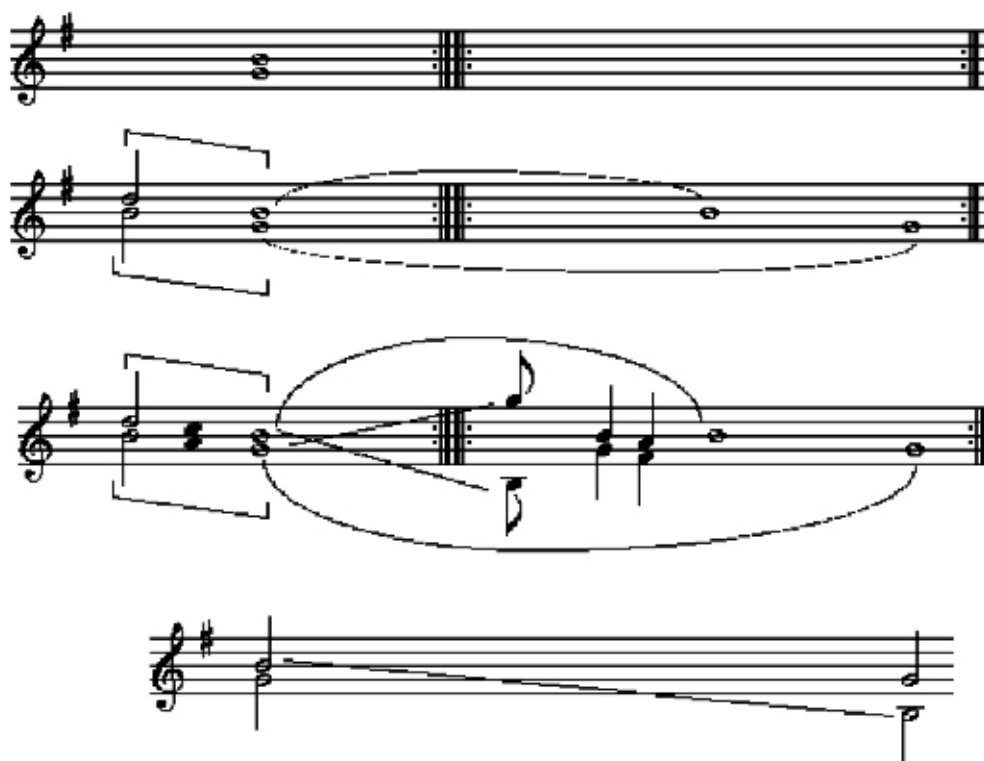
^1-^5: This has the strengths and weaknesses of the unison ^5; it does at least firmly justify the final ^1 and with it the DIVision that occupies the whole of the second half.
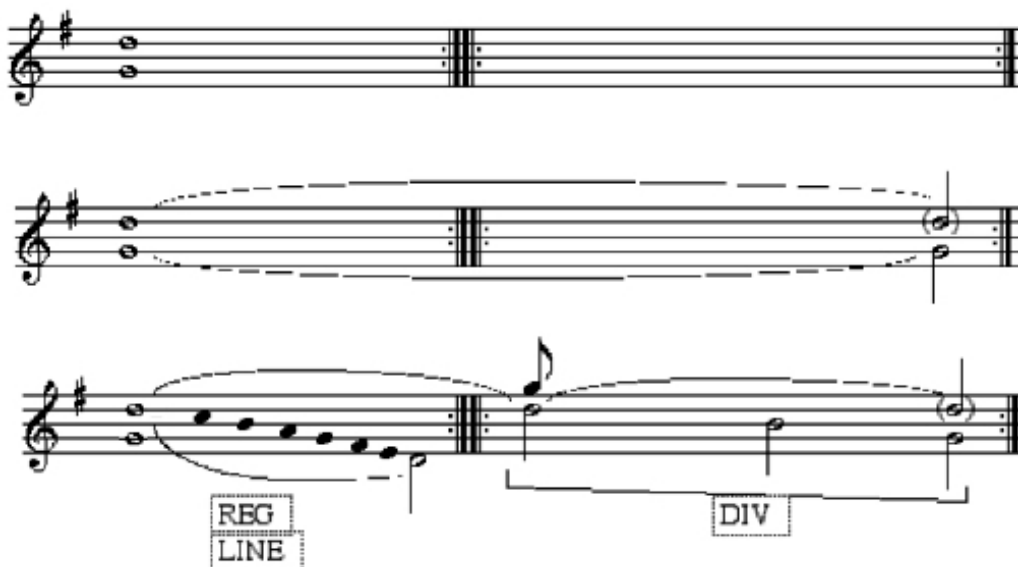
^1-^8: The parallelisms of register in each half are appealing, and the account of the second half is clean and direct (although ADDINV here is in its inverse, that is, adding the interval below rather than above). The connection between the ^5 of the first half and the controlling octave, however, is uncertain.
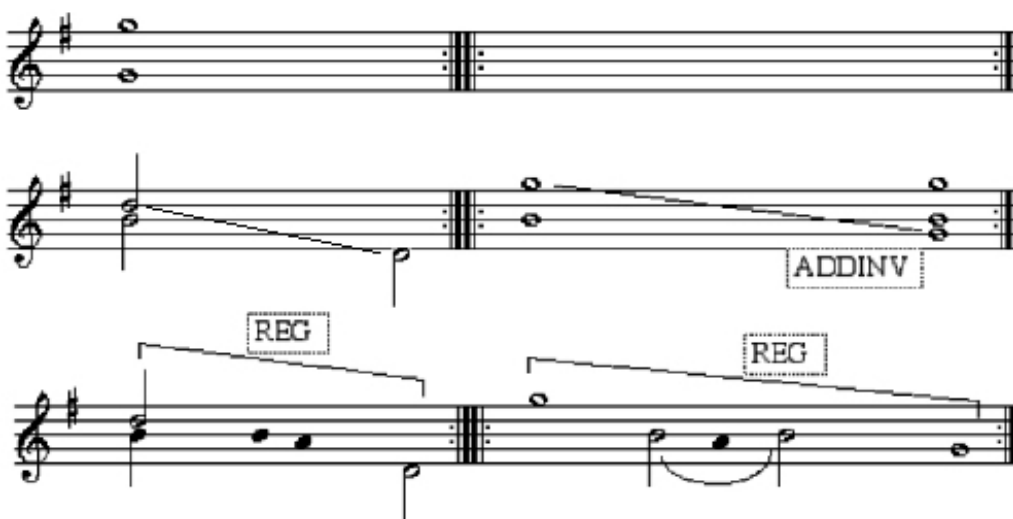
^3-^5: It is by no means always the case, but here I think that one reading stands out above the others as both interesting and thorough. The third pair is now essential to the proceedings, the linear figures suggested by the schemata are prominent, and clear patterns of registral elaborations align with design elements.
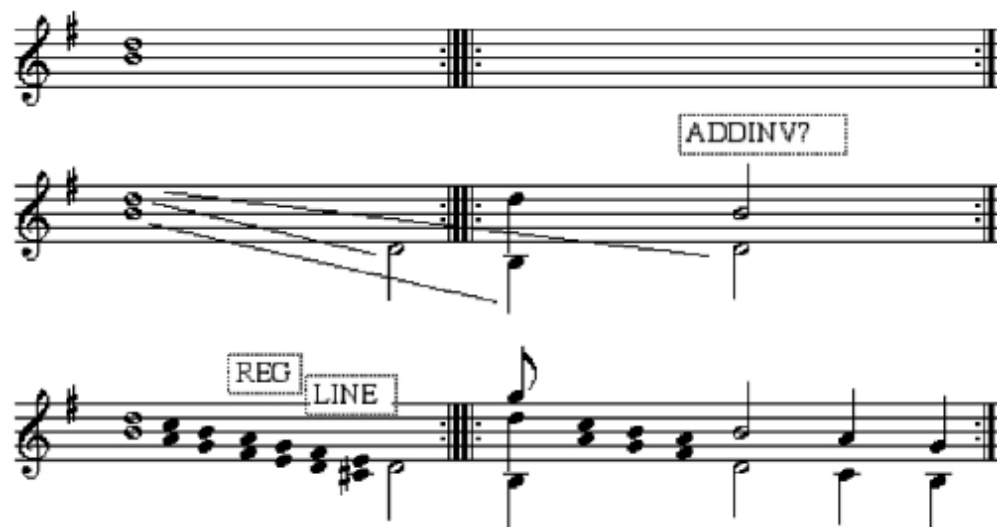
^3-^8: As the example indicates, this can be taken as "correcting" the end-focused radicalisms of the unison ^1 reading. Attention to the opening ^5 is still not what it might be, but the registral constrast -- as an expressive gesture -- now assumes a principal role.
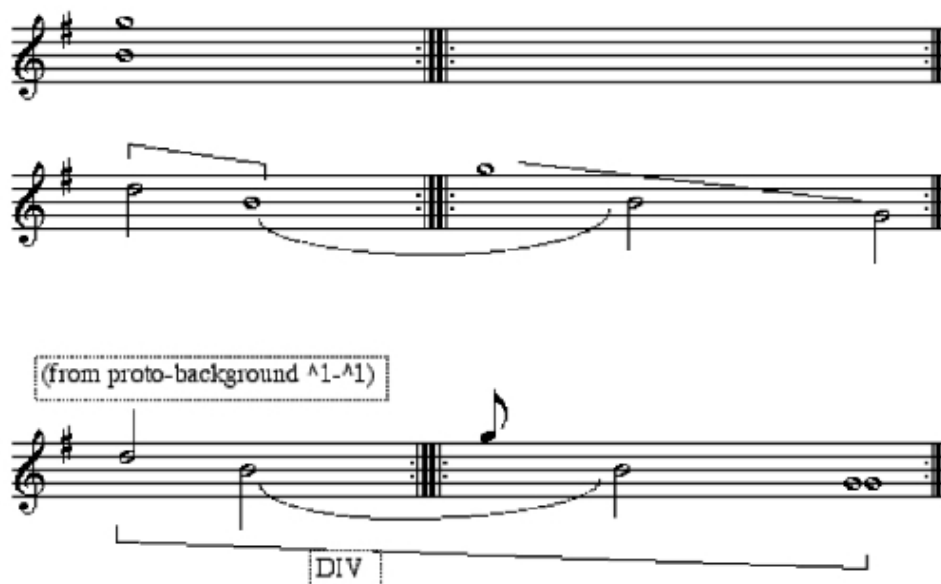
^5-^8: To my ear, this is more appealing than ^3-^8 in the way it ties together the opening third pair and the registral contrast. Whether LINE in the second half is convincing depends -- as with the Neighbours in the unison ^3 reading -- on how strictly you maintain voice leading in bars 9-12.

Conclusion

Analysis using the proto-backgrounds as initial structures for generative hierarchies must be informal -- certainly compared to formal devices and systems elsewhere in music theory. Because the work is based on a top-down hierarchy, it is highly dependent on the choice of the initial or highest-level figure. Such figures are what David Lewin calls "metastable" (see the citation in the *MTS* article): not universals but acting pragmatically *as if they were* for the sake of the work of analysis or interpretation. They are, in other words, identical in function to the themes that a reader engenders to gather and guide reading and interpretation of a poem, story, play, or other text. For example of themes in the analysis of literary works, see *Rebecca* and *Genre Clerk.*

Apart from its practical value in aiding the construction and comparison of analyses made on differing assumptions, the notion of "theme" can also be tied to an argument about the historicity of linear analysis. From the article: "The thematic analogy -- that is, theme as the equivalent of the contents of the background, last stage of reduction, or other 'summary' in a hierarchical model -- helps to align a traditional practice of linear analysis with practices in literary interpretation current at the time that Schenkerian analysis was in process of being adopted in the United States." The point is elaborated at some length in the article.

Beethoven, Menuet, WoO10, no. 1: list of the proto-backgrounds with commentary and evaluation

File created 16 August 2009; updated 28 February 2010.

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The score used here comes from the first Beethoven complete works edition: *Werke. Vollständige kritisch durchgesehene überall berechtigte Ausgabe* (Leipzig, Breitkopf & Hartel (1864-90)), Series 18: *Kleinere Stücke für das Pianoforte.*

The nine proto-backgrounds within the octave identified in the *Music Theory Spectrum* article are reproduced below in C major: three unisons, three additional intervals above ^1, two above ^3, and one above ^5. In the essay below, I apply each of the nine proto-backgrounds to the menuet in turn, adding textual commentary and evaluation. These should be regarded as thematic sketches made to get to a general point quickly, not as detailed analyses that work out any one reading exhaustively.

Here is the score for the Menuet, without its trio. I have added notes about the partimento schemata of Robert Gjerdingen. I am by no means proficient in identifying these standard devices of eighteenth-century music, and the notes should be taken in that spirit. The identifications were made as a way to locate salient features that might help guide the analyses, but since Beethoven uses very few schemata and aligns them closely with the design, I'm not sure the work was really necessary. An Opening Gambit is apparently made up of simple tonic-triad arpeggiations or nearly so simple tonic prolongations. Bars 6-7 could be another figure with ^7-^1-^2 but I was unable to identify it. The Ponte is an arpeggiation or elaborated arpeggiation above V that normally occurs in this position, at the beginning of the second half. I have marked the end Cadence but it is no more than a V-I approach to the final ^1.

Overall, this piece is very much simpler than WoO10n2, a trait that fits its role as a processional, fanfare, or overture. If the set was used in the orchestral version during a ball (whether public or private), this would provide the traditional formal introduction to the dancing of menuets. The few schemata confirm the significance of broad form-defining gestures, which can be seen equally well in a continuo-style realization that maintains the bassline and matches the upper-voice shapes to it: see below. This realization especially brings out the "two-chord" simplicity of the harmonic underpinning.

