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Telos and Temporality: Phenomenology and the Experience of Time in Lewin's Study of Perception

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avid Lewin's 1986 essay "Music Theory, Phenomenology, and Modes of Perception" is an important touchstone for phenomenological approaches to analysis.¹ At its core, the essay presents a phenomenology of analytical processes: a study of how perceptual statements about specific details of musical works are constituted. The essay's thematic and critical focus is on the antinomies that, as Lewin argues, are integral to the perceptual and analytical consideration of music. These antinomies, in the context of the always provisional and changing quality of musical perceptions, are suppressed in unifying discourses at the price of a certain violence to the validity of perceptual experience itself.

To this tendency to suppress perceptions—a disposition that arises from the need for internal consistency in music-theoretical languages—Lewin opposes poetic and creative acts of interpretive criticism. Conceived as responses that are grounded in other creative and discursive acts, these acts also, for Lewin, constitute modes of perception. Musical performance for example, understood in this way, is a direct mode of perception of a musical work, and a response, akin to a poetic, theatrical, interpretive, or other discursive act. But whereas this interpretive poetics of skilled action and creative engagement is founded on the unity of perception and expression, Lewin denies this alliance in the employment of music-theoretical languages, and argues instead for a separation between perception and expression in their use. This tension in Lewin's discourse between modes of perception and their relationship to expression is the focus of the present essay.

I would like to thank the anonymous readers for the **Journal** for their generous and insightful comments. Given David Lewin's idiosyncratic system of musical nomenclature, I have preserved his spelling for both chords and perception taxonomies in my own prose so as to present linguistic consistency across this article.

1. Lewin, "Music Theory, Phenomenology, and Modes of Perception," 327–92; repr. in his *Studies in Music with Text*, 53–108; henceforth abbreviated MTPP. In-text references are also given to both editions; page numbers from the 1986 article are followed by those of the 2006 reprint.

Journal of the American Musicological Society, Vol. 65, Number 1, pp. 179–214 ISSN 0003-0139, electronic ISSN 1547-3848. © 2012 by the American Musicological Society. All rights reserved. Please direct all requests for permission to photocopy or reproduce article content through the University of California Press's Rights and Permissions website, www.ucpressjournals.com/reprintInfo.asp. DOI: 10.1525/jams.2012.65.1.179.

Lewin's principal vehicle for demonstrating the irreducible plurality of perception is the well-known analysis of Franz Schubert's "Morgengruß."² This analysis, a centerpiece of the essay, is articulated through the intermediary of a heuristic device that Lewin calls the "perception model," a metaphorical representation of mental engagement in the activity of musical perception (MTPP, 341/65). The model, cast in part in the formal language of artificial intelligence, can be described as a procedure for recording and relating to one another a wide (and potentially unlimited) range of possible variations in the perception of a given musical event. The model's structure is simple, comprising two components and operating on two levels. On a preliminary level, it preselects an event (for example a chord, or a sequence of chords), and manipulates the contexts in which this event is framed. The second level of the model is engaged with reading these variants as different perceptions of the same event, and recording and comparing them to one another. The heuristic value of a mechanized representation of the perceptual process, which can both isolate a passing perception and at the same time represent the continuity and interrelation of perceptions, lies in a descriptive formalism that comes close to reflecting the *apperceptive* quality of experience, which Lewin, citing the American Heritage Dictionary, defines as "the processes of understanding by which newly observed qualities of an object are related to past experience" (MTPP, 342/65).

The starting point in Lewin's essay for what he calls an "overtly phenomenological study of music" (MTPP, 327/53) is Edmund Husserl's well-known analysis of the perception of a sustained tone in his 1928 publication, *Vorlesungen zur Phänomenologie des inneren Zeitbewußtseins.*³ Though Husserl's analysis is not concerned with music as such, but rather uses the temporality of the sustained tone as a support or guide for an analysis of the nature of time-consciousness itself, by demonstrating the various stages of the perception of continuity in temporal objects, Husserl points to potential approaches toward a phenomenological analysis of musical works. The central aspect in Lewin's adaptation is his association of Husserlian phenomenology with artificial intelligence.⁴ However, in the final section of his essay Lewin ap-

2. The "Morgengruß" analysis carries the trace of multiple contexts. A version of the analysis was the subject of a 1983 lecture about music and perception presented at a conference organized by Fred Lerdahl and Diana Deutsch; MTPP, 335n11/59n20. It was also the subject of a much more extensive 1974 essay on the methodology of analysis; MTPP, 344n15/67n25.

3. Trans. Churchill as *The Phenomenology of Internal Time-Consciousness*, henceforth abbreviated *PITC*.

4. Lewin cites Dreyfus and Hall, *Husserl, Intentionality, and Cognitive Science*; Laske, "Toward an Explicit Cognitive Theory of Musical Listening"; and idem, *Music and Mind: An Artificial Intelligence Perspective* as precedents that discuss this contact between Husserl's phenomenology and artificial intelligence. pears to reject this pairing as a limitation not just of the model's formalism, but also the focus and reach of Husserlian phenomenology itself.⁵

Lewin's apparent skepticism has been interpreted as an ultimate rejection of the medium of artificial intelligence as adequate for modeling human perceptual response. For insofar as an artificial modeling of perception inevitably isolates *listening* as the principal and paradigmatic activity of musical experience, it overlooks, Lewin argues, the constructive and creative dimensions that are integral to human perceptual engagement.⁶ However, though the formal language, data manipulation, and analytical bias needed for Lewin's artificialintelligence casting of perception may indeed account for some of his reservations, in his analytical practice this formalism is not rigorously, but only heuristically applied. What is more, since Lewin does not reject the polemical and methodological points that the model, perhaps by virtue of its very artificiality and mechanicalness, enables him to express, the perception model's internal structuring as a metaphorical representation of the mind remains of primordial interest. In addition, since the expression of the temporal dimension-not just of perceptual acts of consciousness, but also of the musical object itself-is central to any phenomenological endeavor, it is worthwhile to consider the nature of the model's internal limitations for developing a phenomenological theory of music, regardless of Lewin's ideological and aesthetic reservations, by considering how this machinery is mobilized to produce the "Morgengruß" analysis.

My focus in the present essay is on two inseparable aspects of the perception model: on the one hand, the layered modes of temporal awareness through which it operates and the implications of this interaction for a music phenomenology, and on the other hand, what I will argue is a layering of languages through which the "Morgengruß" analysis is constructed. In the first phase of my argument I briefly consider the perception model as Lewin himself presents it in the "Morgengruß" analysis, and in light of a "Fregean reading" of Husserl's phenomenology that supports it.⁷ In a second phase, I will

5. "I do not see as yet," Lewin writes, "how [Husserl] might distinguish and relate what we call acts of listening, acts of performing, and acts of composing as varieties of *perceptual* response in various musical contexts"; MTPP, 381/100.

6. This is the narrative focus of Kane's "Excavating Lewin's 'Phenomenology.' " After contextualizing Lewin's exploration of phenomenology through reference to Lewin's sources and interlocutors at the time of the essay's publication, Kane speculates as to the reasons why Lewin did not consider the phenomenological approaches of Heidegger or Merleau-Ponty as alternatives to Husserlian transcendentalism.

7. The so-called Fregean interpretation of Husserl, based on the research of Dagfinn Føllesdal in the 1950s and 1960s, asserts a decisive influence of Gottlob Frege's analytical philosophy on Husserl's pure phenomenology and in particular his mature theory of intentionality. Frege and Husserl were both engaged, in the last decades of the nineteenth century, with the foundational problems of logic and mathematics. Frege's 1894 critique of Husserl's psychological account of

return to Lewin's perception model and the "Morgengruß" analysis from the vantage-point of Husserl's Phenomenology of Internal Time Consciousness. This perspective draws out the interaction of *telos* and temporality at work, both within the perception model itself, and in a larger framework in which Lewin's analysis overrides the model. Insofar as it reconstructs a synthetic temporality for the piece, Lewin's phenomenological presentation diverges from Husserl's analysis of temporality in interesting ways. Furthermore, I will argue, the analysis derived from the model is a heuristic offshoot of a more global approach that is excluded from phenomenological investigation in Lewin's essay. This exclusion, I will suggest, originates in large part in the conceit of artificial intelligence, and Lewin's conviction, crucial also for his reading of Husserl, that perception can be associated with a linguistically neutral propositional syntax (a kind of zero-level of writing, and critiquable on the same grounds) that can be subsequently clothed in languages of diverse theoretical systemsa conviction that confines Lewin to the Cartesian field of unique and fixed musico-temporal coordinates that is the very subject of his critique.

The language of theoretical description, I will argue, far from being passive, as Lewin asserts, belongs already to that high level of skilled coping and creative participation that Lewin himself exercises in his analytical practice, but appears to seek elsewhere in a physical engagement with performance and the activities of music making. These considerations suggest an alternative narrative for understanding analytical practice within the framework of perception as constructive creation with which Lewin concludes his essay.

I. The Perception Model

Reading Lewin's "Music Theory, Phenomenology, and Modes of Perception" is in some ways a disorienting experience. The essay is multiply voiced, now formal and stringently theoretical, now conversational, polemical, performative, with continual changes of register both within and between its five sections. In its reexamination of the fundamental premises of music-theoretical practice, whether in relation to its own history or its social contexts, valuation,

the concept of number as a purely operational product of the mind in relation to real objects, and Husserl's own subsequent repudiation of the methods of descriptive psychology that had guided his early work, has suggested grounds for an interpretation of Husserl that reads his theory of intentionality as a generalization of Frege's semantic distinction between reference (or directedness to an object) and the linguistic sense (*Sinn*) that mediates it. This "Fregean" reading of Husserl and its significance in coming to terms with Lewin's phenomenological study is the subject of Part I of the present essay (pp. 186–87). For more on the Husserl/Frege relationship see Drummond, "Frege and Husserl: Another Look at the Issue of Influence"; Solomon, "Sense and Essence: Frege and Husserl"; McIntyre, "Husserl and Frege"; Føllesdal, *Husserl und Frege*; and Mohanty, *Husserl and Frege*. Kane's "Excavating Lewin's Phenomenology" cited above focuses on the relationship between this reading and Lewin's perception model.

and ideologies, or in considering its methodological and pedagogical significance in relation to creative expression, Lewin's essay can be read as a response to Joseph Kerman's influential article, "How We Got Into Analysis and How to Get Out."8 In this article Kerman critiques what he views as an organicist ideological bias that valorizes objectivist and formalist analytical methodologies at the expense of aesthetic, as well as historical and sociological dimensions.9 Read in this context, to the extent that it directs focus toward the constitution of perceptual statements that by their very nature can never fully apprehend any object as complete or finished, Lewin's essay presents an intricate strategy of response. He turns away from any authoritarian descriptions of supposed objective properties of a musical work, and focuses, rather, on the ways in which perceptual variants upon the same object are constituted. Through this attentiveness to the unstable and constantly changing quality of the musical object in perception, which embraces as much the temporal, affective, or cultural world of the perceiver as the genesis and reception history of the work, Lewin anchors his approach in Husserlian phenomenology. And it is from this perspective that Lewin's essay elaborates a far-reaching methodological, pedagogical, and sociological program for music theory that ultimately encompasses a "poetics of analysis," a creative confrontation with musical works that, in his words, bears the "[trace of] the poetic deeds that were the perceptions themselves" (MTPP, 382/101). To the extent that an act of analysis, as a "deed of perception," is in its own right a poetic act, then criticism, in Lewin's sense, must concern itself with the poetic resources, media, and spaces that are articulated in the production of that act.¹⁰ Conceived in this way, analysis becomes the locus for critical attention in its own right, and it is in this sense that analysis and criticism are brought to a common meeting ground.