^1-^1, ^3-^3, ^5-^5: In the example below I have gathered thematic sketches for the three unison proto-backgrounds. It is hardly surprising that registral changes should be prominently involved, as are basic Neighbor figures available in I-V-I progressions, such as ^1-^2-^1 or ^3-^2-^3, and a static ^5.
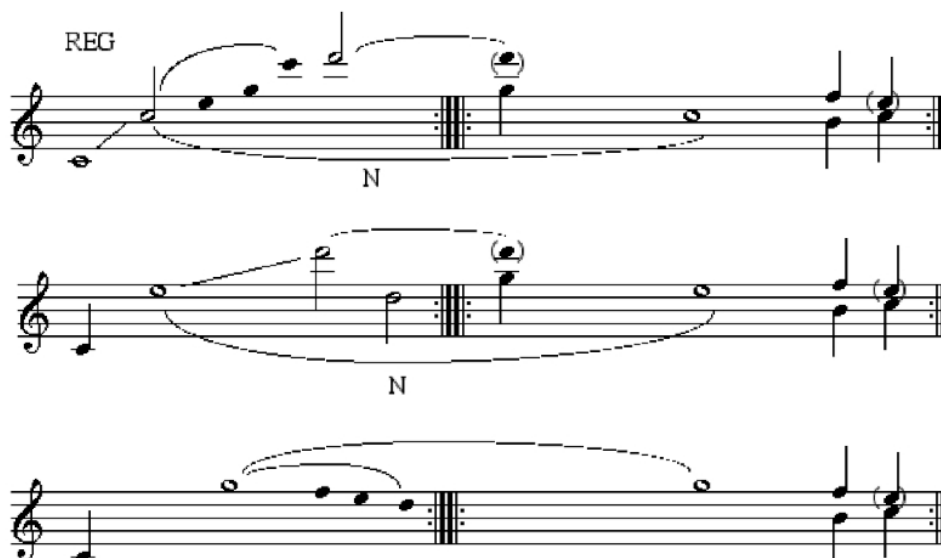
^1-^3, ^1-^5, ^1-^8: The next example has sketches for the three proto-backgrounds above ^1. Patterns seen in the unison readings are replicated with "inner voices" elaborating ^1 with Neighbors above or below.
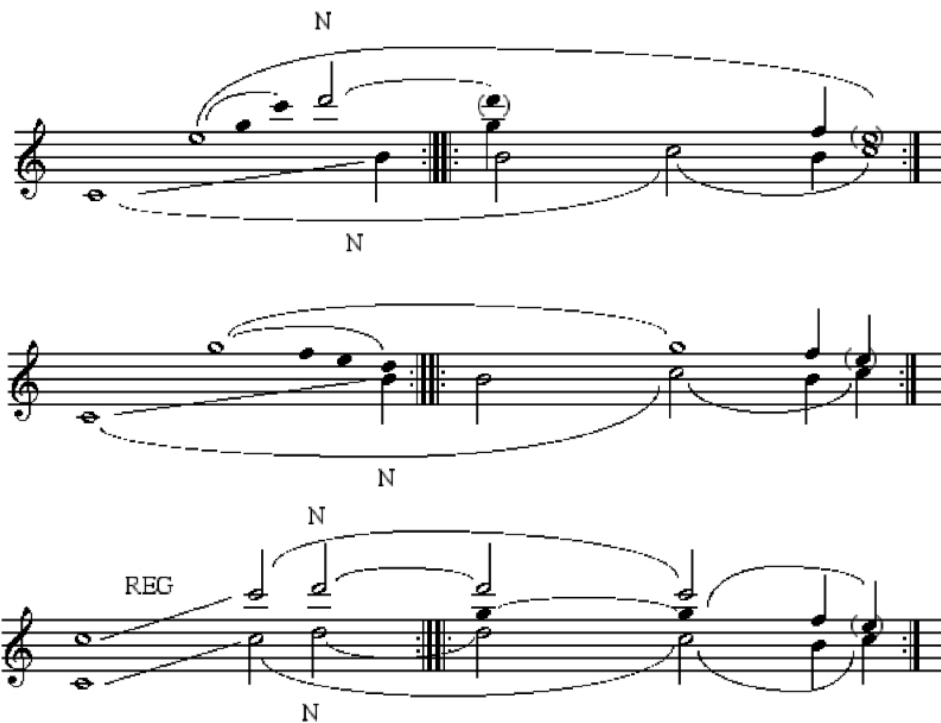
^3-^5, ^3-^8, ^5-^8: The final example gathers the remaining proto-backgrounds.
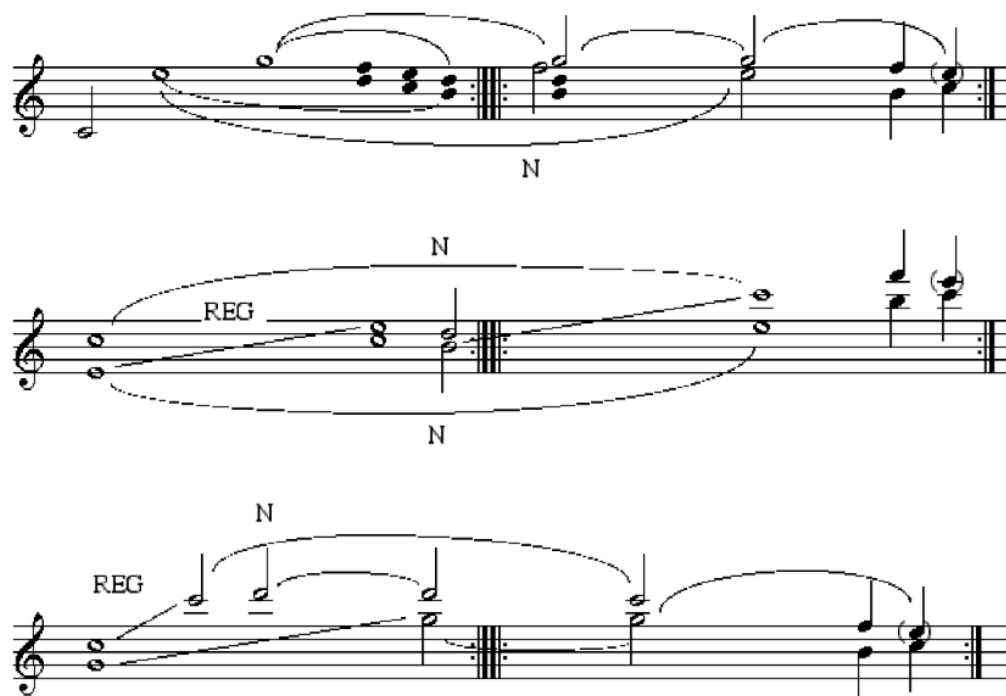
The readings with ^5 above are clearly the weakest, and the unison readings seem less compelling than their intervallic counterparts (^1-^8 is better than ^1-^1, ^1-^3 and ^3-^8 are better than ^3-^3).

Conclusion. [repeated text] Analysis using the proto-backgrounds as initial structures for generative hierarchies must be informal -- certainly compared to formal devices and systems elsewhere in music theory. Because the work is based on a top-down hierarchy, it is highly dependent on the choice of the initial or highest-level figure. Such figures are what David Lewin calls "metastable" (see the citation in the *MTS* article): not universals but acting pragmatically *as if they were* for the sake of the work of analysis or interpretation. They are, in other words, identical in function to the themes that a reader engenders to gather and guide reading and interpretation of a poem, story, play, or other text.

Apart from its practical value in aiding the construction and comparison of analyses made on differing assumptions, the notion of "theme" can also be tied to an argument about the historicity of linear analysis. From the article: "The thematic analogy -- that is, theme as the equivalent of the contents of the background, last stage of reduction, or other 'summary' in a hierarchical model -- helps to align a traditional practice of linear analysis with practices in literary interpretation current at the time that Schenkerian analysis was in process of being adopted in the United States." The point is elaborated at some length in the article.

Application and evaluation of readings with proto-backgrounds: A study of Landrin, "Blac Danse"

File created 22 June 2009; last updated 28 February 2010.

Supplementary material for "Thematic Reading, Proto-backgrounds, and Transformations," *Music Theory Spectrum* 31/2 (fall 2009): 284-324.

Introduction

The repertory of proto-backgrounds within the octave is 9: three unisons, three intervals above ^1, two intervals above ^3, and one interval above ^5. The repertory of first-order transformations is not fixed, but I assume it includes at least LINE, N(eighbor), and their inverses. The article also introduces two registral (rather than linear) transformations: DIV(ision) and ADDINV. For the notational style most closely matching that of the article, see the [Fifth and Sixth Readings](#) below.

Given that the hierarchical character of linear analysis is unavoidable in practice (if by no means immune to criticism), there is value in increasing the number of available top-level constructs in order to promote flexibility and range in analytic practice.

This essay is a case study in application of the proto-backgrounds and readings based on informal transformations. After cataloguing six of the nine available readings, I evaluate them, mainly according to plausibility but ultimately in terms of my own personal prefer-ences, following the lead of David Lewin (as discussed in the *MTS* article and particularly in reference to Lewin's essay "R. Schumann's *Anfangs wollt' ich* : A Study in Phrygian and Modern Minor," in his *Studies in Music with Text,* 53-108. New York: Oxford University Press, 2006).

M. Landrin's "Blac Danse"
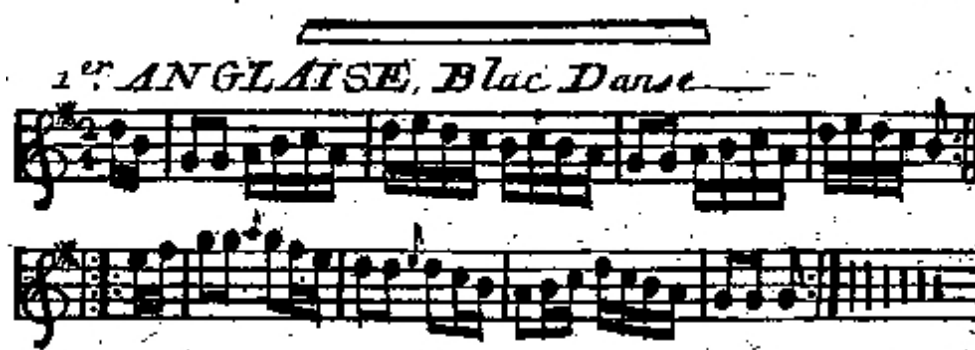
Source: Library of Congress American Memory: Dance Manuals: Landrin, Recueil danglaise [c1760-1785].

The work at hand is a melody for dancing: the first tune in a set of *contredanses anglaises* published in Paris sometime between 1760 and 1785 (in my view, most likely before 1770). M. Landrin may be the author of the tune, but it could just as likely be the work of someone else or simply a tune well known at the time. It is a typical 2/4 contredanse (though with an eighth rather than quarter note pickup) and has nothing "English" about it -- "anglaise" refers to the style of dancing (in a column rather than circle or square), not to the style of music (on the English long dance, see my article in *Music Theory Online*, Contredanse and Classical Finales, Illustrations 1 & 2 and explanatory text). In performance, "Blac Danse" would most likely be played by a single violinist -- probably the caller/dance-master himself (Landrin was known as a dance teacher and leader). Alternatives common at the time would be two violins, with the second part possibly improvised, or two violins and bass. (Examples of the former may be seen here: Clarchies; examples of the latter here: Neue Mozart Ausgabe -- look under Serie IV, vol. 13, Abt. 1/1: menuets). Full string band performances would only happen in the large dance spaces afforded by aristocratic or public balls.

To approximate the performance modes mentioned above, I have constructed scores for two violins (below) and for two violins and bass.

I should also note that, in an actual dance setting, the melody would be played multiple times in order to accommodate all the dancers -- this was especially true of the English long dance, which did not dictate a specific number of dancers. During the course of the repetitions, embellishments and other alterations would certainly be introduced by all but the least skilful (or laziest) players.

The proto-backgrounds applied to "Blac Danse"

(INTRODUCTION: SIX, NOT NINE). I will only present six of the nine possible readings with proto-backgrounds. I will leave out the two intervals above ^3 and the one above ^5. These three are also plausible -- in many respects, no less so than the six I will discuss -- but since my point can be made without introducing all nine readings, this web essay will be a little more efficient.

(FIRST READING: unison ^1). Spaces of the unison are, of course, the simplest and, one might say, the most forceful grounding for generative hierarchical analysis that gives its

highest priority to pitch design. Every other design element comes directly under its sway. In the graphic below, the top level is the proto-background (shown as an interval, not as an isolated note). The pitch G4 has undisputed prominence in the dance's rhythms (relatively long note), meter (first bar, first beat; repeated in third bar, first beat), and form (G4 is also the final note). These three G4s are shown in the second level with half notes beamed together, representing a very basic transformation function we might call RECURrence -- in this case combined with GRouping-PROMinence (suggested in the numbers and brackets below the music in the second level).

The one high-level metric position missing, bar 5, does not abandon ^1 but transforms it with a change of register (or reaching-over in voice-leading terms). The Schenkerian term coupling could apply instead -- that would be covered by a transformation I call ADDINV (adding the inverse of the proto-background interval above it: in this case, adding the octave above the unison) -- but I regard the octave as secondary and the RECURrence of G4 as primary. Therefore, the G5 in bar 5 is shown as a kind of "prefixing" register shift within the second 4-bar group (slur from G5 to the final G4). Note that this octave is also divided by the fifth on its way.

Back in the first 4-bar group, the device of prefixing shows itself also with triadic figures down from D5 to G4 [bracketed], the pitch D5 being the secondarily prominent note in the 2-bar groups because it's on the downbeat of bar 2 and in a noticeably high register. The third level of the graphic shows that this figure is an expansion of the pickup gesture (also

bracketed). I have added the assumed harmonies in the third level in order to help clarify the voice leadings that begin to emerge here.

(SECOND READING: unison ^3). See the general comments about unison proto-backgrounds under the First Reading above. The second reading replaces the attention on metric-rhythmic-formal priority with a progressive melodic figure leading by step from G4 to B4. In this case, "progressive" means "phrase-end" or "group-end," as B4 is positioned at the ending of all but the final 2-bar group. In this sense, the reading of a proto-background as the unison ^3 is in direct opposition to a reading as the unison ^1 and tends (as any reading from ^3 will) to bias the reading early on toward voice leading patterns and the "imaginary continuo" (on the latter, see William Rothstein, "Rhythmic Displacement and Rhythmic Normalization," in Allen Cadwallader, ed., *Trends in Schenkerian Research,* 87-113).

In order to give the progressive melodic figure as much prominence as possible in the analysis graphic, I have separated it from most other events, in particular the D5s and G5s, which are shown as the traditional cover tone (with eighth-note flags). See under the Fourth Reading for the integration of voice leading (that section also has a traditional linear analysis graph as a Schenkerian reading with Urlinie from ^3).

(THIRD READING: unison ^5). See the general comments about unison proto-backgrounds under the First Reading above. This analysis suggests that secondary metrical position, es-pecially when it's consistent (^5 is the first pitch of bars 2, 4, & 6), combined with registral prominence (enhanced by motivic consistency: a scalewise figure goes down from every D5), is enough to undermine metric position (of G4). As with the Second Reading, the low-

est level makes few voice leading connections in order to emphasize the "separateness" of the unison D5.

(FOURTH READING: third ^1-^3). See also the comments under the Second Reading (^3-^3). This reading combines pitches (in the bracketed figures of the second and last levels) that acted very differently in the first three readings: the metrical solidity of ^1, the registral prominence and secondary metrical position of ^5, and the melodic goal of ^3 are tied together in a triadic motif that replicates itself (bars 3-4) and then is reshaped in bars 5-6. Unlike the traditional Schenkerian analysis (below), the Fourth Reading does not subordinate ^1 to ^3, and thus the broadest-scale of grouping priorities is merged with -- or reconciled with -- the progressive melodic priorities: that is, G4 is background at beginning and end (not "erased" as middleground in an initial ascent).

Traditional Schenkerian reading with Urlinie from ^3:

(FIFTH READING: fifth ^1-^5). It is probably inevitable that registral processes stand out in those readings that are based on the larger intervals. In this case, I have added a level of middleground in order to highlight these processes. From the proto-background ^1-^5, a transformation enlarges the space -- ADDINV adds the inverse of the proto-background interval above it, or here, the fourth D5-G5 above the fifth G4-D5. Then the latter is set out temporally in reverse during the dance's second strain or phrase, from D5 to G4. The result is a symmetrical, arch pattern that is clearest in the third level of the analysis graphic.

(SIXTH READING: octave ^1-^8). See the comments about register and registral processes under the Fifth Reading. Like the Fifth Reading, this one shows a symmetrical registral shape, now even more starkly as it ties the beginning of the first strain to the beginning of the second, then reverses the figure to reach the end on G4 again. The transformation DIVision takes the given interval and subdivides it: here G4-G5 is DIVided at the fifth by D5.

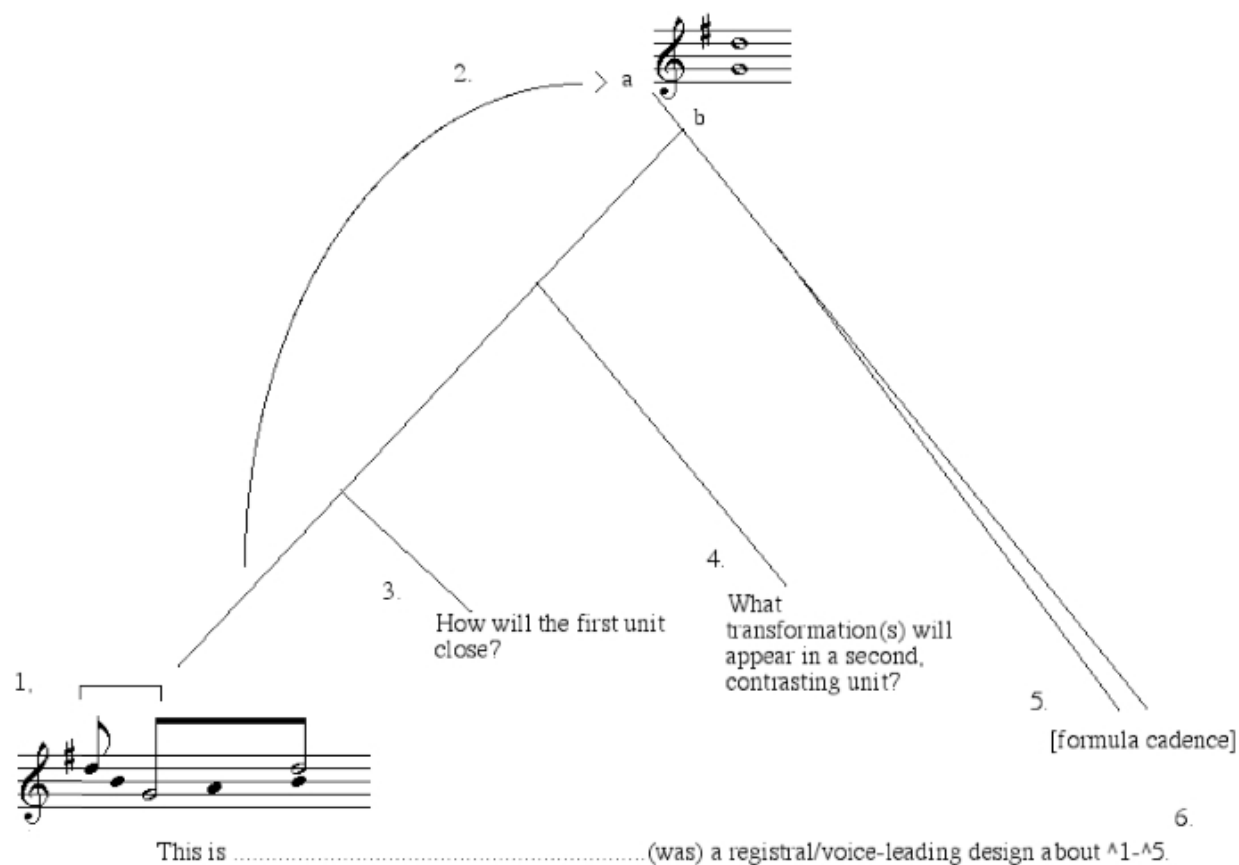## Evaluation of the readings and choice of ^1-^5

(ALL READINGS POSSIBLE) None of the seven readings of "Blac Danse" given above -- six based on proto-backgrounds and one Schenkerian graph -- is implausible, that is, none of them can be rejected outright as failing to be a reasonably possible hearing of this basic form of the dance melody, nor can the analysis graphics be mechanically wrong, within the normally informal limits of all linear analysis. Thus, the seven readings satisfy Lewin's requirement in his comparative analysis exercise for a Schumann song (cited at the beginning of this essay), in that they are musically plausible and mechanically adequate on their own terms. If we leave it at that, we assert a pluralist viewpoint that is also relativist -- necessarily tolerant because it is not deemed possible to evaluate different assertions of value. Is the voice leading bias in Schenker closer to "truth" than the register preference in the proto-background readings, most obviously the Fifth and Sixth?

(FIFTH READING PREFERRED) The admirable tolerance of relativism, however, is unsatisfying. Although it is quite possible for me to hear the "Blac Danse" in terms of any of the analyses given here -- or, for that matter, in any of a number of other ways -- that fact doesn't mean that all of them match my own "best fit" for this melody. Nearly sixty years ago, Milton Babbitt said, in reference to Schenkerian modes of linear analysis, that "There is no authority of ultimate validity beyond the formed, informed, and intelligently experienced musical perception" (cited in the MTS article). I *could* hear the "Blac Danse" as a car-

nival of different guiding shapes -- different "themes" in the language of literary analysis -- but in fact I hear it most readily in a particular way, one conforming most closely to the Fifth Reading. And that is because I hear the dance as a melody for dancing as much as -- or more than -- I hear it as an autonomous musical composition. As I put it in paragraph 11 of my *MTO* article [Contredanse and Classical Finales,](#)

If two measures mark the basic step-unit in the menuet, they must mark more rigidly the passage of time in the contredanse, whose figures have multiple elements that must be accomplished within a single strain. Since these are lively group dances, one couple's failure of timing can create problems for the others . . . For example, in [one set of dance instructions,] the second strain (ten measures, as five two-measure units) asks the dancers to "clap hands sides, all four [couples] turn [single] then clap hands with your Partners and cast off, then lead through and cast off again." One need not understand the details of each action to recognize that a great deal is being asked in a relatively short time. Under the circumstances, it is not surprising that music for the contredanse puts a premium on clarity and symmetry -- and, to help accomplish that, on regular hypermetric patterns.
Therefore, metric clarity at all levels is a high priority. The First Reading certainly fits the bill, but it ultimately can't compete with the Fifth Reading, which accounts not only for the 2-bar groups but for the individual bars as well.
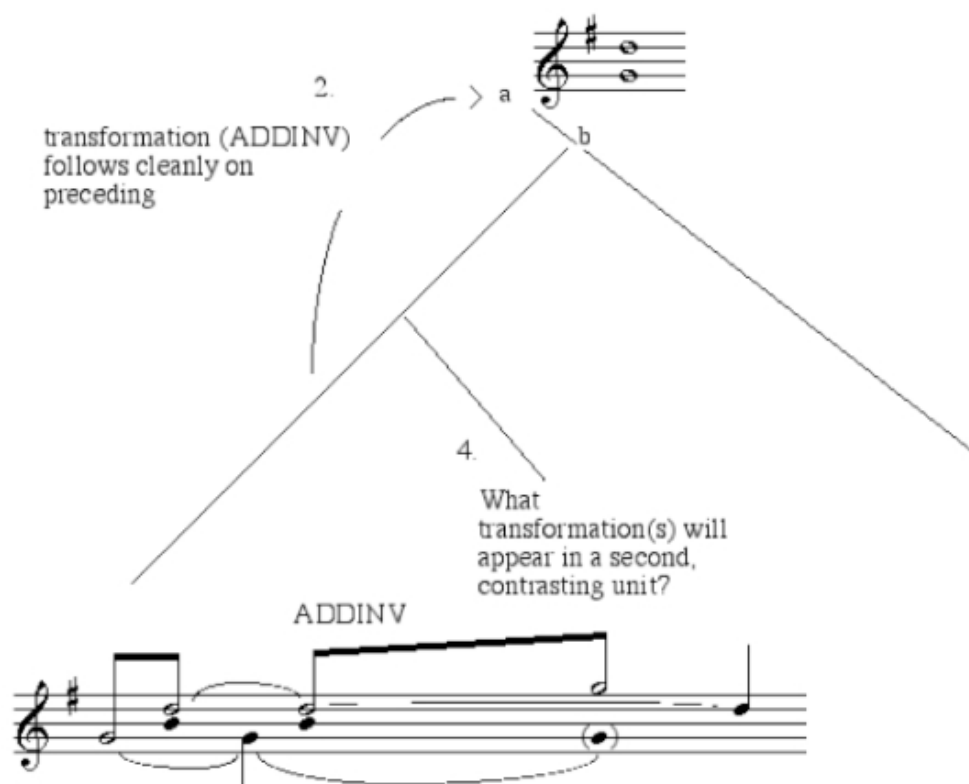
(ANALOGY TO LISTENING FOR DANCING) In order to give a better sense of how I would hear the "Blac Danse" by analogy with music for dancing, I will employ a graphic construct that I have already used elsewhere in connection with the "leap" from the particular to the general (see the second part of the section *tonal frames* for another example and citation to a published article). For a dancer, this leap represents a run from clues in the first moments of the music to a quick judgment of the dance's genre (perhaps, "This is a waltz"), necessary for the dancer to know how to begin and at what pace. For the listener, the analogy would be a quick guess at genre, style, era, or composer ("This sounds like Gershwin") or a pitch-design or metric schema ("The basic idea seems to be neighbor-note figures about ^3").
In the first figure below, the music has begun (1), and from that I make a quick judgment (2) that the opening strongly suggests a registral and voice-leading frame of ^1-^5 ("The frame or generating interval seems to be ^1-^5"). Given this, I have a number of expectations about likely continuations. including a first significant (but internal) formal articulation (3), some kind of continuation, most likely involving a level of contrast (4), and an ending involving a formula cadence (5), at which point -- if all has gone well -- I would assume that my initial judgment would be confirmed (6).

2.

> a

b

4.

What
transformation(s) will
appear in a second,
contrasting unit?

3.

How will the first unit
close?

1.

5.

[formula cadence]

6.

This is ....(was) a registral/voice-leading design about ^1-^5.

Steps (2) and (3)--see below: This example is not as clear as it might be because it doesn't highlight the "looping" that occurs from (2) through (3) back to (2). Step (3) shows an answer (in the musical notation) to the question posed about the ending of the first strain. Because that ending leaves the background/middleground shape unchanged, it feeds back through step (2) as "tending to confirm" (2)'s snap judgment about the proto-background.

2.

tends to confirm

a

b

3.