Lewin's essay concludes with an apparent break from the didactic, methodological insights articulated through the intermediary of the heuristic of the perceptual model (parts 1–4), and finds its vital point of contact in direct, embodied presence, and an attentiveness to the creativity of acts, of music making, and of performance (part 5). Subtitled "Perception and the Productive Modes of Behavior," part 5 sets itself apart from the rest of the essay both in content and style: breaking free from the world of carefully calibrated

8. I owe the insight as to the relationship between Lewin's essay and Kerman's article to one of the anonymous readers for the **Journal**.

9. Kerman's article has been the subject of extensive debate. See especially Agawu, "Analyzing Music under the New Musicological Regime"; and idem, "How We Got Out of Analysis, and How to Get Back In Again."

10. "To the degree that analytic records of musical perceptions are poems, ski-tracks tracing the poetic deeds that were the perceptions themselves, then critics—if not analysis—must concern themselves with the poetic resources at hand, that is, the sorts of poetic spaces analysts inhabit and the varieties of poetic media through which they move in executing their deeds"; MTPP, 382/101.

theoretical languages, it turns its focus to the autonomy of authorship and creative activity as the principal field of response to music. In contrast to the mental constructs and critiques of the previous discourse, here we enter into an embodied world of gestures and movement—kinetic activity caught in the enthusiasm of a roving pleasure in the midst of a vibrant musical and creative life. Schoenberg, Shakespeare, Sessions, God, Boretz, Bloom, and others make their entrance. Their message: the only appropriate response to a creative act is another creative act.

In the final scene of part 5, Lewin himself appears in the role of director, to coach "you," the reader, me, "in the dramatic role of F#/Gb, within the drama that is the first movement of Beethoven's Fifth Symphony." I enter as a costumed character in a play, I wear, Lewin says, an F# cloak "as leading-note to G," which I abruptly hurl away to reveal a Gb suit underneath. My diminished seventh chord resolves, instead of the expected key of G, to the V/V of the key of E flat. I have just enacted single-handedly, Lewin tells me, an enharmonic feat. . . . As I continue to read my part in this charming account, I am gripped by a sense of the familiar. Music as drama, characters as themes that prowl around tonal territories, appropriating them registrally, timbrally, associatively, now forcing a modulation, now yielding and acquiescing—the vivid world of an E. T. A. Hoffmann, Marx, Schumann, and Wagner as much as that of Boretz, Randall, and others. What is the connection between this ending and Lewin's starting point in Husserl's phenomenology, and what is the nature of the continuity, or breach, between them?

I will briefly sketch the aspect of the essay that I am chiefly concerned with, the perceptual model Lewin develops and defines as a "linguistic tool for making analytic statements about previously composed pieces of music" (MTPP, 372/92). The phenomenological preamble that opens the essay and takes as its starting point Husserl's analysis of internal time-consciousness can be summarized as follows: (1) In any present phase, the perception of a duration (for example a sustained tone) includes within itself the unified continuity of the tone's own past phases (retention) as well as an orientation toward its own future continuity and duration in the present of the tone parallels the inherent temporality and time-consciousness that accompanies all our cognitive acts. Lewin supplements this perceptual structure with the psychological implication-realization model developed by Eugene Narmour.¹¹ The important difference, however, is that an expectation (protension)—whether it is realized or not in the ensuing event—accompanies the arrival of that event, such that the

11. Narmour, *Beyond Schenkerism.* As Moran explains, the psychological approach is one that describes the mental processes of empirical persons: "When I grasp a complex inner psychological state, I may not at the same time attend to all the component parts of that state, but nevertheless, they are all psychologically *presented* and perceived, even if not explicitly noticed. Furthermore, they may, with training, be discovered, which is the task of descriptive psychology"; *Introduction to Phenomenology*, 44.

event passes into retention as reinforced, confirmed, or denied in expectation.¹² The event, existing on its own account independently of me is colored and transformed by my expectation, and thus my perception of it.

Yet my perceptions are unstable, incomplete, and in constant flux. They vary according to the context of the event within its own continuum (for example, the location of a repeated chord or theme in the overall form of a piece—an example of which Lewin elaborates in MTPP, 337-39/61-63). They are also shaped by the infinity of contexts that I bring to the event, and which can include my habituation in the idiom; my aesthetic, political, and ideological values; the limitations or resources of the descriptive language I am accustomed to; and myriad other contingent aspects, be they associative, geographical, acoustical, medial, or personal-historical. Furthermore, I can reconstruct past events in my memory, for example, or in my imagination. Despite this multitude of contexts through which I perceive, and which modify and change and transform what I perceive, however, I can always identify the event or object of my perception-for example Bach's St. Matthew Passion-as the same object. This rough sketch provides a sense of the vast field of data that is opened up in phenomenological investigation, and sets the overall framework for Lewin's own exploration of perceptual structures in the domain of music.13

Lewin adapts this phenomenological framework to a music-analytical environment through the intermediary of the symbolic computer language of artificial intelligence. For Lewin, this conceit, aside from being a metaphorical representation of our own cognitive acts, can provide—as a mechanical and programmable process—a useful means for handling the sheer proliferation of phenomenological data collected by this method (MTPP, 341/65; 333/58).¹⁴

Lewin further specifies the active components of the model as follows: (1) a preliminary, or "higher level parser" determines the "EVents" and segments the musical environment around them into differently sized durational spans

12. Lewin's concept of perception often vacillates between the psychological (or "natural") and the phenomenological perspectives, as we will see. My expectation of a tonic resolution after a perceived dominant chord, for example, modifies my hearing of the deceptive cadence that actually occurs, so that I hear in the deceptive cadence itself the denial of the expected tonic, as the term "deceptive" itself indicates. An example of this process is given in the perception p_{6a} , p_{6b} , and p_{6c} sequence in Lewin's "Morgengruß" analysis presented below (pp. 188–91).

13. Later, I will return to a more sustained view of Husserl's phenomenology and particularly the *Phenomenology of Internal Time-Consciousness*, which will be crucial to my reading of Lewin.

14. Lewin's innovation is precisely this adaptation of the method of variation of perspectives to the musical field, and the substitution of variation of musical contexts for variation of spatial perspectives. My focus is principally on the problems that arise from this methodological transfer from the domain of spatial objects to that of temporal objects. Artificial intelligence attempts to reproduce mental processes mechanically, thus eliminating the contingencies of subjectivity. However, since mechanical and algorithmic procedures, insofar as they must be previously designed and selected for implementation, cannot escape the realm of subjectivity, the analogy between artificial intelligence and consciousness is necessarily limited by an occluded element, beyond or external to the synthetic environment. This occlusion and/or ambiguity of viewpoint reveals itself readily in Lewin's model, as we will see.

or "ConteXTs" following a mechanically determined process; and (2) an "EVALuator" collects and records perceptions of these variously contextulized EVents (MTPP, 331/56). In considering the prepared segments (ConteXTs), the EVALuator brackets out any knowledge of what lies beyond the given frames, and produces analytical "STatement LISTs" in accordance with the descriptive vocabulary of a "language L," in addition to "Perception-Relation LISTs" pairing expectations generated in a given EVent/ConteXT with their subsequent confirmation, denial, reinforcement, and so forth.¹⁵ Lewin summarizes the form of the perceptual model as follows: Perception = EVent, ConteXT, Perception-Relation LIST, STatement LIST expressed in a language L. Table 1 illustrates the distribution of the activities of the parser and EVALuator in the perception model. With regard to the diachronic aspect of perception (expressed in the Perception-Relation LISTs), Lewin's position is in general agreement with that of Eugene Narmour whom he cites: "The true 'genetic' basis for musical processes is to be found by discovering what patterns imply in prospect . . . in relation to what they realize in retrospect" (MTPP, 330/55).

Before we proceed to an example of the perception model at work, it is useful to consider the Fregean interpretation of Husserl that provides the context for Lewin's analysis. In its simplest formulation, this interpretation can be described as follows: sense (expressed in symbolic, or in simple propositional form) is understood as that by means of which an act of consciousness (I see, I judge, I remember . . .) intends an object, or reference. The reference, however, is not the real object in the world; rather, the sense/reference correlation is the cognitive structure that refers my perception to an indexical this, here (the "determinable-X") external to me and independent of my constitution of it.¹⁶

15. This language, Lewin says, can be drawn from any music-theoretical system but in principle is open to any descriptive mode, ranging from mathematical to poetical; MTPP, 341/65.

16. The Husserlian terms for describing this structure are noesis (my constituting act) and noema (the object constituted, as correlate of my act) in the context of the transcendental reduction. A brief explanation of this structure is given below. I will only point out here, that both the structure of the noema and all the terms of the Fregean interpretation of it are disputed in the specialized literature. Sense (Sinn), which in the Fregean reading points to linguistically articulated differences (e.g., victor of Austerlitz = sense 1; defeated at Waterloo = sense 2) is defined, on an alternate interpretation, as the common core by which I know I am directed to the same object, dynamically, in and through the variants through which I view it (e.g., "Napoleon," in this case, is the "sense" [Sinn] by which I understand the noematic correlates "victor of Austerlitz" and "defeated at Waterloo" as directed to the same object). In other words, contrary to the Fregean interpretation, sense is, itself, the object of my intentional act; it does not lead me to an object external to itself, or, differently put, there is no ontological difference between the sense and the object of my act. Similarly, the "determinable-X," which in the Fregean interpretation represents the "independent object out there" to which my sense-giving act is directed, on an alternate reading, is not at all an object straightforwardly given to the senses, but that component which grounds, or is common to all my temporal acts of consciousness (whether successive or separated from each other, and in whatever thetic mode)-a residual X in my constitution of the object that transcends any of my acts, and that is uncovered only by phenomenological reflection.