How will the first unit
close?
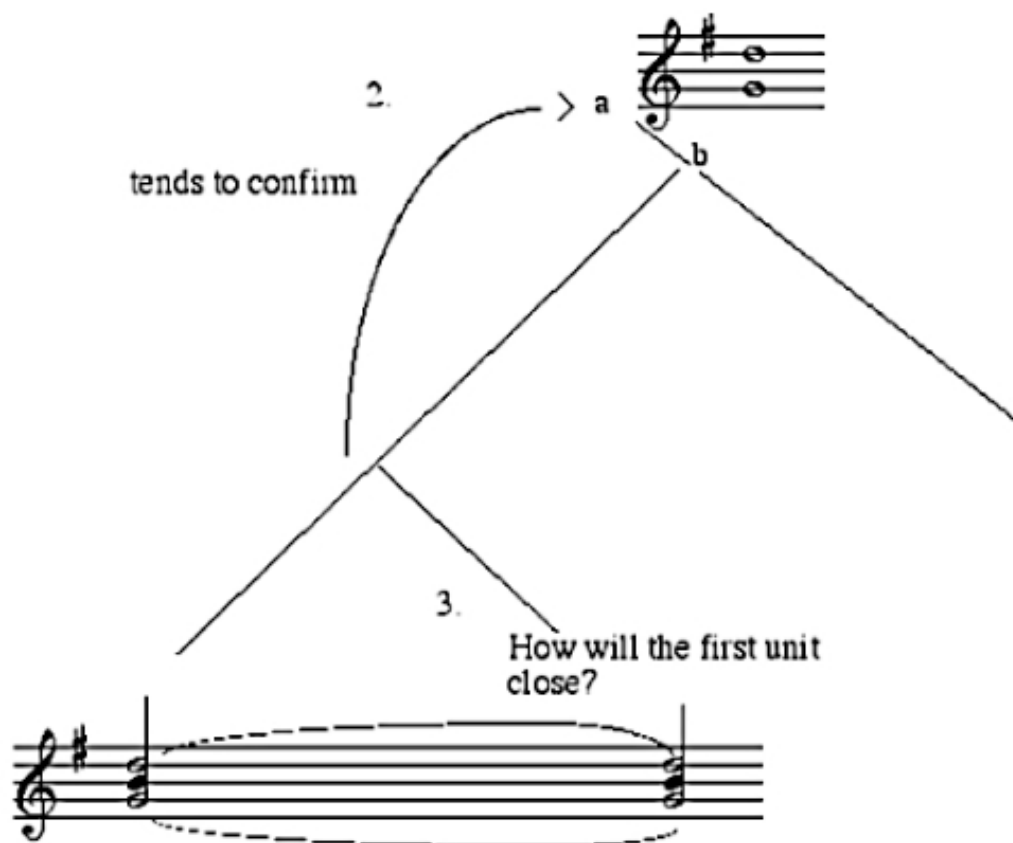
Step (4)--see below: Here again the graphic could be clearer. As in Step (3) above, an answer to the question in Step 4 (see the music notation) feeds back through Step (2) to identify a "transformation (ADDINV) that follows cleanly on the preceding" (that is, bars 1-4). That of course also "tends to confirm" the judgment about the proto-background.

2.

transformation (ADDINV)
follows cleanly on
preceding

a

b

4.

What
transformation(s) will
appear in a second,
contrasting unit?

ADDINV

Steps (5) and (6)--see below: As the dance ends with a conventional cadence and all prior elements support the same conclusion, we can finally say that "This was a registral/voice-leading design about ^1-^5." (There is of course a contradiction between the end-oriented tree diagram, borrowed from Lerdahl & Jackendoff, and my beginning-biased view of pitch design hierarchy. That could be resolved simply by switching the branching from left to right.)

2.

a

b

1.

5.

[formula cadence]

6.

This is .... (was) a registral/voice-leading design about ^1-^5.

Conclusion

Analysis using the proto-backgrounds as initial structures for generative hierarchies must be informal -- certainly compared to formal devices and systems elsewhere in music theory. Because the work is based on a top-down hierarchy, it is highly dependent on the choice of the initial or highest-level figure. Such figures are what David Lewin calls "metastable" (see the citation in the *MTS* article): not universals but acting pragmatically *as if they were* for the sake of the work of analysis or interpretation. They are, in other words, identical in function to the themes that a reader engenders to gather and guide reading and interpretation of a poem, story, play, or other text. For example of themes in the analysis of literary works, see *[Rebecca](#)* and *[Genre Clerk.](#)*

Apart from its practical value in aiding the construction and comparison of analyses made on differing assumptions, the notion of "theme" can also be tied to an argument about the historicity of linear analysis. From the article: "The thematic analogy -- that is, theme as the equivalent of the contents of the background, last stage of reduction, or other 'summary' in a hierarchical model -- helps to align a traditional practice of linear analysis with practices in literary interpretation current at the time that Schenkerian analysis was in process of being adopted in the United States." The point is elaborated at some length in the article.

Mozart, German Dance, K. 602, no. 4, reading using proto-backgrounds and transformation functions

File created 1 July 2009; last updated 28 February 2010.

Supplementary material for "Thematic Reading, Proto-backgrounds, and Transformations," *Music Theory Spectrum* 31/2 (fall 2009: 284-324.

Introduction

The essay on M. Landrin's Blac Danse focuses on the variety of proto-backgrounds, their application, and evaluation. This essay pays closer attention to transformations, which are not systematically exploited in the graphics there. Along the way, I will introduce comments (not in the *Spectrum* article) on Schenkerian transformations as gathered by Matthew Brown in his book *Explaining Tonality.*

(MOZART, GERMAN DANCES) The composition at hand is from Mozart's last year, during which he wrote three sets of orchestral waltzes or deutscher (deutscher Tanz; German dance): K. 600, 602, & 605. Manuscripts for these sets are dated 29 January 1791 (or two days before Mozart's 35th birthday), 5 February, and 12 February, respectively. The deutscher Tanz is the type of the waltz that was the principal ancestor of the familiar nineteenth-century waltzes (with respect to the style of dancing which it accompanied, that is; the "purely" musical antecedents of the Strauss waltz are a bit harder to trace with confidence, especially as they obviously involve French and Italian sources as much as-- perhaps more than--Austrian ones). A piano score for the fourth number of K. 602 is given below. This was taken from the examples for the "modern dance" chapter in Franz Boehme's *Geschichte des Tanzes in Deutschland* (1886); his examples 238-242 are from Mozart: no. 241 is K. 602, no. 4. Having no additional information, I assume that Boehme himself did the piano reduction.

For the original orchestral version, go to [Neue Mozart Ausgabe]() -- look under Serie IV, vol. 13, Abt. 1/2. The dances of K. 600, 602, & 605 were gathered into a single set of "13 Deutsche Taenze" but have been separated out in the NMA's Inhaltsverzeichniss.

241. Deutscher Tanz. Aus „4 deutsche Tänze“. Nr. 4. (Comp. 5. Febr. 1791.) [Mozart-Ausgabe, Serie XI, S. 143.]

K. 602, no. 4: backgrounds and proto-backgrounds

(SCHENKERIAN READING) A Schenkerian reading of this dance poses few if any problems: the Urlinie runs convincingly from ^3 -- see (a) below -- and an interruption beginning about bar 6 (with the ^2 displaced but unequivocal when it does arrive in bar 9) is equally obvious (not shown in the figure). One might ask whether or not coupling of the initial C#5 by C#6 at bar 5 is appropriate, but even a judgment about that isn't necessary because Boehme has dropped the melody of the first phrase an octave from the original violin and flute parts.

(OPTIONS FOR PROTO-BACKGROUNDS) This clarity in Urlinie and first middleground does not, however, mean that the proto-background will be ^1-^3, from which an Urlinie ^3-^2-^1 would be generated at the next level -- see (b) below. At least two others are plausible: ^3-^3, and a "shifted octave" ^3-^10: see (c) & (d) below. The proto-background ^3-^3 is always available as an alternative to ^1-^3, and in fact in many cases I prefer ^3-^3 as the origin of the later-level Urlinie ^3-^2-^1 because it offers a clear visual correspondence to

the distinction between primary tone and elaborative, subordinate conventional cadence formula. The "shifted octave" ^3-^10 simply acknowledges that register transfer, especially as coupling, elaborates -- and therefore is grounded in -- a pre-existent interval. I briefly discuss extending proto-backgrounds beyond the octave in a footnote to this section

(a)

(b)

(c)

(d)
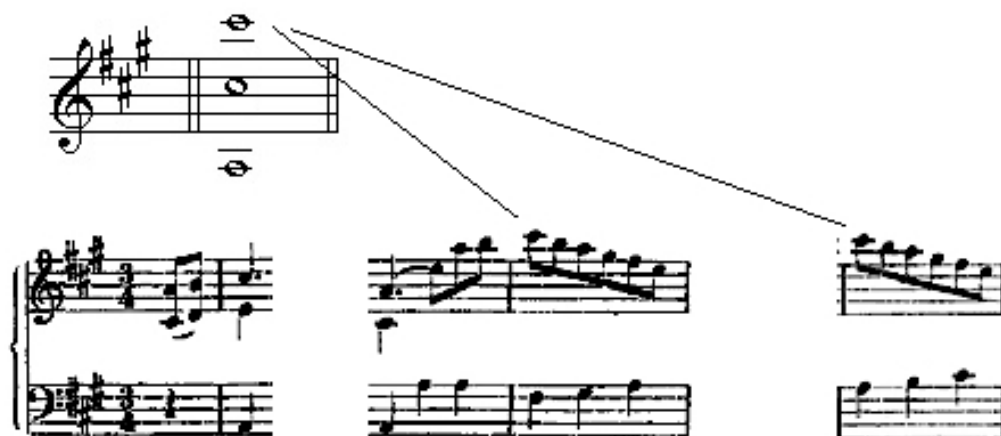
(extending proto-backgrounds)

The nine proto-backgrounds within the octave are three unisons, three intervals above ^1, two intervals above ^3, and one interval above ^5. The restriction to the space of the octave

was arbitrary, made to keep the total number of forms manageable, but in fact expanding the space to a tenth, or ^1-^10, adds only three additional forms after we delete duplicates. Those three are ^1-^10, ^3-^10, and ^5-^10. The duplicates are ^8-^8 (same as ^1-^1), ^10-^10 (same as ^3-^3), and ^8-^10 (same as ^1-^3). If we expand the space available to as wide as a twelfth, three more forms would be added, with three additional duplicates.

Matthew Brown's Schenkerian transformations

Since the goal of this web essay is to develop an analysis using transformations in a more systematic way than the essay on *Blac Danse,* I will start by invoking a list or catalogue of transformations within Schenkerian theory devised by Matthew Brown. In the table below, I have gathered information from four tables in his Chapter 2, pp. 76-83. The labels for individual transformations have been altered according to my usage ("Repetition" becomes "REPetition" etc.). At the right for each term are my summaries of Brown's descriptions.

Transformation figures (gathered) from Brown, *Explaining Tonality*

Transformations	Descriptions (mine)
Horizontalizing transformations	
REPetition	Direct recurrence of a note within the same harmony.
REGister transfer	Shifting a note an octave higher; within the same harmony.
ARPeggiation	Shifting to another note of the same harmony (such as ^5 after ^3, or ^3 after ^1)
UNFolding	Turning existing interval pairs from vertical to linear; chords in pairs
VOEX--Voice exchange	Inverting an existing interval in a harmony
RO--Reaching over	REG involving actual or potential inner voices put above the principal voice
Filling-in transformations	
Neighbor motion	Inserting a note a step higher between notes formed by REC
LINear progression	Inserting a note (or more as needed) between the members of an interval formed by ARP
FRIN -- Motion from inner voice	Line within existing notes of a harmony, with prinicipal voice at the end
TOIN -- Motion to an inner voice	Inverse of FRIN
Harmonizing transformations	
HARmonize	Supplying harmonies for primary pitch elements
ADDition	Adding parallel intervals above or below existing figures
MIXture	Adding chromatic elements, either in a line or within harmonies
TONZ-- Tonicization	Chromaticism suggesting or establishing secondary region
Reordering transformations	
DELete	Notes missing from an expected figure, generating *"Implied tones"*
DISplacement	Temporal shifting of elements either later or earlier than expected

(REDUCTION OF THE LIST) The second table reduces the number of transformations. I have removed Harmonizing and Reordering because they are assumed and not directly relevant to my discussion. Of the ten remaining types (in the Horizontalizing and Filling-in categories), I have reduced them to five by considering several to be subcategories of others. Adjustments in definitions to fit the proto-background model are discussed under comments.

Transformation figures (gathered) from Brown, Explaining Tonality

Horizontalizing transformations	comment
REPetition	Brown assumes a generative hierarchy of note, then recurrence -- thus, in ^3-^3, the second note is subordinate (in a generative scheme "comes after") the first. The proto-background also permits the temporal expansion of a prior unison interval (this is closely analogous to the temporal expansion of an interval that forms the ground for an Urlinie, where ^3-^1 becomes ^3-^2-^1, for example).
REGister transfer	This assumes a hierarchy of note, then transfer. The proto-background also permits the temporal expansion of an octave (see parenthetical comment under REP). RO, or Reaching Over, is a simple subspecies of REG, distinguishable from it only when one is focusing on the difference between principal and secondary voices. VOEX, or VOice Exchange, is a complex, elaborative species of REG. My ADDINV is a variant of VOEX.
ARPeggiation	This assumes a hierarchy of note, then some-other-chord-note. The proto-background also permits the temporal expansion of the relevant chord interval (see parenthetical comment under REP). I have deleted UNFolding because there is no reason to separate it out from ARP.
Filling-in transformations	
Neighbor motion	Direct elaboration of REP. The Schenkerian interruption being an unnecessarily forced construct, the proto-background permits both upper and lower neighbors, separately or in combination.
LINear progression	FRIN and TOIN are subcategories required only when upper/inner voice hierarchy is relevant.

Brown's Schenkerian transformations are informal, as also are the ones I name and apply in the *MTS* article. Certainly they are nothing like the formal transformations familiar from neo-Riemannian theory. For that reason, I actually prefer to use the term "Transformation functions" or simply "functions." For more, see the section in the *MTS* article on Schcheglov and Zholkovsky's structuralist model for generating literary texts.

Transformation functions and K. 602, no. 4

(PROTO-BACKGROUND FOR K. 602, NO. 4) Example (a) below gives the four plausible options for a proto-background in K. 602, no. 4 (assuming the orchestral version and not including the trio for now). The first acknowledges a strong emphasis on ^3, the second the "germ" motive of the first two bars, the third and fourth the movement upward to E6 by the end of the first part. Of these, I think the second is the strongest. The form-defining status of E6 can be absorbed into the reading as in (b), beginning, by means of ARP and its inverse; the thirds are elaborated by LINE and its inverse: see the middle of the system -- at the far right I have written out the voice leading that fills out the figure. These two highlight

what might be called the expressive problem of this dance: brief linear elaborations of ^1-^3 suddenly turn into a radical scalewise extension at bar 5, but that extension introduces two "anomalies" that turn the strain toward the region of the dominant -- those are marked with an asterisk (*) in (d): an introduced chromaticism and a turn away from the expected ending of the scale on E4 in bar 7. The music emphatically regains C#6 at bar 13 (in (c)) and gives a corrected diatonic and completely scalar form (see aligned music in (d)).

(a)

(b)

ARP   ARP -1   LINE   LINE -1

(c)

(d)
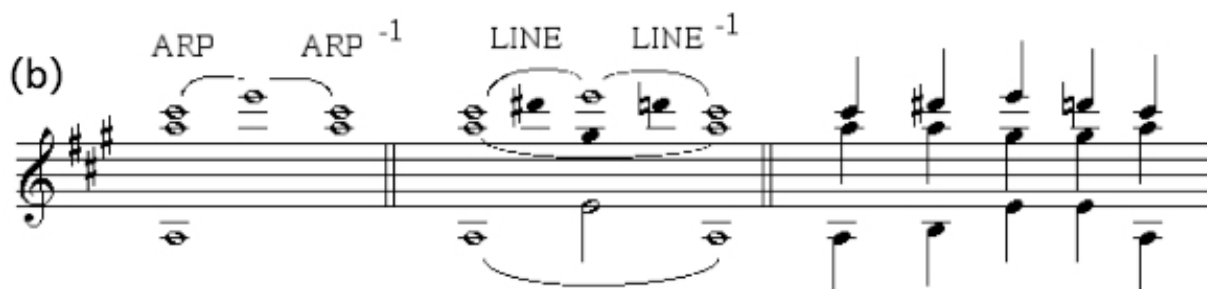
Finally, I have written out a more formal generative graph for the early levels below. After this, the elaborations are almost entirely lines and short arpeggios.

(K. 602, NO. 4, TRIO) The trio is in the parallel minor and, surprisingly for a waltz, is in the popular Turkish or "janizary" style. Contredanses are more likely to make use of this style (as, for example, the "trio" of the contredanse section in the finale of the A Major Violin Concerto, K. 219). The point seems to be maximum contrast with the waltz, as even the melodic shapes are different -- the scale figures of the waltz are mostly gone in favor of strongly articulated and thematic arpeggiations. For that reason, the choice of a proto-background is more difficult to make (see (1), but here again I think that ^1-^3 works best overall, in part because of the move to the mediant at the end of the first part. As the analysis graph (2) shows, this trio surprisingly outlines a LINE despite all the arpeggiation figures. The LINE figure does not encompass the final formula cadence (as an Urlinie would), as the "tutti" answer in each second phrase (bars 21-24 & 29-32), most obvious in the piccolo part, which ascends directly through an octave where the flute and violin double back (see (3)).

(1)

Conclusion

This essay interpreted the basic design and transformations for a Mozart dance and its trio. Schenkerian transformations as gathered by Matthew Brown were reduced to five categories, some of which then appeared in the analyses. Work of this kind is informal -- compared to formal devices and systems elsewhere in music theory -- and, because it is based on a top-down hierarchy, is highly dependent on the choice of the initial or highest-level figure. Such figures are what David Lewin calls "metastable" (see the citation in the *MTS* article): not universals but acting pragmatically *as if they were* for the sake of the work of analysis or interpretation. They are, in other words, identical in function to the themes that a reader engenders to gather and guide reading and interpretation of a poem, story, play, or other text.

Tonal frames in eighteenth and nineteenth century European and American music

File created 25 July 2008; updated 4 January 2011.

INTRODUCTION: LERDAHL'S ANALYSIS MODEL

Tonal frames are understood here as schemata comprising the "a" level elements of a time-span or prolongation reduction in the system of Lerdahl and Jackendoff (GTTM: *Generalized Theory of Tonal Music* (1983)), as amended and extended by Lerdahl (*Tonal Pitch Space* (2001)). An example (from *TPS*, ch. 1) is given below; the work at hand is one of two extant settings by J. S. Bach of the chorale "Jesus, der ist mein Leben." The upper section shows tree notation with the score for the beginning and end. The middle system shows standard notation for the time-span reduction; the lower system the "a" level elements of the prolongational reduction.

As Lerdahl explains, the fact that the standard notation for the "a" level (or basic form) of the time-span reduction looks like the background of an older-style Schenkerian analysis is merely a coincidence: "Unlike the Ursatz, which it superficially resembles, the basic form is not an a priori generating structure but a description of a common reductional state, reflecting the trajectory from structural beginning to cadence" (*TPS*, 25). And, later in the same source: ". . . the crutch of the constraining power of an encompassing Ursatz schema would seem too enticing to resist. I take the psychologically more plausible position that schematic prototypes arise out of a convergence of simple cognitive principles that are available at or near musical surfaces" (40).

Elsewhere Lerdahl says that "the Ursatz is construed not as a well-formed grammatical entity to which acceptable tonal pieces must conform but as a prototypical instance within a flexible underlying schema. The Ursatz need not exist a priori, nor need there even be any claim that it influences unconscious listening. It is just a particularly stable manifestation of classical tonal principles." ("Underlying Musical Schemata" (1988), 287).

In the dichotomous model of hierarchy schemas set up by Lawrence Zbikowski (*Conceptualizing Music: Cognitive Structure, Theory, and Analysis*), the analytical descriptions of GTTM fit the atomistic hierarchy, which favors a reductive mode of analysis: ". . . each level is a conformance class whose elements combine into units that constitute the elements of the next higher level in the hierarchy. This process continues recursively until the limits of the system are reached" (108). (The opposing model is a chain-of-being schema, or a top-down hierarchy emanating from and infused with mysterious (ultimately supernatural) energy.) The GTTM method is not strictly reductive (occasional "leaps" upward are permitted by certain preference rules), just as traditional Schenkerian analyses are not strictly top-down, at least with respect to the analytical task itself (the final result is another matter).

In GTTM there are two types of analyses, one focused on rhythm, meter, and form (time-span reduction) and another focused on tonal hierarchies (prolongational reduction). The former constrains the latter directly through the Interaction Principle: "In constructing a prolongational reduction, we can, for each prolongational region, simply search for the strongest prolongational connection possible among the events in the two largest levels of time-span reduction represented in the region. . . . In terms of musical cognition, this means that patterns of tension and relaxation are strongly organized by rhythmic articulation--an intuition that seems obvious" (233).
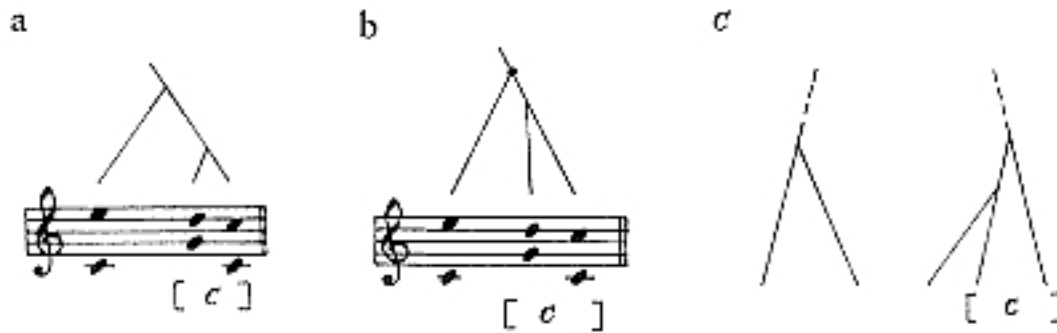
At the largest level, the basic forms of the time-span reduction ("a" at the right) and prolongational reduction ("b" at the right) are matched by a "normative (or preferred) overall prolongational structure for phrases and larger levels of grouping" (GTTM, 233) ("c" at the right). Lerdahl is willing to acknowledge these as schemata and understand them not as ideal forms but as elements of cognition: "Experienced listeners often attend to the expectations, realizations, and alterations of [schematic] units as much as they do to the unfolding of the pitch events that compose them" (TPS, 248); and "Schemata for a given domain have particular variable and default values, and can be intricately organized in ways unique to the domain. Yet schemata are fluid: we adjust or combine them creatively" (1988, 273).

REVISION OF LERDAHL'S MODEL TO EMPHASIZE REGISTER

I will use the basic forms as a starting point but will call them tonal frames in order to make a clear distinction from GTTM and TPS, because I have a stricter view of the role of register. The reduction to one staff in figures "a" and "b" above seems to me both unnecessary and misleading; there is no reason to collapse registers in the final level of a reduction *other* than to make the analysis resemble the pseudo-strict-counterpoint of a Schenkerian background. One might perhaps point out that these figures are abstract representations, not analyses, but the same form is used above in the time-span reduction of the chorale.
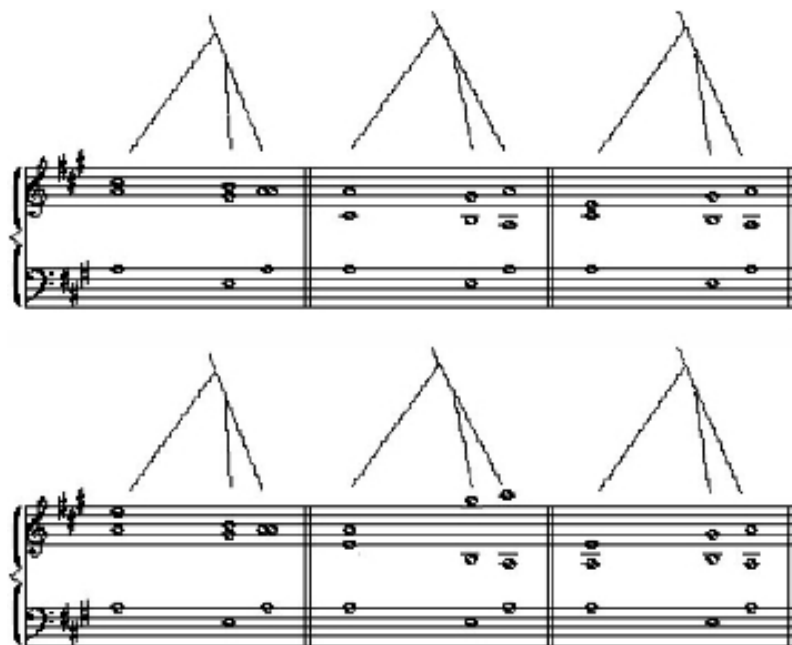
In addition to respecting registral position in so far as possible, I take the "best form" of a tonal frame to have three voices, with a harmonic bass and a *clausula vera* construction in the two upper voices, as in the first row of examples below. The positions of the melodic voices over the initial tonic depend on the time-span reduction. It is not necessary that they form a direct voice-leading connection to the closing cadence: the first row of examples do so, the second row do not. It is also not necessary that the final upper voice pitch be ^1 nor that both elements of the *clausula vera* be present (one voice could move ^7-^1 while the other stayed stationary on ^5, for example), but I focus here on the forms that do highlight the observation that rising cadence gestures derive "naturally" from inversion of the *clausula vera* formula: the 3-1 of the first example becomes the 6-8 of the third example, although of course no priority is implied, as one could say equally well that the 6-8 is inverted to become the 3-1.

The forms in the upper row certainly resemble backgrounds, as Schenkerian analysts overwhelmingly distribute the fundamental structure across a piece as a single extended and elaborated [prolonged] note, followed by a stepwise descent in the final or most important cadence. In my conception of a hierarchical model, however, time has priority over pitch and register has priority over line.

EXAMPLES: SCHUBERT, D366ns1 & 6

The first of Schubert's Laendler, D366, offers a simple example. The score of its first strain is below, a diagram of the tonal frame below that. In this instance, the initial pitch is unequivocal (E5) but no "alto" is expressed; at the end, the 3 in the 3-1 formula is stretched out across a bar (B5-G#5). The stretching of register (in the violinistic manner of the laendler) is a prominent surface motif in this waltz.
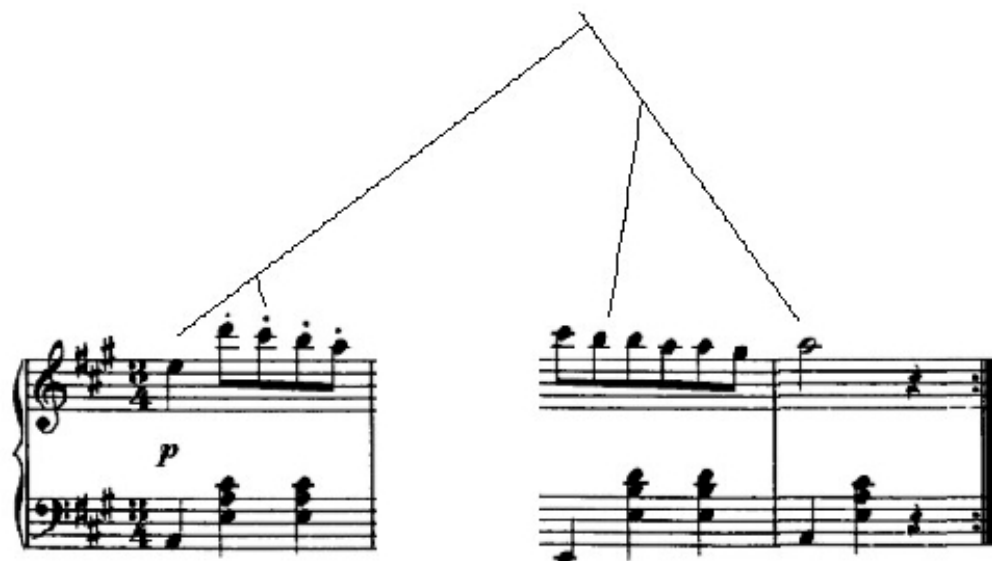
In the sixth waltz from the same set, the voice leading moves in 4- and 5-part block chords, and the static quality that results is reinforced by the "failure" to reach ^8 in the cadence of the first strain, but in the reprise the C5 *is* reached and a reinterpretation of the status of ^7 (B4) is in order.