Parser:	• selects EVents			
	• determines ConteXTs for the EVents			
EVALuator:	• prepares Perception-Relation LISTs for the EVent/ ConteXT pairings (for example confirmation, denial, reinforcement, etc., of perceptions in relation to one another)			
	• prepares STatement LISTs in a language L (e.g., "this c minor chord is the minor subdominant of the key of G")			

Table 1 Structure of the Perception Model

The Fregean reading has been criticized for decontextualizing Husserl (particularly with regard to the phenomenological *epokhé*, on which more will be said below), and for regressing into a representational theory of mind and an entrenched mind/body dualism.¹⁷ In so doing, as Beth Preston has pointed out, it replaces Husserl's dynamic concepts with a static formalism, the most important aspect of which, from the standpoint of artificial intelligence (and thus, also, Lewin's perception model), is that sense, identified with simple and familiar propositional syntax directly in view, can be broken up and manipulated for computation purposes, without an interpreter.¹⁸

This formalism is integral to Lewin's perception model, though only to a degree, since the conceit of artificial intelligence is only loosely applied. It enables him to describe harmonic EVents (associated with a determinable-X or purely referring this, here [MTPP, 336/61]) as constructed through the intermediary of different ConteXTs (*noemata*), which determine the *sense* (or, as Lewin terms it, the "attributive meaning") through which I perceive the fixed EVent (a chord, or a sequence of chords). The model, through the activity of the EVALuator, records the fluctuation in the possible meanings of an EVent by means of variation of the ConteXTs through which they are perceived. To the extent that the different meanings associated with a given EVent belong to *my* constituting activity which takes place diachronically "in" time, any contradictory or multiple meanings I associate with the *Same* time about the *same* object, but as *different* objects belonging to different acts and occupying "different parts of phenomenological space-time" (MTPP, 356/78).

17. The practical consequences of this view in the context of Lewin's phenomenology are discussed at length in Part IV of this essay, beginning on p. 200. For a concise summary of the conflicting interpretations of Husserl, see Drummond, "Noema"; and idem, "Structure of Intentionality." See also Zahavi, *Husserl's Phenomenology*. For a critique of the representational theory of mind as implicit in the Fregean reading of Husserl, see Preston, "Husserl's Non-Representational Theory of Mind"; and Langsdorf, "Noema as Intentional Entity: A Critique of Føllesdal." For a collection of essays presenting the Frege/Husserl connection see Dreyfus and Hall, *Husserl, Intentionality, and Cognitive Science.*

18. Preston, "Husserl's Non-Representational Theory of Mind."

A brief consideration of the "Morgengruß" analysis will illustrate the process in the framework in which Lewin conceives it. His melodic summary of the song is reproduced in Figure 1 (MTPP, 344/67). It is perhaps significant that Lewin presents the melody and text in abbreviated form as a mnemonic device to help in the recollection of something already known and familiar.¹⁹ Thus his focus is not on the temporal unfolding of the song as such but, rather, on the construction (or perceptual constitution) of the individual EVents, as seen through the aperture, so to speak, of the ConteXTs predetermined in the preliminary parsing. The descriptions that form the principal substance of Lewin's analytical discussion—the conventional analytical symbols which here act as the operative language L for recording STatements about perceptions—belong, therefore, to the level of the EVALuator's activity.

Lewin begins his analysis *in medias res* with the construction of the g^6 harmony of measure 12, which will act as the focal point and springboard for all that will ensue. The g^6 is presented, first, as an EVent constructed "in its own ConteXT" as a harmonic entity read in the general framework of tonal-theoretical language (MTPP, 346/69). This is perception p_1 as illustrated in Table 2.²⁰ Perception p_2 , directly below p_1 in Table 2, still concerned with the perception of the EVent of measure 12, expands the ConteXT to span measures 9–12. Here, the perceptual constitution of the EVent g^6 is immediately altered. Heard in the ConteXT of the G⁷ chord of measure 9, the g^6 is perceived as ambiguous, and as a possible minor dominant $\frac{6}{3}$ in the key of C major. The right-hand column of the preceding perception.

Perceptions p_{3a} and p_{3b} present a similar pairing: the harmonies of measures 12–13 are given as EVents, first in their own ConteXT (perception p_{3a}), and then in a broader ConteXT (perception p_{3b}) that can either confirm or deny any of the former perceptions. Here, the association of the g⁶ chord with the following A-major chord of measure 13 (as iv⁶–V in d minor) dislodges perception of g⁶ as minor dominant of C, an association that holds also in the larger ConteXT of measures 9–13. The procedure for the EVALuator is thus straightforward: the prepared ConteXT plays a determining role in the perceptual constitution of the designated EVents, which the EVALuator records in a given language L, and compares to other perceptions.

A more intricate example of the kind of perceptual distinction Lewin wishes to emphasize is that shown in the perception $p_{6(a, b, c)}$ sequence, and percep-

19. "I shall assume that the reader knows the piece well enough not to need more reminders of the complete music and text"; MTPP, 344–45/67.

20. Lewin's original diagrams (his figures 7 and 8) are reproduced in the the Appendix of this essay, pp. 211–12. For ease of reference, I have adapted Lewin's presentation by amalgamating elements from both diagrams. I have placed the STatement LISTs (which Lewin refers to as "Selected Statements" and illustrates separately using musical notation in his figure 8) in the center of the diagram; I have aligned the EVents (in this instance mm. 12–13) and provided the ConteXTs as specified. The melodic/harmonic abbreviations and the Perception-Relation LISTs on the left-most column of my adapted diagram are Lewin's.



Figure 1 Lewin's summary sketch of Schubert's "Morgengruß" from *Die schöne Müllerin*, D. 795, No. 8. From MTPP, 344/67.

tion p_{7a} , as shown in Table 3. Here, the EVent is the sonority on measure 14, and the emphasis is on the impact of expectation (protension) on the perceptual act. The perception $p_{6(a, b, c)}$ sequence shows the active expectation of a resolution to d minor following the g6-A progression (perceived as iv6-V) of measures 13-14. The expected d tonic, shown as diamond-shaped noteheads, is retained *through* the melodic C natural (which appears against it as a passing 7th in perception p_{6b}), as well as through the Ab bass note, which sounds against it as an altered 5th (perception p_{6c}). Neither the Ab nor the C in this perception dislodges the expected d-minor tonic that is held in retention, as an expectation never realized that nonetheless persists. The force of this expectation is expressed in the perceptual transition of a series of tonic chords, as i, to i^{7} , to i_{3k}^{4} . The sustained expectation of D produces, together with the sounding Ab, C, F, a half-diminished chord of d which, moreover, insists on its *tonicity*, even though no D is sounded in the bar. By contrast, perception p_{7_2} is embroiled in no such tangle. It recognizes the sonority of measure 14 as a continuation of the sequential iv⁶–V pattern initiated in measures 12–13, and perceives measure 14 as an f-minor iv⁶ projecting in protension a $V(G^7)$ in the

perception	EVent	ConteXT	Selected S	staten	nents	;		Selected Perception-Relation Pairs
			mm 9	10	11	12	13	
р ₁	m12	m12		<u>₽</u>		•		
P ₂	m12	m9–12		8	0	g6	!	(p ₁ , terminal inclusion) (V-percept, questioning)
P _{3a}	m12–13	m12–13				d: iv6 not C: '	•	(p ₁ , incipial inclusion) (p ₄ , implication)
P _{3b}	m12–13	m12–13	p3b 2 0 0 9:	8	0	• •	•	(p ₂ , denial) (p _{3a} , reinforcement)

Table 2 Perceptions p_1, p_2, p_{3a} , and p_{3b} . Based on Part of Lewin's Figures 7 and 8.

Source: MTTP, 345-46/68-69

key of c minor (see MTPP, 351–52/73–75 for Lewin's detailed discussion of this moment).

The important point for Lewin in this account is that these perceptions are heterogeneous, and can *both* be affirmed without logical contradiction. "Our model," he writes, "has no problem in handling this logic, since 'the f chord in measure 14 of p_{7a} ' and 'the d chord in measure 14 of p_{6a} ' *are different objects* in our model" (MTPP, 354/76)... "They are different objects (or acts) in different parts of phenomenological space-time, exercising a variety of interrelationships as reflected in our model by a variety of P[erception]-R[elation] pairs" (MTPP, 356/78).

The summary above presents an overview of the activity of the EVALuator in Lewin's model, and it is to this level that Lewin's analytical observations are chiefly directed. The ConteXTs themselves, however, through which the EVALuator perceives EVents, are determined by the preliminary parser, whose role is more ambiguous in this two-tiered structure. Besides preparing the field for the EVALuator, the parser can interrupt, through use of ellipsis marks and the like, recursive structures such as nested images reflected in parallel mirrors, or repeat-marks in music, signaling the EVALuator to move on. This suggests a breadth of perspective on the parser's level that is unavailable to the EVALuator. In addition, something like the activity of the parser can appear also on the level of the EVent itself, for example, the four tubas that interrupt

perception	EVent	ConteXT	Selected Statements	Selected Perception- Relation Pairs	
			mm 12 13 14 15		
P _{6a}	ml4	mm12–14	p6 (a) (b) (c)	(p _{6b} , implication)	
P _{6b}	m14	mm12–14 plus expected m15 (in d minor)	d: iv6 V i i7 i3	(p _{6a} , realization), (p _{7a} , modification)	
p _{7a}	ml4	mm12–14 plus expected m15 (seq.)	$\begin{array}{c c} p^{7a} & & & \\ \hline & \bullet & \\ \hline & \bullet & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \bullet & \\ \hline & \bullet & \bullet & \bullet & \bullet & \bullet & $	$(p_{6a}, modification),$ $(p_{3a}, sequential expansion)$	

Table 3 Perceptions $p_{6(a, b, c)}$ and perception p_{7a} . Based on Part of Lewin's Figures 7 and 8.

Source: MTTP, 345-46/68-69

Siegmund and Sieglinde's mutual gaze, announcing Hunding's approach (MTPP, 331/56, Lewin's example).²¹ Here, the parser seems in the position of the interpreter who understands the significance of the gesture, or more foundationally, the composer who designs it. The mechanism of the external interrupt, Lewin writes, "necessarily presupposes, as an implicit feature of its model, an aspect of musical time that is not a mental construction of the listener; *some* temporal exigencies impinge on the listener *from without*" (MTPP, 341/65). The perspective of the listener, therefore, would seem to parallel in some way the externally restricted level of the EVALuator, from whose view the context-determining activities (the choice of EVents ["X"]) and motivations of the parser/composer-(interpreter) are occluded.

However, the parser functions in two distinct modes that are perhaps incompatible with one another. From the standpoint of the machine, Lewin writes, "[the] musical perceptions should not form a 'language,' and/or the parsing itself should be 'imperceptible' " (MTPP, 331n8/56n17). The parsing patterns, in other words, should be mechanically, and not subjectively, determined.²² Elsewhere, however, the parser is associated, following the metaphorical connection to the human mind, with the musical timeconsciousness of the listener, though here, inclusive of the EVALuator's

21. Lewin points to a similar instance in interpreting the fermata in measure 15 of "Morgengruß" as an interrupt of the protagonist's psychological impasse that spurs a change of course that accompanies the text fragment "muß ich wieder gehen"; MTPP, 359n20/80n30. Here it is the reader who interprets the pause/interrupt as an active signal in the musico-poetic context.