(reprise, cadence)
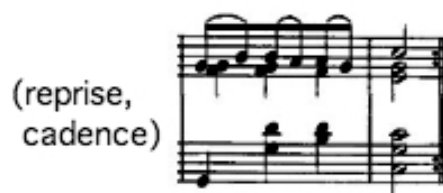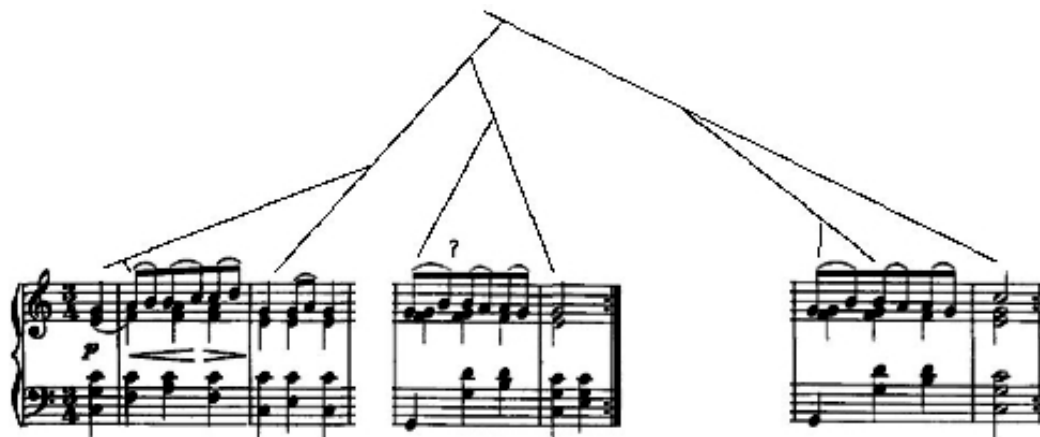
The continuation of this essay looks at the complexity of schematic unfolding, the definition of register, and the role of lines.

Schematic Unfolding, Register, and Line: Part 2 of Tonal frames in eighteenth and nineteenth century European and American music

File created 27 July 2008; updated 28 February 2010.

ESSAY: SCHUBERT, D366n1: LINES, REGISTER, SCHEMATA.

I am again using the first waltz from D366 as the example: the entire score is reproduced at the right. At the outset, given a "blank slate" mode of listening, one recognizes the stability of the tonic triad foundation and chord-tone E5 and might assume, therefore, that everything after bar 1 will "relax" from it (following GTTM's tension-relaxation model, which is shown by right and left branching, respectively). In the upper part of the figure below, the left-leaning direction of the first line acknowledges its stability, which the right-branching hypothetical repetitions from it contradict only in the minimal sense of "coda-like" continuation. This version is not offered as a serious option for listening -- by negative example, it shows how much a typical listener brings to the experience and how quickly that information is deployed. The lower part of the figure illustrates this point: by the end of the first bar, a listener will have recognized the style topic or genre of the waltz and will have constructed a simple pitch-time schema for a tonal composition. (I use a very similar figure to model a dancer's cognition in "Description and Interpretation: Fred Lerdahl's *Tonal Pitch Space* and Linear Analysis," *Music Analysis* 25/1-2 (2006): 220.)

This is a waltz.

[cadence]
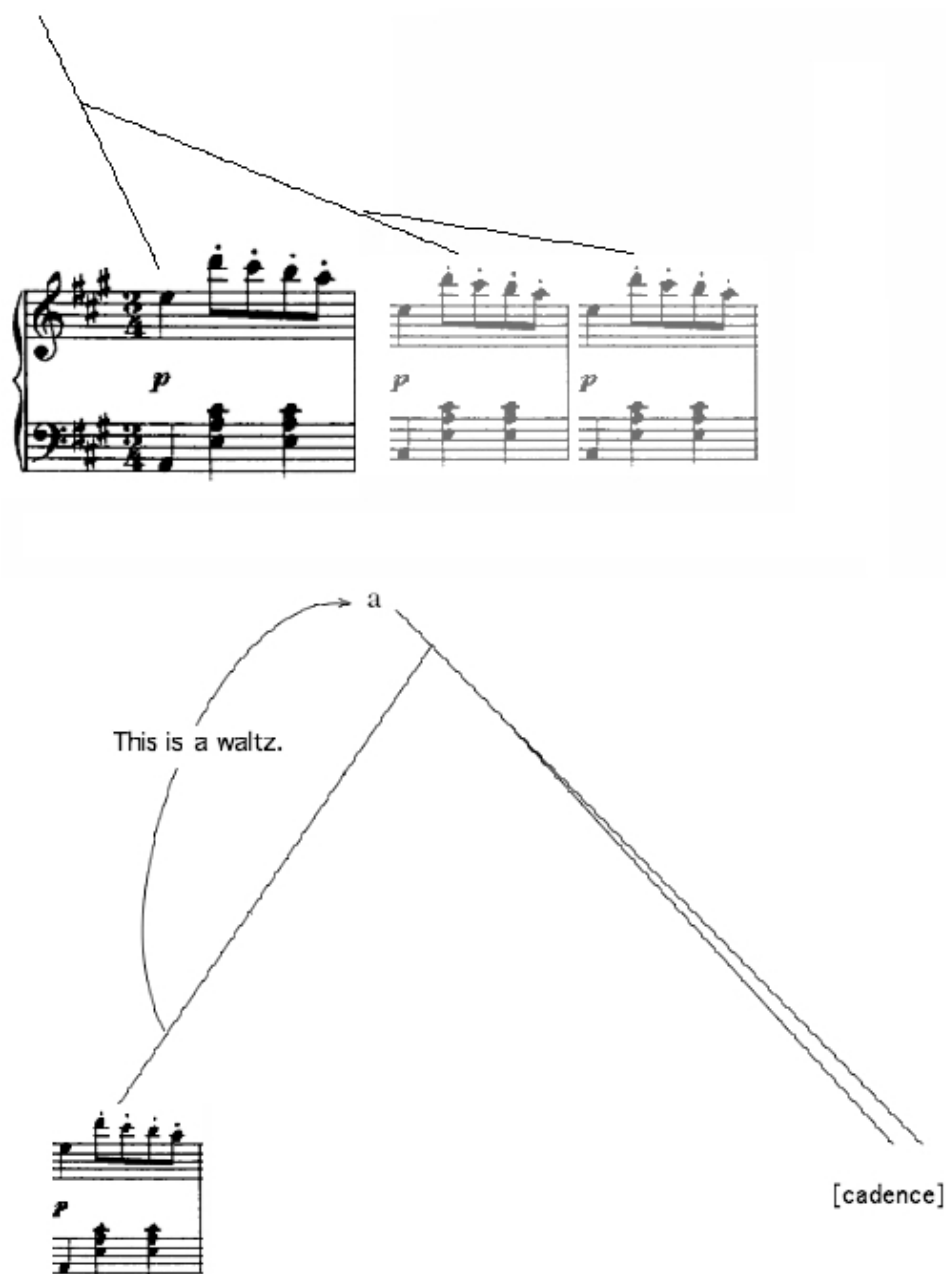
If Lerdahl says that "schemata are fluid," it should also be observed that they are fragile as well (which is a way of saying that they are heavily dependent on detail). It is clear that the opening E5 is the head of each time span (or group) to which it belongs, but the relationship to C#6 is not as simple as the first part of the figure below suggests. The higher register favors the C#, and, although the off-beat position of the C# counts against it, in reduction the displaced C# would take its position on beat 2. We could also appeal to a style trait: a tendency in the laendler to put some emphasis on the second beat. In other words, there is a surprising balance between E5 and C#6, and it would take only a different second bar

to change the analysis (see the right side of the figure with a hypothetical bar 2 that reinforces the register of the C# by a linear connection). Improvisation and variation (both of them central elements in Schubert's waltz practice) are artistic realizations of (or plays on) the fluidity of schematic listening.

The laendler's second beat emphasis is a persistent motif in the first strain, and its effect on register is followed through in the figure below. The cadence (bars 7-8) abruptly breaks the pattern, but that is hardly uncommon in the early waltz repertoire: indeed, one can argue that the very break with "organic" development of a motif aids the cadence's distinctive formal role (not to mention alerting the floor to a potential end to the dance). On the other hand, since the melodic figure that Schubert uses is not one of the simplest laendler formulas, we might say that he simply picks "motif b" out of the first bar and exploits that in the cadence -- in the second figure below, the registral motif is shown as persisting through bar 6 and the "linear motif" as leap-frogging to the cadence.

Finally, then, Schubert might well have decided to follow through on the dominant registral motif by using a waltz cadence cliché of scale degree ^6 as a ninth over the dominant rising to ^7 rather than falling to ^5, as at the right side of the figure below. As the opening sequence made clear -- and as we expect from the waltz repertoire's strong requirement for two-bar groupings -- the registral motif of bar 1 is expanded to the pairing of bars 1-2, then repeated in 3-4 a step lower; it should be repeated again at a lower level in bars 5-6 but bar 6 stretches the pattern (E5, not D5 as the sequence would require, then E6) and opens the way to mapping the registral motif across the entire strain, with bars 1-6 as the "lower element" and the hypothetical cadence below as the "upper element," as the figure shows. (This is the sort of mapping that Schenkerians call "hidden repetition.") I have gathered several similar examples in the next section below.

Registral motif in Schubert waltzes: examples

File created 28 July 2008.

Here are scores for six waltzes from D779, the *Valses sentimentales.* All of these use the rising registral motif in ways similar to my hypothetical variation of D366n1, though not always with a rising cadence gesture (that is, ^7-^8 melodic motion in the uppermost voice).

The final example is from D734, the *Wiener-Damen Walzer.* I have altered the score to show its design: a 16-bar two-reprise form that uses the register motif and a violinistic ("yodeling") Laendler coda that exploits the uppermost register.

Readings of Schubert, Valses sentimentales, D 779, no. 13, using proto-backgrounds (from the blog "Hearing Schubert D779n13")

Saturday, October 10, 2009

D779n13 score

Here is a score for D779n13: see below. And here are two links to the complete collection: Valses sentimentales 1; Valses sentimentales 2.

Tuesday, October 20, 2009

Proto-backgrounds (introduction)

My essay "Thematic Reading, Proto-backgrounds, and Transformations" appeared in *Music Theory Spectrum* 31/2: 284-324. For that reason, several early blog posts will read the Schubert waltz in terms of the proto-background construct developed there.

In a generative hierarchical theory of traditional European tonality (such as Schenker or Lerdahl and Jackendoff), intervals precede lines. Taking the view that intervals are therefore the proper content of the earliest level(s), I build a set of 9 proto-backgrounds within the octave: three unisons, three intervals above ^1, two above ^3, and one above ^5. For the key of D779n13, these would be:

In the essay, I use an informally applied transformational language to elaborate the proto-background intervals, but any kind of notation for linear analysis (including any of the several "dialects" of Schenkerian notation) would be appropriate, too. Some transformations work directly with intervals (ADDINV and DIVision), others with stepwise formations (LINE, Neighbor, and their directional inverses).

I will post a series of entries, each of which is a reading based on one of the proto-backgrounds. A tenth entry will take up the question of comparison and evaluation.

Saturday, October 24, 2009

Proto-background 1: the unison ^1

It would have been better, perhaps, to start with a simpler reading, such as ^3-^3, ^1-^3, or the obvious ^3-^5, but the unison ^1 has the advantage of shifting the interpretive ground rather abruptly and thus emphasizing the variety induced by registrally based proto-backgrounds.
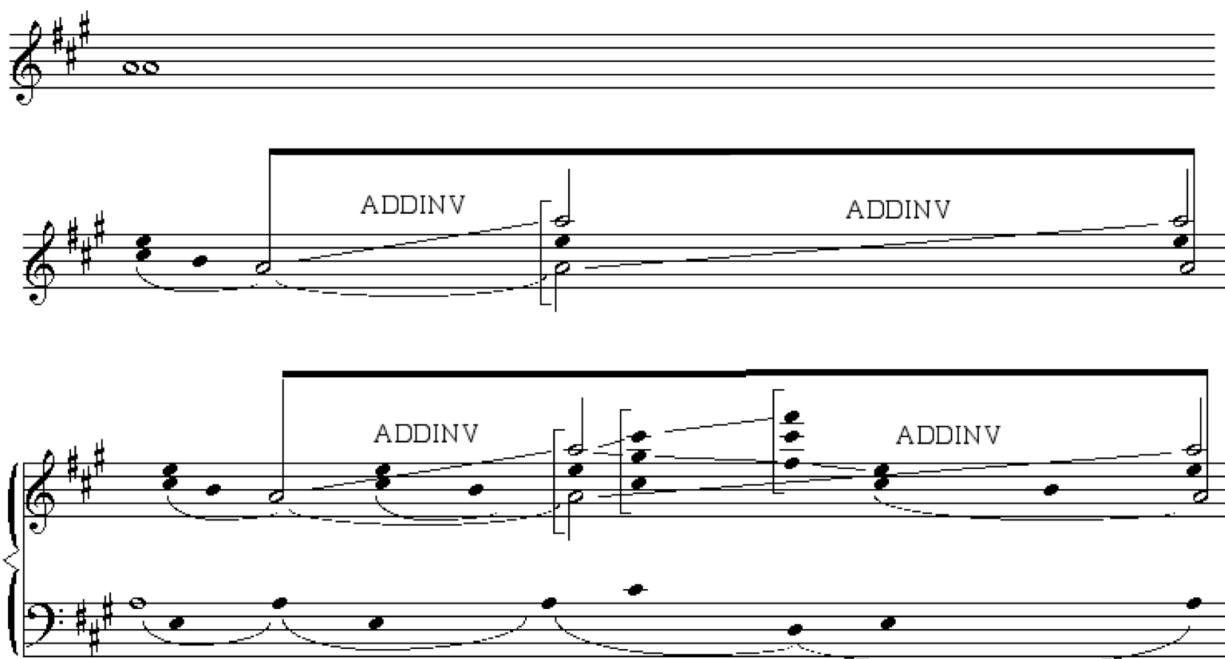
Given the alto's strong focus on ^3 and the soprano's equally dogged emphasis on ^5, a reading generated from ^1 might seem counter-intuitive, but it does a very good job of conveying the teleology in the 8-bar antecedent. After the left hand's "oompah" introduction establishes key and meter, the right hand figures unfold over unstable harmonies; the first point of stability is at the end, when the alto reaches ^1 over I (bar 9). The notation in the treble staff reflects that with unstemmed closed notes for ^5 and the line from ^3 but an open note for ^1.