22. These conditions, Lewin suggests, will avoid the Church-Turing problem of the impossibility of entirely eliminating subjectivity in artificial intelligence. Elsewhere, in the article, however, Lewin does offer musical justifications for parsing patterns (see, for example, MTPP, 348/71 on reasons for the well-formedness of perception p_2).

perspective. "[T]he preliminary parser," he writes, "does not necessarily presuppose any musical time external to the mind of the listener; the parser, along with the EVALuator et al., is metaphorically part of the apparatus through which the listener can build purely mental categories of space and time for the music perceived" (MTPP, 341/65). This level includes objective clock time, theoretical constructs of time such as beats or measures (corresponding perhaps more immediately to the EVALuator's perspective), and the time "in which [the] higher-level parser manipulates configurations of [perceptual] structures before EVALuation" (MTPP, 372/92; emphasis mine). As Lewin points out, neither this higher-level temporality of the parser ("rhythm," as Lewin terms it), nor the EVALuator's processing time, nor the rhythm of the EVALuator's perception of, or response to the externality of the parser's predetermined contextual windows is adequately articulated in the model (MTPP, 372/92). Thus the temporality inherent in our conscious acts of perception guarantees a default temporality that the model itself does not explicitly address.²³ But before enquiring further into the quality of timeconsciousness we might infer from Lewin's model and the relation of this quality to the narrative of part 5 of Lewin's essay, it will be useful to look more closely at Husserl's phenomenology in general, and in particular his analysis of time-consciousness in The Phenomenology of Internal Time-Consciousness (PITC) as an anchor to further observations. The summary of Husserl's phenomenology presents relevant methodological insight into Lewin's adaptation from within a broader, more emphatically temporal framework. The subsequent description of the structure of time in Husserl's analysis provides a necessary perspective for exploring some of the key difficulties and divergences we will encounter when reconsidering Lewin's perception model in Part IV of this essay.

II. On Husserl's Phenomenology in General

The structure of intentionality is central to phenomenological investigation. In contrast to so-called natural consciousness, which is directed to the objects of the world and draws on the perspective of sensory experience as basis for its cognitive activities (for example in the empirical sciences, or in the sphere of our ordinary interaction with the world), the phenomenological standpoint is directed to the acts of consciousness by which the world is given to our per-

23. The quasi-absence of the temporal, or "rhythmic" dimension in the model, Lewin writes, "is surely a defect in the model regarded as a component within a potential formal theory of music-perception. But it does not damage the model irreparably as a linguistic tool for making analytic statements about preexisting pieces of music"; MTPP, 372/92. That Lewin conceives the analytical statements generated in his model independently of the temporality either of conscious acts or of the musical object is a point to which I will return.

ception.²⁴ Any act of consciousness includes in itself a relation to some thing-that is, to my every act of thinking (noesis) corresponds something meant (noema), as the object of my intentional act.²⁵ The object presents itself to me according to the mode to which it is directed in my intention. It can appear to me, for example, in the mode of remembering, perceiving, imagining, dreaming, valuing, predicating, or in its dimension of universality or particularity, or as judgment, aesthetic perception, and so forth.²⁶ Intentionality in a phenomenological sense is thus a polarized structure correlating perception (the subject of immanent intentionality) to the thing perceived (or transcendental object), or noesis to noema, res cogitans to cogitatum, constituting to constituted, or *morphé* (form animated in intentionality, i.e., seeing "as") to hylé (the matter or the raw sensory moment).²⁷ Though the side of the noema carries an objective consistency (as essence, or meaning [Sinn]), this objective essence lies hidden beneath the modes of givenness of the object as constituted in my intentional acts.²⁸ In contrast to Hegel, who conceives the absolute as accessible only through the self-movement of concept and thus

24. Besides Husserl's own writings, my principal sources for what follows are Dastur, *Husserl: Des mathématiques à l'histoire*; Granel, *Le sens du temps et de la perception chez E. Husserl*; and Ricoeur, *Time and Narrative*, vol. 3.

25. As Brentano states it in *Psychology from an Empirical Standpoint*: "Every mental phenomenon includes something as object within itself, although they do not all do so in the same way. In presentation something is presented, in judgment, something is affirmed or denied, in love, loved, in hate, hated, in desire, desired . . . "; cited in Moran, *Introduction to Phenomenology*, 47.

26. Perception, for Husserl, always means object of an intentional act, unless it is qualified as "sensory" perception. The sphere of immanence refers to how an object appears to perception (as the object of an intentional act). The sphere of transcendence refers to the "real world," not in the Kantian sense of the unknowable "thing in itself"—Husserl rejects Kant's noumenon/phenomenon opposition—but in the phenomenological sense of a real and primary content that appears as the common basis of my intentional acts. The object is said to be transcendent, however, because I can never exhaust the full reality of an object in the flow of my perceptions—thus the object transcends the reach of the totality of my possible perceptual acts.

27. Though the terms listed here carry different shades of meaning that evolved in the course of Husserl's philosophical career, their accumulation here—aside from later reference to some of these terms—is intended to clarify the structural isomorphisms that are reflected between pairings. It is important to note, however, that in the *noema/noesis* and the *hylé/morphé* pairs, *hylé* refers to a deep material substrate apprehended in sensation at a preconceptual level. *Noema*, by contrast, refers simply to the object intended in my intentional act (*noesis*), and thus is situated at a more superficial stratum. The *noema* of an act can be a fantasy, a belief—these are still objects of my intentional activity. The same is not true for *hylé*, which designates a self-subsisting matter independent of me.

28. The *noematic Sinn* correlates the various modes of my intentional acts—for example in perception, fancy, dream, imagination, memory—to the same object, which is the object I "mean." I can intend this same tree, in other words, through different acts—in this sense, the tree I intend has a focalizing stability of its own. Interestingly, Husserl observes that the factual existence or non-existence of a *noema* (for example a mermaid or a unicorn) in no way alters this structure. Phenomenology, as Dastur explains, is neither realist nor idealist: phenomenology is ontologically neutral; *Husserl*, 42.

abandons the terrain of representation, Husserl adopts all these images, and conceives the absolute as hidden in the jealous depths of a constituting selfintimacy from which the form of exteriority is constituted on the level of appearance.²⁹ The Husserlian slogan "to the things themselves" refers, then, to this descent beyond the flow of appearances through which the object presents itself, to what Gérard Granel describes as a "life of the Absolute" that is both anterior to, and constitutive of the life of consciousness.³⁰ The perceived, Husserl writes, "so conceals its object in itself that it can be separated from it only through abstraction, and as something essentially incapable of subsisting alone."31 The principal method of phenomenology revolves around this process of abstraction, that is, the suspension or bracketing out ("phenomenological epokhé") of beliefs and of the sensory directedness toward objects in natural consciousness. The suspension of natural consciousness permits us to bring to focus the modes of givenness (intentional acts) through which consciousness becomes aware of objecthood. Indeed, the principal terrain of phenomenological investigation lies in describing the emergence of the self-unity of an object from within this incessant perceptual flux of fragmented and changing perspectives that are the texture of our cognitive acts.

The composite, segmented, and incomplete nature of perceptions—their synthetic character, hovering between the visible (the face seen) and the invisible (the face hidden but inferred), or the play between this inner horizon of the object, its "empty," or assumed potentialities (as for example the other side of a three-dimensional object) and their possible fulfillment (confirmation or denial) from a different perspective—rests in the foreground of Husserl's phenomenological description. We begin here to glimpse something akin to Lewin's description of "Morgengruß," through a process of segmentation (parsing) and from different contextual perspectives, though with an important caveat, as we shall see.

In perception, Husserl writes, an object can be given in only one of its aspects, as a nucleus surrounded by a zone of indeterminacy, which "*points forward* to possible patterns of perception, which, continually pass off into one another, coalesce in the unity of a single perception in which the continuously enduring thing in ever new series of perspectives reveals ever again new 'aspects,' (or retraces the old)." Thus the determinate and the indeterminate flow constantly into one another, referring us to a "unified and continuous series of possible perceptions which, developed from any one of these, stretch out in an infinite number of directions in *systematic strictly ordered ways*, in

^{29.} See Granel, Le sens du temps, 46-47; my paraphrase.

^{30. &}quot;The phenomenon," Granel writes, "is immanent only to itself; it consists of a life of the Absolute which is anterior to the life of consciousness and constitutive of it" ("Le phénomène n'est donc immanent qu'à soi, il consiste en une vie de l'Absolu qui est antérieur à la vie de la conscience et constitutive de celle-ci"); ibid, 47.

^{31.} Husserl, Ideas: General Introduction to Pure Phenomenology, 124.

each direction endlessly, and always dominated throughout by some unity of meaning."³²

Husserl's emphasis on unity of meaning and the serial order of the adumbrations (*Abschattungsreihe*) surrounding a momentary nucleus is worth noting. In §19 of the *Cartesian Meditations* Husserl describes this movement of consciousness through the continuous series in terms of an active direction of perceptions toward different horizons of potentiality:

[T]he perception has horizons made up of other possibilities of perception, as perceptions that we *could* have, if we *actively directed* the course of our perception otherwise: if, for example, we turned our eyes that way instead of this. . . . We can *ask any horizon what "lies in it,*" we can *explicate* or unfold it, and "*uncover*" the potentialities of conscious life at a particular time. . . . [T]he *cogitatum qua cogitatum* is never present to actual consciousness [*vorstellig*] as a finished datum; it becomes "clarified" only through explication of the given horizon and the new horizons continuously awakened [*der stetig neu geweckten Horizonte*].³³

This approximates the activity of Lewin's parser/EVALuator: though the object presents itself to natural consciousness as immediately given and complete (and thus as the first, from which all reflection and investigation follows as consequence), the phenomenological standpoint reveals this concrete first as a *result*, a constitutive and synthetic activity unable ever to contain the natural object in its concrete wholeness. Yet although the object can be described as the totality of the generated series of adumbrations, Husserl, as Moran points out, "denies that we experience the series: we always experience just the object."³⁴

Presupposed in Husserl's account of perception is, on the one hand, the enduring stability of the object and, on the other, the inherent temporality of *noesis*—a temporality that "disappears" behind the appearance of the object of my perceptual acts (the *noema*).³⁵ But what, Husserl asks, is the structure of this temporality itself; what is the objective *hylé* of time that supports my acts of perception? For unlike Kant, for whom the transcendental I was the source for the schemata of space and time necessary for intuition, for Husserl it is time itself that constitutes the unity of the I. Time, therefore, has an objective reality of its own, anterior to my perceptual acts and apart from my construction of it.