The consequent repeats the harmonic progression with variants in the eighth-note groups, but its ending is a surprise as a line rises from ^5 to the upper octave (A5), overwhelming the placid repetition of the descent in the alto. The idea, then, is to make a REGistral shift, but the register of A4 is doubled -- it doesn't disappear -- and so I call the transformation ADDINV, which adds above a given interval its inverse (here, the octave above the unison). The register change is not made directly by A4-A5, but at a later level ("foreground") by G#4 -- see the graphic below:

The density of this figure is preferable to a reading that simplifies the passage through reduction to schematic voice leading over the given harmonies.

Returning to the main graphic, I have bracketed the octave with its internal fifth (which receives direct melodic emphasis in bar 17) and then noted how the progress of the second

strain takes this framework and transposes it upward twice. (These could have been labeled as diatonic transformations T2 & T3, respectively.) This is an elaboration, however: on the larger scale, the entirety of the second strain repeats (or maintains the result of) ADDINV.

Thursday, October 29, 2009

Proto-background 2: the unison ^3

The unison ^3 focuses attention on the alto voice but differs from ^1-^3 (future post) in delegating its repeated linear path to later levels. As the "foreground" figure in a previous posting showed, the potent voice leading clichés invoked by the suspensions in the alto voice and the essentially stationary ^5 in the soprano are subverted at the last moment in the cadence. I have rewritten that figure below in terms of ^3 rather than ^1:

Details of the first section (bars 1-18). The first line is a "middle-level" version of the second line above, relevant only to the first strain. The second line shows how the intervals unfold. Note especially the 3-6 INV pair nested inside the main pair. The third line gives even more detail, focusing on lines and the cover tone E5.
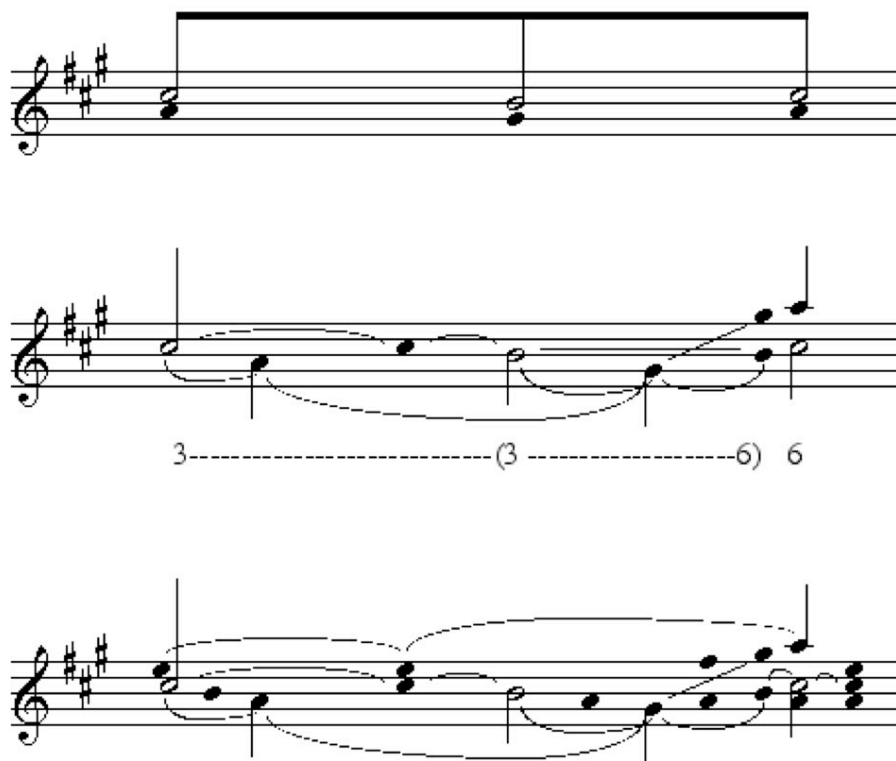
The reading with a proto-background unison ^3 can be rewritten in more traditional Schenkerian notation (the C# major section is not included here -- it's the empty space in the middle of the graph):

Obviously, one has to allow for the possibility of a background/middleground neighbor note in order to make this work. I write about that issue briefly in the *MTS* article (291, 297fn30) in connection with Schenkerian readings by Arthur Komar.

Friday, October 30, 2009

Proto-background 3: the unison ^5

Of course, the unison ^5 forces attention away from the alto (lower right-hand voice) to the soprano, and it also (that is, like the unison ^3 from yesterday's post) aligns itself very cleanly with the formal design. The second line in the graph shows a simple harmonic transformation with one harmony for each section: first strain, contrasting middle, and re-prise. In Riemannian terms, this is (L-followed-by-P) followed by the inverse (or, P-followed-by-L). L turns A major into C# minor, and P makes the latter C# major.

The third line fills in a few details for the first strain. Note that the symmetries in the har-monic patterning extend to the outer melodic voices, with the two neighbor-note figures. The inset takes this a little further by understanding the "essential" chromaticism of getting-into and getting-out-of the contrasting middle symmetrically, as well: E5 breaks up to E#5 at the beginning, but G-natural slumps down to F#5 at the end.

Sunday, November 1, 2009

Proto-background 4: the third ^1-^3

The third-interval rooted in the tonic is a rich source of linear figures, although, like the ^3-^2-^1 of Schenkerian analysis, these figures almost seem *too* obvious; they have a clichéd or generic feel about them, as if someone were to say that the theme of a story, poem, or film was "love." In the graphic below, I have followed this line in interpreting the second level or "middleground" as a neighbor note figure aligned with the harmony of opening-plus-final-cadence (I------V7-I).

More interesting are the details in the third and fourth level. Interval inversion converts the initial third (in the alto) to a sixth in the cadence, then ultimately inverts the inversion, so to speak, in the truncated reprise. (Strictly speaking, I suppose, the second motion inverts upwards (as shown), then shifts the resulting third down an octave.) The fourth level shows further details of the registral play.
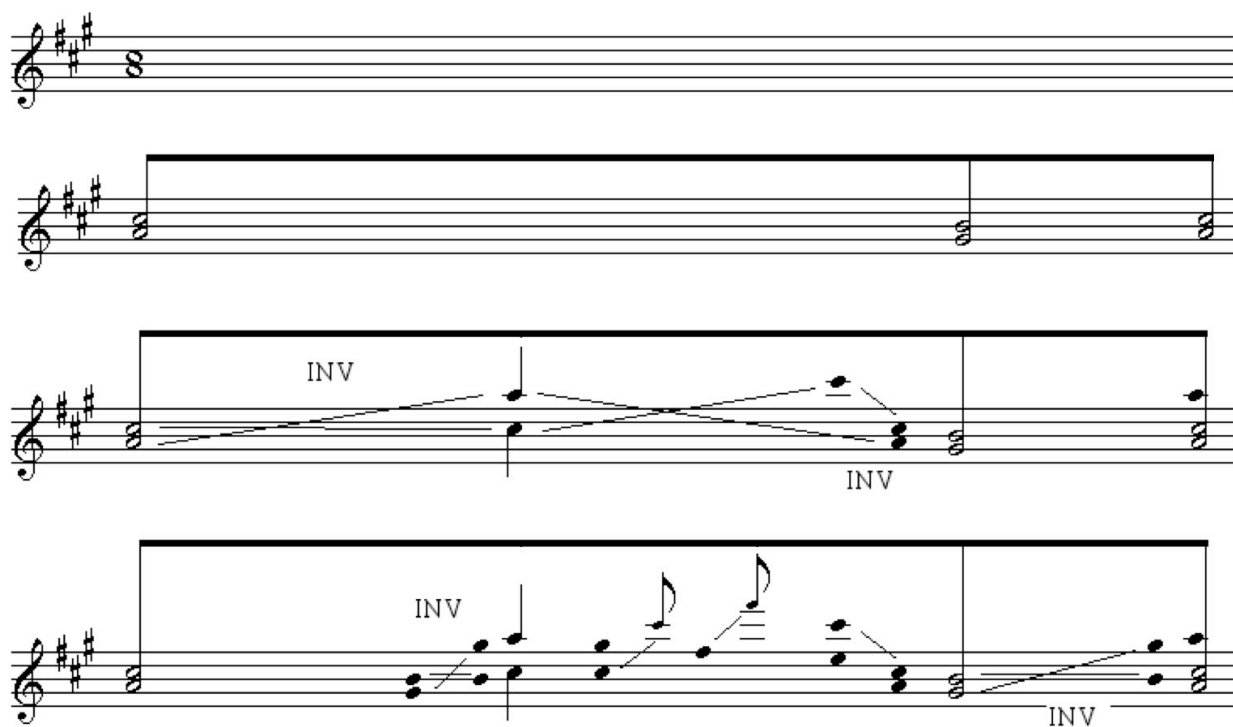
The tonal space of the third ^3-^1 is also used in Schachter's traditional Schenkerian reading of the waltz, of course. I have reproduced the background (strictly speaking, first middleground) form an earlier posting along with my notation of the first strain.

Schachter favors the (inner-voice) descent A-G#-G-natural-F# in the contrasting middle. My own reading of the second strain is close to his but I prefer to emphasize the mixture of E-E#-E.

Differences between the traditional Schenkerian reading and the proto-background can be suggested by aligning both versions with the consequent of the 16-measure theme (mm. 11-18). (b) is the proto-background; (c) is Schenkerian.

(a)

(b)

ADD INV

(c)

$\hat{3}$

c.t.   boundary play   c.t.

leading-tone 3d line

3d line
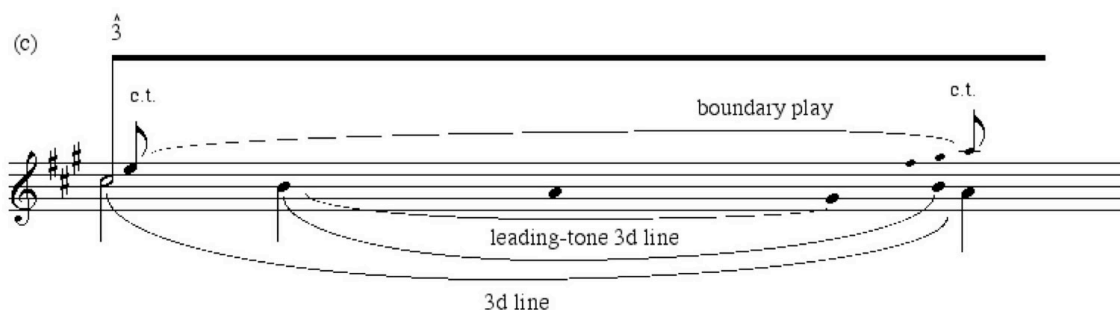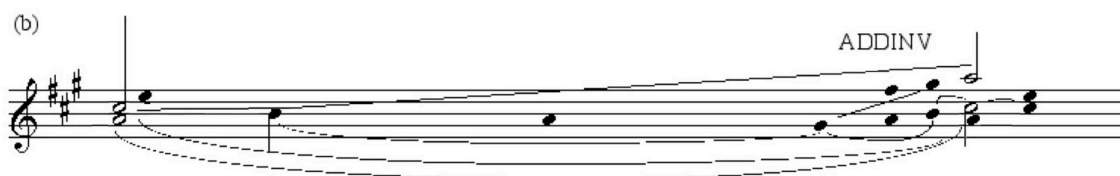
Level (c) allows a simplification of the voice leading that is not available without overt doubling in level (b). On the other hand, the bias against register (or, to put it another way, in favor of single-octave solutions) means that (c) must cut across the clearly articulated parallel sixths in the cadence.

(d)

6-----6---6---6----6

Thursday, November 12, 2009

Proto-background 5: the fifth ^1-^5

The fifth space ^1-^5 re-introduces a teleological element into the reading, but by no means so radically as when we hear the background as ^1-^1. Here, the upper part of the interval receives attention at the beginning, but the interval as a whole is only defined at the end of the first phrase (see the third staff below). The contrast between upper and lower voices in the right hand, thus, is more striking even than in the reading ^3-^5 (entry to be posted later this week), in that the definition or the concrete presentation of each background tone is situated at opposite ends of the phrase. And the teleological hearing of the alto voice is a good mirror of the listening experience for a string of suspensions, which constantly push forward, ahead, towards a goal, the resolution of the last suspension in the series (here, the 4-3 suspension that brings the secure arrival of ^1).

The fifth space also coordinates nicely with the C# major section (in fact, more simply and directly than any other reading): a WEDGE transformation pulls the notes apart by a half step, to G#-E#, then its inverse pushes them back together again for the reprise/ending. (WEDGE here can be understood as inversion about C/C#; it is a variant of Lewin's transformation W -- see 1987, 124 ff.; see also 2006, 332 ff.)

In a performance of the waltz, of course, the WEDGE is distorted as the G# is G#5, not G#4. We would include the registral shift in a fourth staff/level (not shown here).

Monday, November 16, 2009

Proto-background 6: the octave ^1-^8

Register plays such a crucial expressive role in D779n13 that the octave, at first glance, would seem to be an appealing starting point for an interpretation. As it turns out, however, the proto-background ^1-^8 simply shuffles the priorities (levels) of the reading from ^1-^1, rather than introducing any substantially new information, as will be obvious if you compare the graphic below with the first hearing: blog entry.