The *hylé* of time, however, as raw sensation, is mute and inaccessible except as clothed in some form-producing *morphé* as part of the intentional structure of perception. The temporal object, therefore, stands, for Husserl, as a *noe-matic* support to guide his investigation into the form of time. The complexity

^{32.} Ibid., 138.

^{33.} Husserl, Hua I, Cartesianische Meditationen, trans. as Cartesian Meditations, 44-45.

^{34.} Moran, Introduction to Phenomenology, 115.

^{35.} Granel, Le sens du temps, 52.

of the task can easily be anticipated by considering the double movement that is at work: the temporal flux of my intentional perceptual act and, at the same time, the temporality of the *noema* of the act—the temporal object itself which, unlike spatial objects, by its very nature can never be simultaneously present to consciousness. The mode of being of the temporal object is thus like time that, paraphrasing Merleau-Ponty, cannot *be* except to the extent that it is not fully deployed—that is, to the extent that past, present, and future *are* not, or do not exist in the same sense.³⁶ It is precisely this aspect of Husserl's analysis of time-consciousness that will give us the necessary perspective from which to discuss the representation of the temporal object in Lewin's perceptual model.

My discussion of Husserl's Phenomenology of Internal Time-Consciousness is based principally on Granel's analysis of this text in Le sens du temps et de la perception chez E. Husserl. Because the phenomenology of time consciousness is confronted with describing two temporalities-the temporality of the act of consciousness, and, at the same time, the temporality that belongs to the musical object itself-Granel translates Husserl's Zeitobjekte as "tempo-objets" (rather than "objets temporels"). The neologism enables Granel to distinguish between the two distinct temporalities at work in Husserl's analysis, as well as to separate the particular quality of speed of passage specific to the domain of sound and to moving objects from the more general temporality (existence in time, decay, and so forth) that is the temporal condition of all objects. In order to emphasize the distinctness of the temporality of the *object* of the perceptual act, over and above the temporality of the perceptual act itself, I have chosen to follow Granel in the use of the neologism "tempo-object" over the more standard "temporal object." My reading of Lewin hinges, in effect, on this distinction between the temporality of the act and the temporality of the object-a distinction that is overlooked in Lewin's perception model.

III. On The Phenomenology of Internal Time-Consciousness

Husserl begins his study of internal time-consciousness with a critique of Franz Brentano's psychological description of time-consciousness in the perception of melodic succession. Awareness of melody in Brentano's model, Husserl writes, begins with the sensation of sound. The sensation endures as long as the stimulus endures, and ceases when the stimulus ceases. Sensation, however, poised upon the present moment, cannot of itself produce awareness of succession without a concurrent awareness of the immediate past: a past not simply persisting in consciousness—this would produce not succession but a frozen simultaneity—but modified, such that "every aural sensation, after the

36. "Il ne peut y avoir de temps que s'il n'est pas complètement deployé, si passé, présent et avenir ne *sont* pas dans le même sens"; Merleau-Ponty, *Phénoménologie de la perception*, 474.

stimulus which begets it has disappeared, awakes from within itself a similar presentation provided with a [continually varied] temporal determination" (*PITC*, 30). The connection to the past in this model, its retention, must therefore rely on the faculty of the imagination that reproduces, in accompaniment to the present sensation, a continuum of modified simulacra that sink gradually away with the arrival of new sensations, and in addition, a halo of future expectation. Duration in this model appears as a property of the object (the melody), and the form of time in consciousness is lost, dominated by the flash of separable instants connected to one another in linear sequence. A determination of an intuition of temporality is not possible, Granel observes, from within a split between a real that unfolds, and a consciousness that attends to, or witnesses it.³⁷

In Brentano's reading, Husserl comments, only the now is "real," but it can neither alter nor define the experience; the synthesis and the consciousness of time are formed in a separate representation in the imagination, no longer real, but to which the now is joined "by infinitesimal difference" (*PITC*, 34). Brentano's model cannot account for the temporality of perception: the immediate unity of the tempo-object escapes it, and is produced as an accessory, by the super-addition of remembrance and expectation to a sequestered instantaneous present. Perception is reduced to present sensation, succession and change are only appearances, and the origin of time is relegated to the imagination, and thus not really *perceived* at all.³⁸ Furthermore, in this model the structure of remembrance (the souvenir of the past) becomes indistinguishable from the structure of retention as an originary dimension of the present: indeed the two structures are identical.³⁹

The fulcrum of Husserl's description of time is the now in its nascent state. The source-point (*Quellpunkt*) from which the tempo-object's sensory production of sound begins, he writes, is an originary impression that is immediately and continuously in a state of change. "When the present of sound, its originary impression, passes into retention, this retention itself is in its turn present, as something actually there."⁴⁰ The representation of duration, then, cannot appear as successive points on a line—the structure is one of continuous expansion of the now itself, running off "in a continuity of constant mutation that forms an indivisible unity: indivisible into fragments which could

37. "Il n'y a pas de determination possible de l'intuition, pas d'intuition possible de la temporalité, à partir de la scission entre un réel qui se déroule et une conscience qui y assiste"; Granel, *Le sens du temps*, 45.

38. Ibid., 40-42.

39. Husserl distinguishes between primary and secondary memory: the latter refers to rememoration of the past, which is itself a temporal act. Primary memory, on the other hand, refers to the present-past in the structure of retention.

40. "Wenn aber das Bewußtsein vom Ton-Jetzt, die Urimpression, in Retention übergeht, so ist diese Retention selbst wieder ein Jetzt, ein aktuell Daseiendes"; Husserl, Zur Phänomenologie des Inneren Zeitbewußtseins (1893–1917), 29; my translation.

exist of themselves, and indivisible into phases that could exist of themselves as points of continuity."⁴¹ Granel continues:

The integration of each instant to the total perceptual structure is expressed in the fact that each past instant is *concerned* with the novelty of each "individually perceived" instant. The latter does not add itself to a dead structure, but impacts all the past, restructures it entirely, each time, by submerging it in the past by one notch which the living present "retains" and which gives it its thickness.⁴²

The retentional expansion of the initial now in its emerging state, as continually becoming other, is the present, identical in any phase of its transformation with the unified continuity of the past. Indeed, the experience of temporal duration, as Rudolph Bernet formulates it, is possible only in the present modification of the past.⁴³

Husserl's diagram of this structure is instructive (Fig. 2 is an adaptation from *PITC*, §43). The horizontal line represents the phases of the now of the tempo-object. The diagonal lines, in combination with the horizontal and vertical, show the fusion of the immediate past phase with the present: A_1 retained-in-B is the *present* of B—its thickness—just as B retains in itself A_1 as A transformed.⁴⁴ The structure is intended to express the simultaneous and continual revolution and progression of the three lines in interaction with one another. The expansion of the now, it is worth noting, is not the horizontal expansion of a widened window containing in itself a splice of past and future to accompany the now-time-point (we have seen this model operating on the "STatement LIST" level of analytical descriptions in Lewin's parsings); the expansion of the now is a vertical, retentional expansion, as shown in the diagram. The retention, Ricoeur writes, "swallows up" and "undercuts the

41. "[E]ine Kontinuität steter Wandlungen . . . die eine untrennbare Einheit bildet, untrennbar in Strecken, die für sich sein könnten, und unteilbar in Phasen, die für sich sein könnten, in Punkte der Kontinuität"; ibid., 27; my translation. As Dastur points out, Husserl's use of the term "phases" in his description of the tempo-object is a linguistic necessity "because we cannot speak of continuity without the intermediary of the discontinuous; *Husserl*, 60. Similarly Granel: "We can speak of phases only on condition that we consider them in their incessant mutual solidarity"; *Le sens du temps*, 65.

42. "L'appartenance de chaque instant à la structure perceptive totale se traduit par le fait que chaque instant passé est *concerné* par la nouveauté de chaque instant "proprement perçu." Ce dernier ne s'ajoute pas à une structure morte, mais bouscule tout le passé, le re-structure entièrement chaque fois en l'enfonçant d'un cran dans le passé que le présent vivant "retient," et ainsi lui donne son épaisseur"; ibid., 66.

43. Bernet, "La presence du passé dans l'analyse husserlienne de la conscience du temps," 190; cited in Ricoeur, *Time and Narrative*, 3:284n18.

44. We saw an instance of this in Lewin's reading of "Morgengruß" at measure 14, discussed in Part I (pp. 189–90), with the double reading of the F, Ab, C as part of an f-minor chord (confirmed by the entrance of f in the accompaniment) and as a d half-diminished, where the d, held in retention from the previous beat, blends with and modifies the perception of the listener/reader (see perceptions $p_{6(a,b,c)}$ in Table 2).



Figure 2 Diagram of Husserl's structure of time-consciousness. Adapted from PITC, §43.

monopoly of serial succession in the phenomenological representation of time; [...] Retention mediates between the instant and duration."⁴⁵

Husserl's analysis of the now merges two intentionalities. The first, the "transverse" intentionality (Querintentionalität), is oriented toward the noema: the unity of the tempo-object as given to perception in my intentional act. The second, or "longitudinal" intentionality (Längsintentionalität) is directed not to the tempo-object, but to the now itself: "Husserl's improbable wager," Ricoeur writes, "is to have sought in the 'now' a particular type of intentionality that is not directed toward a transcendental correlate, but toward the now that has 'just' expired."46 The two intentionalities are inextricable, but standing on the side of the emergence of the object in consciousness, the form of time, in Granel's striking formulation, has been made to pass through the content, the object.47 In relation to this autonomous unified hyletic multiplicity of time, perception-the animation of the sensory given into form (morphé)-arrives always too late, always in the fusion of present and past, apprehended in the rear-view of retention in which perception is continuously formed (PITC, §43). This lateness, or noncoincidence of the constituting and the constituted (Merleau-Ponty's blind spot, the "invisible") is the condition of the experience of time. The perfect coincidence of the two, the healing of the blind spot, would bring with it the flash of instantaneous consciousnessthe simultaneous intuition of the whole, without succession.48 This concept of a durationless instantaneity of consciousness, the simultaneous flash of intuition, belongs to the Cartesian narrative of consciousness, which, as we will see, is not overcome in Lewin's model.⁴⁹ It is in view of this lateness, this horizon of darkness, that retention has priority over protension in Husserl's analysis of the phenomenology of time consciousness. "In perception," Husserl writes, "intentions of the future are indeterminate in their content,

45. Ricoeur, Time and Narrative, 3:28-29.

- 46. Ibid., 3:28.
- 47. Granel, Le sens du temps, 58.
- 48. Dastur, Husserl, 69ff.; PITC, §39.
- 49. See Wahl, Du rôle de l'idée de l'instant dans la philosophie de Descartes.

and become determinate only by the ulterior perception of fact. What is determined is only that something will arrive, in a general sense."⁵⁰ Thus protension is simply orientation toward a phase to come.⁵¹

IV. The Parser and the EVALuator

Lewin's analytical model, as we have seen, generates perceptions from the vantage point of an EVent as perceived through a sequence of varying ConteXTs. In the analysis of "Morgengruß" in part 3 of his essay, the focalizing EVent is the g⁶ chord appearing in measure 12 of the song (MTPP, 337/61). It is through a focus on the qualities of this sonority that the song comes progressively into full view through the accumulation of discrete and overlapping environments that are abstracted from the piece and that contextualize the sonority in different ways. These perceptions, heterogeneous and sometimes mutually incompatible, are all valid for Lewin, within the particular ConteXT in which they are generated. In explaining his methodology, Lewin critiques the notion that the notehead on a page should be taken to represent the coordinates for a single and self-identical spatiotemporal entity:

Our fallacious sense that only one musical time is involved, in only one musical time-system, is prompted by the unique horizontal coordinate for the same notehead-point in the same notational geometry, and by the one-dimensional representation of time in that notation... The one-dimensional span ... suggests a unique "time" (span) in which we fallaciously suppose our harmony "is." (MTPP, 360/81)

The pattern Lewin proposes for his reading of "Morgengruß" can be reframed in light of my previous discussion as follows: beliefs associated with the harmony of measure 12 are suspended in *epokhé*, as the object is constituted in different perspectives and contexts through an epistemological stance in some ways similar to perspectival variation.⁵² Though written well before

50. "[I]m Fall der Wahrnehmung die Zukunftsintentionen im allgemeinen der Matrie nach unbestimmt sind und sich erst durch die faktische weitere Wahrnehmung bestimmen. (Bestimmt ist nur, das überhaupt etwas kommen wird.)" Husserl, *Zur Phänomenologie des Inneren Zeitbewußtseins*, 106; my translation.

51. There is a strong emphasis, in Lewin's model, on filling the horizon in protension, or what is the same, for him, anticipating harmonic events in expectation, as we have seen in the perception p_6 example. Musical experience, then, takes place largely on this protensive edge, similar to the implication-realization model, but diverging sharply from the primarily retentional Husserlian perspective. We will return to this question in Part IV.

52. See pp. 192–94 above for examples of Husserl's views about this process. The essential point, for Husserl, is replacing "empty" or theoretical speculation about possibilities with an active and concrete following through, or "fulfillment' of these intentions in thought. Any object viewed in this manner is the site of an inexhaustible number of perspectives that open for phenomenological investigation. This opening of additional perspectives is accompanied by a reciprocal occlusion of others, as we have seen.

the development of phenomenological methodologies proper, Denis Diderot touched on the effect of context in the constitution of meaning in a famous passage that is, in many ways, analogous to Lewin's broader discussion of "Morgengruß":

Everyone knows that sublime phrase from the tragedy Horace: "Qu'il mourût." ["He should have died."] Suppose I ask someone who is unacquainted with Corneille's play, and who has no notion of what old Horatius' answer means, what he thinks of this phrase. It is obvious that since he does not know what this "Qu'il mourût" is, since he cannot tell whether it is a complete sentence or merely a fragment of one, and since he can only with difficulty make out any grammatical relation between the separate words, the person of whom I ask this question will reply that to him the phrase appears neither beautiful nor ualy. But if I tell him that it is the reply of a man who has been consulted on what another man should do in combat, then he will begin to apprehend a kind of courage in the speaker, one that will not allow him to believe it is always better to go on living than to die, and this "Qu'il mourût" begins to interest him. If I add that this combat involves a nation's honor, that the combatant is the son of the person being questioned, that he is his last remaining son, that the young man was confronting three foes who had already taken the lives of his two brothers, that the old man is talking to his daughter, and that he is a Roman, then the reply "Qu'il mourût," at first neither beautiful nor ugly, acquires beauty in proportion as I develop its relation to the circumstances and eventually becomes sublime.53

The comprehension and judgment of Diderot's interlocutor—indeed the resonance of the phrase—is commensurate with the contextual horizon that is gradually opened for him. Diderot performs for his interlocutor something akin to what the parser prepares for the EVALuator through the variation of ConteXTs. Yet Diderot's demonstration is a rhetorical act—an accelerated transformation of meaning from enigmatic utterance to devastating tragic violence—that does not emerge from the immanent time of the work, but instead, is poised perpendicular to it. For the *philosophe*, the work is already constituted, simultaneously present, like a vista revealed by a camera whose shutters he controls. The *telos* of the interpretation reveals, indirectly, the *telos* of the work, though it never enters the time of the work. There is no development here, but rather, revelation.

The similarities between the Diderot extract and Lewin's procedure of organizing his reading around the focalizing role of measure 12 in the "Morgengruß" analysis are clear. As is the case for the *philosophe*, Lewin's parser does not engage in the immanent time of the piece. The parser's horizon is not bound to the temporality of the piece—indeed it is not a temporal object, but a spatial one that the parser manipulates—a "space" of time already constituted, or an instantaneous present in which past and future coexist. This inert body is the site of the parser's acts of "mental surgery" (Lewin's term,

53. Diderot, "On the Origin and Nature of the Beautiful (Encyclopedia)," 57.

MTPP, 361/82) that pulverize it into discrete and nested segments, each the locus of valid perceptions in its own context, but having lost connection in this process, in any rigorous sense, to the entity "Morgengruß."⁵⁴

Lewin rightly argues for the heterogeneity of the perceptions generated by the EVent/ConteXT frames (MTPP, 356/78). We speak not of the same object, but of multiple and different objects, related only tenuously and associatively to the work "Morgengruß." In the tempo-object "Morgengruß" there is no detachable, preconstituted measure 12, or 9, or 14; each moment of the song has its determinate thickness: the history of its constitution, immanent to the present moment itself in the simultaneous advance/retreat movement of retention. The activity of the parser shatters this phenomenological unity, which, in its temporal element, would be indivisible into fragments and phrases that could exist both of themselves and in their own contexts.55 Indeed, in Lewin's model we have not left the Cartesian notion of space-that one-dimensional representation of time, imaged as separable time-points on a line-we have only multiplied it. Instead of a single coordinate point, i.e., measure 12, we have a profusion of coordinates external to the piece: segment-spans, or ConteXTs from which to view measure 12 or other designated EVent spans. The detachable instant is simply expanded horizontally to become the detachable fragment.⁵⁶ The image that presents itself is that of two fixities: the isolated EVent (the "X" of the Fregean reading) that is being explored, and the fixed position-the perspective-of the perceiver of that EVent, which is determined by the ConteXTual frame. Husserl's double movement, of tempo-object and consciousness, is frozen in a spatial snapshot. We cannot ignore, therefore, the importance of the fact that the starting point for Lewin's model is not the tempo-object—it is as though duration itself is subjected to epokhé, leaving behind, as the material for our constitutive acts, the residuum of a spatial husk.

From the standpoint of Lewin's model, the perspective of natural consciousness, which would take the tempo-object itself as the "first" for its subsequent fantasies, daydreams, analyses, discourses, etc., is thus bracketed out to reveal a certain "material" in a more primitive state—perhaps a kind of *hylé* to support our constituting activities. The analogy would run aground, however, because the tempo-object *qua* tempo-object can at no point be consti-

54. In defense of Lewin's procedure, we could say that in a non-Fregean sense, "Morgengruß" is the determinable-X—i.e., that component which is common to the intentional content of my successive, or separate, or thetically distinct *noetic* acts. Thus measure 12 already identifies the g⁶ chord within the entity "Morgengruß." However this would undermine Lewin's argument about the "unique horizontal coordinate and the unique time (span) in which we fallaciously suppose our harmony 'is' "; MTPP, 360/81.

55. See Part III (pp. 196-200) above.

56. For a different perspective on Cartesian space as a factor in Lewin's music-theoretical thinking see Klumpenhouwer, "In Order to Stay Asleep as Observers: The Nature and Origins of Anti-Cartesianism in Lewin's *Generalized Musical Intervals and Transformations.*"

tuted before reaching its final note; furthermore, in retention, it is at no point co-present with itself in all its earlier phases, for these, taking the form of time, will have receded in the perspective of the past, and narrowed to a distant point.⁵⁷ Thus there is no question that an abstracted spatial object might stand for the *hylé* of the tempo-object. Nonetheless, it is this co-presence of the whole, and not the temporal multiplicity of the tempo-object that Lewin's parser manipulates.

But what is the experience of the EVALuator? Table 4 summarizes the complete STatement LISTs that the EVALuator produces from the ConteXTs it encounters. The shutter-frame opens, a partial scene appears in a flash, and the EVALuator makes sense, according to its habituation, of the frames presented to it. If the EVent/ConteXT frames are environments that the EVALuator inhabits, then we might imagine them as separate rooms, superimposed in space, one over the other. We can imagine these rooms on different parallel planes (showing the heterogeneity of the strands or the "different phenomenological space-times," as Lewin intends), with transparent floors and ceilings to facilitate the comparisons between the perceptions from any vantage point or perspective occupied by the EVALuator.58 Sometimes the EVents fill the space entirely (for example perceptions p_1 and p_{3_2}); sometimes, in addition, they include an opening, inviting a protensive view of what lies ahead (perceptions p4, p5, p9); sometimes a determinate past occupies part of the room as anterior to the EVent (perceptions p_2 , p_{3b} , p_{6a} , p_{7b} , p_8); and sometimes the room includes a portion of the past as well as a protensive vista (p_{6b}, p_{7a}). The EVents vary in length. Perceptions carrying the same ordinal number but differentiated by letter are related through variation of ConteXT around the same EVent. For example perception p_{3b} opens a retentional shutter that orients and confirms perception p_{3a}; or perception p_{7a} opens a protensional shutter confirmed by the EVent p_{7b}. In this way, by indirection, the guiding *telos* of the parser makes its appearance in the sequence of the parsings. Given the absence of the notion of a Quellpunkt in Lewin's description, the parser's shutters are free to provide ConteXTs that will either dislodge or restore, modify or confirm the EVALuator's topographical reading. The

57. An instance in Lewin's essay that points to this structure is the following statement, made in relation to the "rhythmic" (temporal) deficiency of the perception model: "The model suggests, for example, that the rhythmic effect of the passage from 'Morgengruß' involves not just aspects of the music traditionally considered as 'rhythmic,' but also the way in which the various percepts p_1 , p_2 , p_{3a} , and so on come into mental focus, engage one another in various P[erception]-R[elation] situations, recede from focus, and leave behind various mental residues, all the while the acoustic signal is proceeding in clock-time"; MTPP, 372/91.