Nevertheless, I am inclined to prefer this new version, if only because it takes the teleological bias (which will be a factor in any analysis of this waltz involving ^1) and pushes it to the max, making for a more consistent interpretation overall.

[second graphic below] As a postscript to the reading from ^1-^8, here is a reading that, if possible, goes even further to declare a "universal" space of the octave (see graphic below). This hearing of D779n13 follows from an observation that the traditional octave ambitus of the modal scale continued to exert a considerable force throughout the Baroque era, but not later (Neumeyer 1987; Smyth 1999). Since the practices of European tonal music arose and were solidified in this era, it is not unreasonable to suppose that the octave might be a universal principle for tonal space, with the same status as strict counterpoint, figured bass, and the rhetorical schemata exemplified in the *partimenti* tradition.

If so, the result might be a fixed octave "background" with secondary motions (represented by arrows here) established in relation to it. The idea is not only retrospective but prospective since it is, of course, related to the device of absolute register in some twentieth-century musics.

("universal space of the octave")

Tuesday, November 17, 2009

Transformation table

Here is a reference table with the transformations I have devised to date for use with the proto-backgrounds.

These are presented here as three groups of three: the first group results in stepwise changes, diatonic or chromatic (L, N, WEDGE); the second group adds a third note to a triad interval (DIVision, ADDINVersion, TRiadFLIP); and the third group manipulates a triad interval INVersion, EXPandUp, and TRiadTransposition). All of these assume inverses (L-1, N-1, etc.) but note that EXPU-1 contracts an interval -- it does not EXP downward (to make the point as clearly as possible, a fourth transformation, EXPandDown, is added to the third group: see the staff insert).

Caveats: (a) This is certainly not a complete list of what might be done in "triad space," much less in diatonic space; (b) these can only be regarded as informal -- I have not attempted formal definitions, here or elsewhere; and (c) to both the previous points, someone has without doubt done such work and, once I find it, this post will be updated accordingly.

Wednesday, November 18, 2009

Proto-background 7: the third ^3-^5

One might reasonably object that my systematic working through the proto-backgrounds has just delayed the obvious: the alto clearly moves from ^3, while the soprano is just as obviously based on ^5. That sanguine certainty, however, is undermined when one realizes that a proto-background ^3-^5 means the interval also holds sway at the end of the piece: in other words, this reading is radically anti-teleological. Only three of the nine possible proto-backgrounds support such "beginning-loaded" hearings: the unison ^3, the unison ^5, and ^3-^5.

The second level in the graphic below conveys this curiously static sense: the work unfolds in a leisurely way from a firm initial premise, enfolding the C# major section by means of a simple (chromatic) neighbor note and demoting the cadence (whether rising in its direct sense or falling in its hidden sense). The second level also conceals the reprise's instability, which is duly sorted out and explained in the details of the third level.

Sunday, November 22, 2009

Proto-background 8: the sixth ^3-^8

The sixth ^3-^8 often seems more comfortably regarded as a transformation of ^1-^3 through INVersion or ADDINV (in the first case, the sixth replaces the third; in the second case, the sixth is added onto the third).

In D779n13, however, the prominent sixth ^3-^8 of the closing cadence is unavoidable; it generates a foil to the previous reading's static ^3-^5: the new reading is the most sharply teleological of the nine, as everything must be read "backwards" from the voicing of the final right-hand chord.

In the graphic below, the proto-background is at the top. The second level shows the distribution of the pitches over the form (A5 appears at the end of the first strain), along with the first elaboration by means of neighbor notes (as N-1 in both voices). The third level shows the origins of the C# major section in a temporally displaced (and registrally elaborated)

INV transformation. The material below the third level shows later iterations of the same kind of registral play with the basic pitch classes.

For other examples of the ^3-^8 proto-background, see my essays above on Beethoven WoO10n2, where ^3-^8, curiously, plays the anti-teleological role among the several readings; and Beethoven WoO10n1, in which registral shifts upward elaborate a neighbor-note pair (no commentary).

Monday, November 23, 2009

Proto-background 9: the fourth ^5-^8

The last of the proto-backgrounds implausibly demotes the alto voice and gives all the attention to the overall shape of the uppermost voice. Although some interesting insights emerge from this focus on the fourth, still the reading overall seems forced, a deliberate misreading.

Schubert uses the ^5-^6-^7 *Leerlauf* most blatantly to end the first waltz of the *Valses nobles.* It can also be found in the first strain cadence of D783n16, and, in more elaborate form, in D734n1, in D924n7, and in the last of the*Valses sentimentales.*

In the graphic below, the second level shows other figures in addition to the basic opposed neighbors, E-E#-E, A-G#-A; these could, alternatively, be described as a WEDGE.
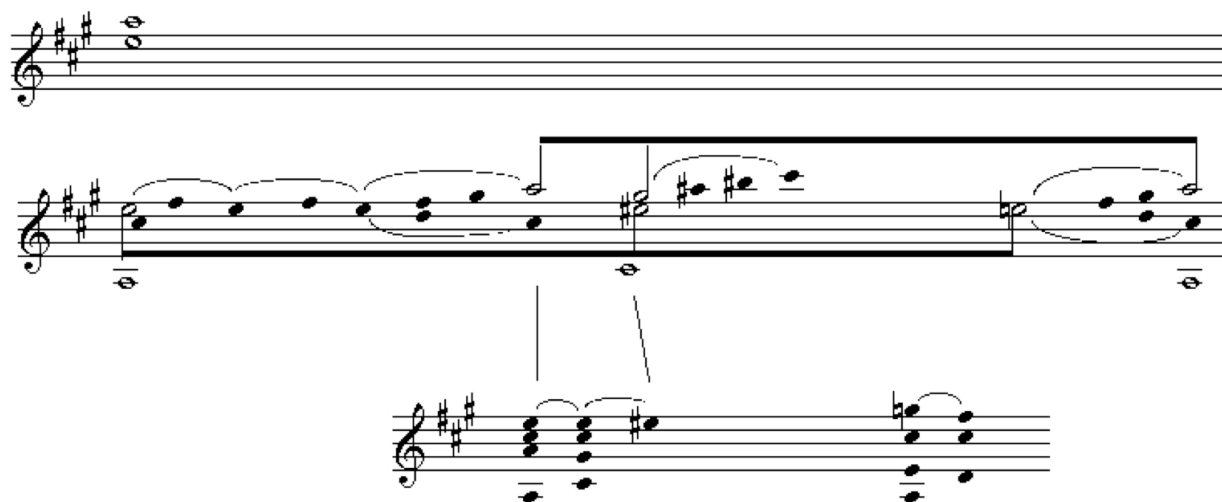
In this version, the second staff shows simple registral shifts generating later-level INV transformations, plus the transposition of E5-A5 to generate the C# major section. The third staff elaborates all of these intervals by means of lines.
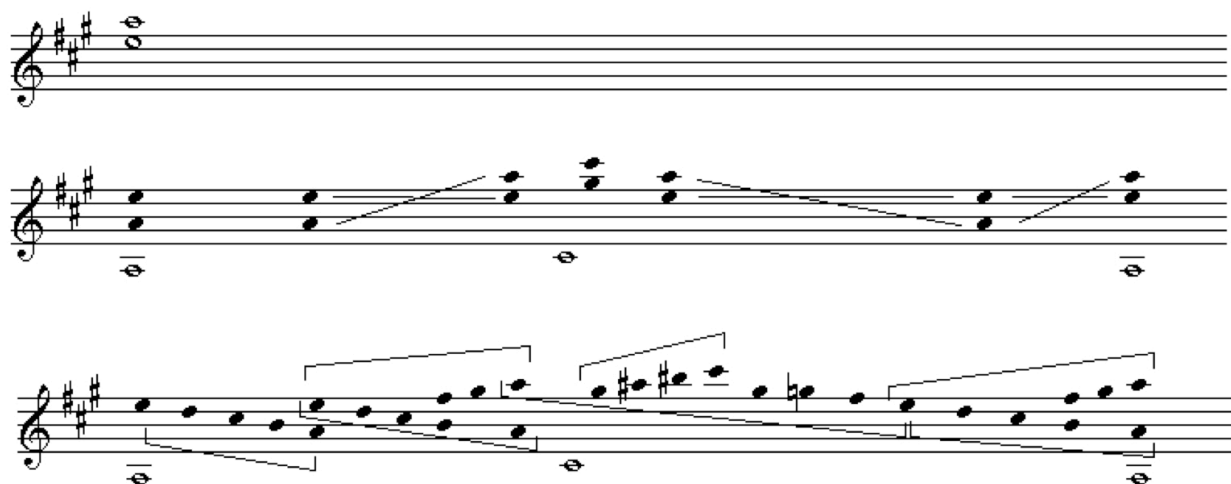
This conception of the piece traces the interval/line relationship more abstractly, as a series of Transpositions in the first staff, to which the countermanding (and insinuating) line is added. This latter, nevertheless, traces the same fourth down (A-G#-Gnat-F#-E), and in the end notes also reaches a vertical interval of that fourth again.

Proto-backgrounds (comparison and evaluation)

Over the past month, and one at a time, I have presented readings based on the nine proto-backgrounds. In many of the individual entries, comments offer preliminary assessments. This post compares all the readings, which seem to form two (non-exclusive) groups: (1) teleological (or end-oriented), (2) focused on one or both of the principal right-hand melody notes and yielding N or LINE-derived backgrounds.

^1-^1, ^1-^8. Of the first version, the unison ^1, I wrote that "Given the alto's strong focus on ^3 and the soprano's equally dogged emphasis on ^5, a reading generated from ^1 might seem counter-intuitive, but it [effectively conveys] the teleology in the 8-bar antecedent." The unison and octave (^1-^8) readings are very closely related, the main difference being the level to which the octave A4-A5 in bar 9 is assigned (whether proto-background or "background"). My assessment was that I "prefer [the octave] version, if only because it takes the teleological bias (which will be a factor in any analysis of this waltz involving ^1) and pushes it to the max, making for a more consistent interpretation overall." Both readings do a good job of aligning formal design and pitch elements at comparable levels.

^3-^8, ^1-^5. The reading from ^3-^8 takes this further, as "the prominent sixth of the closing cadence [that it represents] is unavoidable; . . . the most sharply teleological of the nine, [this hearing of the waltz requires that] everything must be read 'backwards' from the voicing of the final right-hand chord." By contrast, the end-orientation of the ^1-^5 hearing is limited to phrase level, where ^5 shows up immediately but ^1 only arrives at the end.

^3-^3, ^1-^3, and ^5-^5. Like the unison and octave readings, the unison ^3 and ^1-^3 are closely related: "unison ^3 focuses attention on the alto voice but differs from ^1-^3 in delegating its repeated linear path to later levels." Thus the third level ("first middle-ground") of the unison reading highlights INV transformations, but the same level in the ^1-^3 analysis features layered lines. At the same time, ^3-^3 and ^5-^5 are related in that each forces intense focus on one of the two right-hand melodic notes throughout. Both align very cleanly with the large units of the formal design, but the ^5-^5 hearing is more dramatic in the chromatic shift of its primary tone (rather than a secondary voice) for the C# major section and therefore offers a very direct expression of the most distinctive feature of this waltz.

^3-^5, ^5-^8. This is the odd couple, in that I characterized the former as the most obvious, one might say "natural," hearing, but the latter as a misreading.

As to which of the nine readings is the "correct" one -- or even which of them I favor -- I will first refer the reader to the *MTS* article's discussion of Lewin's assessment of four Schenkerian readings of a Schumann song and his ultimate choice among them. Like Lewin, I will say that all of the nine analyses of D779n13 are possible in the sense that they are coherent on their own terms and I can -- sometimes with a little effort -- hear the waltz as

each interprets it. Finally, though, I would choose ^3-^5: the strongly teleological readings seem out of sync with a waltz whose sections move unpredictably. The immediacy of the suspension chain does drive forward at phrase-level, but the C# major section even breaks that up (note that there is only one suspension in each unit, not a chain). Similarly, the analyses that isolate either ^3 or ^5 (or ignore them, as in the unison ^1 and octave) are much harder to hear than the one that combines ^3 and ^5 (soprano and alto, male and female dancers).

"Any background analysis does crucial work in specifying just what some metastable hearing of the piece is" (Lewin, 167). Analysis using the proto-backgrounds as initial structures for generative hierarchies is highly dependent on the choice of the initial or highest-level figure. Such figures are what Lewin calls "metastable": not universals but acting pragmatically *as if they were* for the sake of the work of analysis or interpretation (see discussion in my *MTS* article). As I have noted in earlier posts and in web essays, they are, in fact, identical in function to the themes that a reader engenders to gather and guide reading and interpretation of a poem, story, play, or other text.

Prefix to the end: reconception of the readings from ^1-^8 and from ^3-^8.

Friday, December 11, 2009

Teleology

Yesterday's post introduced a series that may continue through the end of this month: additions or corrections to previous posts and analyses. In January, new readings will start again in earnest.

Here is another way to conceive the most sharply teleological readings so far: proto-backgrounds from [^1-^8](#) and [^3-^8](#). We might regard everything as a "prefix" to the final chord. This takes the teleological bias to its extreme; the effect is to devalue the "declaratory" quality of the piece's beginning (with its organicist or generative implications) and give the strongest possible emphasis to dramatic "delay," or Schenker's *retardation*.

Overt harmonic designs of this type are not unknown, especially in later nineteenth century music, and Schubert plays with them in some waltzes by extending V across seven bars of a strain, only arriving at I in bar 8. See the two examples below: first strains of D365n1 and D734n10.

In the case of D779n13, such a reading is encouraged by the strong metric accent given to the non-tonic sonority of bar 3. To create a graph, we could simply reconstruct the prolon-

gations of a traditional background third-line as prefix to the final ^1. The result would be to make the entire waltz into an "initial descent" to the ^1 (Forte and Gilbert, *Introduction* 181-3). Most linear readings could be similarly reconstructed along extreme teleological lines, although some would certainly suffer considerable damage to their original intentions.