58. We see Husserl's method of perspectival analysis clearly emerge when we understand the observer-position function of the EVALuator. In place of the free series of new perspectives and patterns of perception passing into one another (the *Abschattungsreihe*), however, we have the formal division of this activity into the two-tiered structure of parser/EVALuator in the artificial intelligence model. This method, however, becomes applicable only through the substitution of a spatial object for the tempo-object, as we have seen.

perception	EVent	ConteXT	Selected Statements					
р ₁	m12	m12	mm 8 9 10 11 12 13 14 15 16					
P ₂	m12	mm9–12						
P _{3a}	mm12–13	mm12–13	$C: V_{b}^{6}?!$					
P _{3b}	mm12–13	mm9–13	d: iv6 6 (not C: V _b !)					
P ₄	mm12–13	mm12–13 plus expected m14						
P ₅	mm9–13	mm9–13 plus expected continuation	$\begin{array}{c} p^{5} & \bullet & \bullet \\ \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet \\ \hline \\$					
р _{6а} Р _{6b}	m14 m14	mm12–14 mm12–14 plus expected m15 (in d minor)	(a) (b) (c) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c)					
p _{7a}	ml4	mm12–14 plus expected m15 (sequence)						
Р _{7b}	mm14–15	mm12–15	$\begin{array}{c} \underline{p7b} \\ \hline \\ $					
P ₈	mm14–15	mm9–15						
P9	mm9–15	mm9–15 plus expected m16	P^9 P					

Table 4EVent, ConteXT, and STatement-LISTs.

Source: Based on Lewin's Figures 7 and 8, MTTP 345-46/68-69.

EVALuator's horizon of darkness is controlled by a higher omniscience, for purposes that will become clear.⁵⁹

The EVALuator proceeds in two stages: in a preliminary stage, it deduces logical or speculative chord-progressions (STatement LISTs) from its understanding of the EVent/ConteXT relationship it inhabits. The observations in the STatement LISTs are typically simple constatations made on the level of natural consciousness, sentences, for example, such as "d-minor is being tonicized," or "only one pitch is attacked at a time" (MTPP, 347/70), or "the gminor six chord is iv-of-ii in a C-major progression and tonicizes ii" (MTPP, 349/72). There is no temporality in these STatements, but rather a suspended, timeless surveillance. Instantly aware of the dimensions of the room, and poised on the EVent within it, the EVALuator gauges its position vis-à-vis the back-limit of the room and moves across the designated succession, reading its position according to its chosen idiom or language. These STatement LISTs, however, are not ends in themselves, but serve as a preliminary stage in a broader framework: that of the constitution of Perception-Relation LISTs. Where the STatement LISTs are horizontal and follow the sequence of sonorities in the EVent/ConteXT fragments, the Perception-Relation LISTs, based on comparisons between perception levels (expectation, fulfillment, reinforcement, denial, etc.) operate vertically. Husserl's double intentionality, transversal and longitudinal, suggests itself as interpretive context, though with the decisive difference that neither the temporality of the fragments on the level of the STatement LISTs, nor the relation of these fragments to "Morgengruß" as tempo-object is addressed. Indeed they cannot be addressed without undoing the model; nonetheless the association exists as a potential. The EVALuator's perceptions on the level of the STatement LISTs are provisional, as are its ConteXTual frameworks, and they change according to the size of the window surrounding the EVent. Retentional "Quellpunkte" are given as needed, as the back-limit and/or the protensive windows are shifted to reinforce, dislodge, or modify one or another perception.

But in preparing the Perception-Relation LISTs for each of its perceptions, the EVALuator enters into a new dimension: as it engages in dialogue with the other perceptual strands, the EVALuator begins a process of synthetic temporal reconstitution of the piece from the preliminarily pulverized fragments of the original tempo-object ("Morgengruß").⁶⁰ The retentional structure, in

59. It is worth noting that it is only after the lengthy discussion of the passage spanning from mm. 8–15 that the shutter opens for the first time to a segment that includes m. 1, and other segments including the ending of the piece. Interestingly, Lewin's language in this passage (MTPP, 354/76) is that of natural consciousness as he details the associations ("we notice") as our roving gaze traverses, rememorates, and reconstructs the moments of a familiar piece—or perhaps better, the objects of a familiar room, now opened to span an entire strophe. The effect, as with Diderot's example, is one of revelation achieved through a control of shutters, windows. The cognitive structure is one of spatial pointillism motivated and reinforced by associations.

60. Lewin's prose at this point, illustrating the communication between the strands in the reconstitution of the piece is worth noting: " p_{3b} , it will be recalled," he writes, "denied (denies) p_2 by STating: 'Aha! That g minor chord is *not* a confusing dominant of C; it is rather iv-of-ii in a

other words, absent from the level of the STatement LISTs, makes its appearance in the process of preparing the Perception-Relation LISTs.⁶¹ The default of the Quellpunkt, however, in Lewin's model-a necessary exclusion because it is incompatible with the requirement of detachability and division on which the perception model is based-carries with itself the consequence that the restoration of the tempo-object to a synthetic unity is accomplished from the horizon not of the present, but of expectation. Thus the state of listening-of Achtsamkeit-disappears as uncertainty is continually repelled and filled at every stage with the ingrained habits of expectation. Perception and the temporality of the object go their separate ways for the EVALuator in its laborious forward march from sonority to sonority, as it remains suspended in a quasitemporal rememoration of layers of modified perceptions. This shift in the essential quality of time is well described by Merleau-Ponty who writes: "[T]ime, in the primordial experience we have of it, is not for us a system of objective positions through which we pass, but a moving milieu which distances itself from us like a landscape from the window of a train."62 The active construction of each temporal position in Lewin's model is at the expense of the moving milieu, which is arrested and frozen.

In considering the activity of the parser, we observed, indirectly, an underlying *telos* that guided and progressively illuminated the EVALuator's horizon. Lewin's analysis of "Morgengruß" culminates in an impasse concerning the dual meaning of the g^6 chord of measure 12 that confirms an original perception of perplexity in trying to understand the g^6 that was the launching-point for the analysis. On the one hand, the g minor is a composed-out minor dominant, "malformed," across the span of measures 12–15. On the other hand, it is iv⁶ in the key of d minor, initiating, through a sequential progression, a return to the tonic key of C major.⁶³ This impasse, this undecidability between the two strands—one belonging to a deep-structure composing out, and the other to a more localized, surface reading, with neither one able to dislodge or

progression tonicizing ii.' p_{3b} utters this while listening to the EVents of measures 12–13 in the ConteXT of measures 9–13. p_9 in turn denies p_{3b} by STating: 'Doch, doch! The g minor chord *is*, after all, a minor dominant of C, a questioning, doubting, chromatic, blue dominant arpeggiating the G root which set in at measure 9.' p_9 utters *this* while listening to the EVents of measures 9–15 in their own ConteXT, anticipating also a protensive measure 16."; MTPP, 357/78.

^{61.} Lewin's observation as to the undeveloped "rhythmic" dimension of his model suggests that we must understand temporality here as a subsequent layer of cognitive construction, superadded to a more fundamental stratum of the immobile and spatialized detachable instant. We are thrown back to Husserl's critique of Brentano's analysis of time, constructed in the imagination, but never perceived.

^{62. &}quot;[L]e temps, dans l'expérience primordiale que nous en avons n'est pas pour nous un système de positions objectives à travers lesquelles nous passons, mais un milieu mouvant qui s'éloigne de nous, comme le paysage à la fenêtre du wagon"; *Phénoménologie de la perception*, 480.

^{63.} Lewin presents an analogy with Gestalt drawings, for example that of the duck and the rabbit, perceivable separately, but impossible to assimilate into a single perception, a "dubbit," without violating the logic and integrity of the language L; MTPP, 370–71/90.

dominate the other—is what Lewin interprets as a kind of harmonic/symbolic signal (an external "interrupt") for the change of pace in the musical setting of the last phrase of the stanza: "und muß ich wieder gehen." This phrase, despite initiating gestures of impending motion, remains rooted to the spot and incapable of movement. In this sophisticated reading, then, the final line of the stanza is tinged with a prescience that can only be produced in the perception of the immobilizing, internal contradiction contained in the unfolding of measures 12–15.

Lewin started his analysis with an algorithmic parsing-pattern (whose particulars do not enter directly into his discussion), before reconstituting the piece through systematic implementation of the perception model (perception = EVent, ConteXT, Perception-Relation LIST, STatement LIST in a particular language L). Lewin's preliminary parsing, to the extent that it encourages us to acknowledge the validity of ConteXTual variations, clarifies at the same time the terms under which the analytical STatements are assimilated to the structural rules of well-formedness, and to the aesthetic and ideological values and particularities of the language L. This distinction between perception and ConteXT on the one hand, and analytical STatements on the other, limits the infringement of any theoretical construct upon the aesthetic space of the work of art, or at least separates the function of "perception" from that of "expression in the language $\hat{L}_{,}$ " thus restoring to the former a level of autonomy outside the internal structural exigencies of the latter. In Lewin's words, the "logic of perceptions" is in this way separated from the "logic of sentences in language L" (MTPP, 368/88).⁶⁴ The emancipatory effect of this position is without question. Two problems, however, arise from this construal, which are worth considering, and which will conclude my discussion.

In beginning with a seemingly "language-neutral" parsing of a work, Lewin asserts the priority of this abstract fragmentation over the formative force of expression (language).⁶⁵ This move, I have suggested, implements a reversal of the preconstituted givenness of the work—the starting position of natural consciousness, in relation to the written score—and creates a basis for

64. It should be pointed out that Lewin does acknowledge the perceptual impact of theoretical languages—as for instance his description of one and the same harmonic event (e.g., a short chord progression) that, from the vantage-point of scale-based theory, or Rameauvian, or Schenkerian vocabularies, is, in essence, a *different* object, belonging to different historical, conceptual, and phenomenological spaces (MTPP, 342–43/66–67), or, when he writes with respect to Lerdahl and Jackendoff's theory in *Generative Theory of Tonal Music*: "Since [their theory] uses extensively a different language L from mine, it 'perceives' things differently"; MTPP, 344n15/67n25. However, his principal methodological point (part 4 of his essay) overlooks this relationship. In an example of analytical antinomies, he writes: "It seems that we must deny the one perception or the other, in order to avoid a logical paradox. But our difficulty is only apparent. The confusion arises from our having improperly *relifed one percept (as opposed to a sentence)* called X [is the dominant of] Y, and one percept called Y [is the dominant of] X"; MTPP, 369/89 (emphasis mine).

65. As we have seen, Lewin does not pursue such neutrality in his parsings, though the model is presented on that basis.

phenomenological investigation.⁶⁶ Starting from this raw material, in Lewin's view, it is the variant ConteXTs and their accompanying perceptions, and not the theoretical language L that produces the *telos* of the phenomenological investigation and reconstitutes the tempo-object as synthetic unity. The language (L) in this construct, in other words, is a mere recording device—a convention, a vocabulary of signs, a mechanism. And yet, in Lewin's own demonstration, it is the habituation in, and activation of, a theoretical language that forms the trajectory of the model and provides its *telos*. The undecidability of the harmonic meaning of the g-minor chord of measure 12 arises not from the isolated chord, but from a perceptual structure formed in the cradle, so to speak, of a hearing that pits a composed-out background against a foreground that contradicts it. It is a quintessentially Schenkerian hearing: that of simultaneously unfolding strata that we can learn to produce as a result of actively acquiring the language and skill of hearing music as interaction of differently paced levels of motion across the same durational span. The anomaly of the g minor, in other words, is one that is provoked and brought to perception by the theoretical morphé-the form animated in intentionalityitself. Though it is true that in a fully Schenkerian account the background would predominate and assume to itself the contradictory foreground, nonetheless, without the particular criteria of this morphé, the mere Romannumeral labeling of the g minor of measure 12 of "Morgengruß," would encounter no conflict as such. The kind of double meaning achieved by constructing the g-minor chord as minor dominant in association with the immediately preceding chord-function and, at the same time, as initiator of a sequential pattern of "pre-dominant"-to-dominant is a frequent device in conventional analysis, and does not, of itself, signal conflict. Rather, it can be understood syntactically as a pivot and, furthermore, as marked or as poignant with pathos from the major/minor juxtaposition, or other readings along similar lines. The perception of conflict arises elsewhere, specifically in the language and listening practice associated with Schenker's theory. The perception of the g minor as "puzzling," "inconvenient," or "malformed" is not possible outside the framework of the theoretical language that produces it as conflict. And it is this language, I want to argue, that is the underlying and not so hidden telos of Lewin's analysis.⁶⁷ It underlies the functioning of the perceptual model itself, guiding the parser; indeed it is the perception model that serves as a secondary language L for the *re*-presentation and analytical breakdown of a prior mediation, in this case the acquired skill of listening in levels in tandem with the conceptual apparatus that can express it: the ground for perception that is opened up in Schenkerian theory.

66. We have already seen the anomalies that arise from the transferal of this methodology from the spatial to a temporal dimension.

67. This is not to contest Lewin's larger point about the jealous intransigence and authoritative posturing of theoretical readings that often overcrowd theoretical discourse. My focus remains on the implications of the perceptual model alone. The perception model apparatus, then, does not begin from a theoryneutral position in its parsing procedure.⁶⁸ It uses the process to direct the *reader*—because this is at least as much a performative exercise as an analytical one—by an alternative route, to an insight whose source and origin is the *morphé*, active and present in forming musical experience, of a *different* language. Lewin's perception model is thus not the neutral ground on the basis of which multiple languages can shape their analytical products; on the contrary, it is an alternative presentation of the perceptual product of a prior language. Not a meta-language, but a language, artisanal and not mechanical, that is constructed upon the foundation of a previous one. The implementation of Lewin's perception model brings nothing new in the manner of discovery: its *telos* is predetermined, and its statements are thus circular. Its role, rather, would be to demonstrate an interpretive insight through a different prism.

However, this prism, in its own right, does not neutrally and transparently reflect the intentional object, but reshapes it with its own positive content, thus modifying and transforming it. It does not *repeat* a catalyzing intuition, but reconstitutes it in the mode of perceptions as defined and articulated in the model. Since the synthesis of the tempo-object as succession occurs, in Lewin's model, in a separate, *second* representation (the Perception-Relation LISTs) *after* the preparation of the STatement LISTs, the tempo-object is constituted on the protensive edge of expectation and thus positions itself *ahead* of the *hylé*.⁶⁹ It is this position of consciousness *ahead*, which the tempo-object, in its catching up, impacts and modifies. The result, then, is a tempo-object constituted from a direction opposite to that of Husserl's analysis, for in Husserl's theory of time-consciousness it is the *hylé* that is always ahead, separated from perception by a horizon of darkness.⁷⁰

The second question that arises from Lewin's metaphorical alignment of the perception-model with the human intellectual apparatus is the role of the listener (and reader) in Lewin's construction. Having configured the listening/reading relation to music in terms of the mechanics of artificial intelligence,

68. Perhaps it *could* do so in a fully artificial setting, opening an entirely different tangent of investigation. This is not the direction that Lewin has chosen to explore.

69. It is interesting that in the notation of the perception model the Perception-Relation LISTs are positioned *before* the STatement LISTs. This arrangement is not realizable, however, because the segmentation into ConteXTs presupposes a static object, and the STatement LISTs survey the segments spatially, as we have seen. (The element of succession in the STatement LISTs is not of itself time-constituting, but is present in two as content of two- and three-dimensional spatial representation as well.) This element of stasis on the level of the STatement LISTs equally prevents any construal of the two lists as simultaneous.

70. Lewin's example of the composer whose only relation to a work of her/his own making is that of the experience of active conquest (MTPP, 376/95) can be understood only in light of this anticipatory position ahead, through which Lewin constructs any real or active engagement with the tempo-object. From this perspective, the composer indeed "already knows"; however there is nothing intrinsic that would prevent a composer from engaging in a listening participation with music, whatever its source, and without Lewin's preoccupation with expectation and protension.

Lewin rejects the paradigmatic dominion of this relationship as the dominating response to music, and restores, in its place, the activities of music making and aesthetic expression of all kinds. His dissatisfaction with the listening/ reading relationship (which he associates with passivity, consumerism, and on a pedagogical level, negligence in development of motor musicianship skills) originates, I would suggest, in that preliminary spatialization that denatures the tempo-object-that first act that dominates the perceptual model. It is this void of suspended temporality that is suddenly filled in part 5 of Lewin's essay, by a rush of kinetic energy and embodied present activity that restores the dimension and experience of time. But as I am directed through my role as F_{\star}/G_{\flat} in Beethoven's Fifth, I catch the glimmer of something familiar. Is it not I, now, in the position of the EVALuator, inhabiting my level? And is my director not the selfsame parser lighting my way, flashing forward to my future role in the recapitulation, replacing parts of my temporal horizon with prescience and the inklings of a higher design I cannot fully grasp? The hierarchical division has reproduced itself-I inhabit my place, under the guidance of a separate omniscience. But metaphor brings clarity, for the theater of this activity is not physical action after all, but still, thought.

If we were to take this exegesis of Lewin's perception model as metaphor for analytical thinking one step further, we might say that it works out a phenomenological reconstruction of a moment of listening as an analytical exercise (Lewin's term); that the perception model's part in the "Morgengruß" demonstration is not independent, but embedded inside a broader analytical vision that determines its *telos*; that the form of time belonging to this analysis is one of progressive revelation, and a temporal reconstruction in light of that progressive revelation, on a protensive edge-thus it constructs its own temporality independent of the temporality of the work; and that this work is carried out through skill with analytical languages, or language/perceptions, which are superimposed and placed in dialogue with one another to construct a new kind of experience of the musical work, whose trace is the analytical process-the text and methodology that brought it to view. This experience, theoretical and speculative in nature, cannot be imputed to my spontaneous listening, however fluent my habituation in any music-theoretical idiom, but is the product of the analytical engagement itself.

How, then, can we understand the theatrical presentation of Beethoven's Fifth that concludes Lewin's essay in light of this analytical focus? If it is not real action, then what dimension does it add, and in what sense? A return to the Husserlian phenomenological terms might shed some light. If I close the gap that separates the director from the actor, assimilating the director (and in the perception model, the parser) to my intentional act (*noesis*) then the *noematic* correlate of my act (the cloaked figure) is the affective state expressed in terms of the description of my gesture: the qualitative impact (the literary device of the sudden motion of my cloak of F# that reveals Gb) that is the sense

(*Sinn*) of my act. The *noematic* correlate, in other words, *is* the thing itself as it is given in my act/perception/*noesis*. The "X" transcends my act in the sense that no description of mine can possibly exhaust it; it is not *external* to my act. In that sense, my gesture, or the description of that $F\#/G\downarrow$ in Beethoven's Fifth *as* gesture is the trace of the "poetic deeds that were the perceptions themselves" (MTPP, 382/101).

Appendix Lewin's Figures 7 and 8 reproduced from *Music Perception* 3 (1986)

p EV CXT		CXT	Selected P-R Pairs	Selected STatements	
<u>p1</u>	m12	m12		Fig. 8.1	
p ₂	m12	m9–12	(p ₁ ,terminal inclusion) (V-percept, questioning)	Fig. 8.2	
p _{3a}	m12–13	m12–13	(p ₁ ,incipital inclusion) (p ₄ ,implication)	Fig. 8.3	
Рзь	m12–13	m9–13	(p2,denial) (p3a,reinforcement)	Fig. 8.3	
p4	m12–13	m12–13 plus expected m14	(p _{3a} ,realization) (earlier d tonicization,elaboration)	Fig. 8.4	
p 5	m9–13	m9–13 plus expected continuation	(p4,medial inclusion), (p4,reinforcement) (p3b,reinforcement), (p2, virtual annihilation)	Fig. 8.5	
P6a	m14	m12–14	(p4,confirmation and elaboration) (p6b,implication)	Fig. 8.6	
Р6ь	m14	m12–14 plus expected m15 (in d minor)	$(p_{6a}, realization), (p_{7a}, modification)$	As in the commentar	
p _{7a}	m14	m12–14 plus expected m15 (seq.)	$(p_{6b}, modification), (p_{3a}, sequential expansion)$	Fig. 8.7	
р _{7b}	m14–15	m12–15	(p _{7a} ,confirmation), (p _{6b} ,denial) (p ₅ ,confirmation (via p _{6a}))	As in the commentary	
P8	m14–15	m9–15	(Ab–G in bass of m9, expanded recapitulation), (p9,support)	Fig. 8.8	
P 9	m9–15	m9–15 plus expected m16	(p ₂ ,confirmation), (p _{3b} ,denial) (p ₈ ,support), (p ₅ ,qualification)	Fig. 8.9	

Lewin's figure 7, from "Music Theory, Phenomenology, and Modes of Perception," 345



Lewin's figure 8, from "Music Theory, Phenomenology, and Modes of Perception," 246

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Abstract

In his 1986 essay on the intersections between music theory, phenomenology, and perception, David Lewin develops a heuristic model through which to come to terms with the constitution of multiple and heterogeneous perceptions of musical events. One of his principal vehicles for demonstrating this phenomenological turn is the well-known analysis of Schubert's "Morgengruß." The present article considers the ramifications of Lewin's methodology, particularly with respect to the experience of time that emerges from Lewin's mobilization of the heuristic perception model, by approaching it from the perspective reveals a superposition of temporalities as well as a superposition of languages as the underlying factors through which Lewin's analysis is produced.

Keywords: David Lewin, Edmund Husserl, phenomenology, perception, music theory