Hildegard von Bingen’s
*Ordo Virtutum*
A Musical and Metaphysical Analysis

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1 A metaphysical medieval assemblage

Introduction

At first glance the book in front of you is perhaps an odd, seemingly incongruous amalgam of perspectives: part music theory, part Neoplatonic philosophy, part theology, and equal parts critical theory, phenomenology, and contemporary philosophy. However, the book’s principal argument marshals these resources to answer a basic question: how does Hildegard’s conception of sound, song, voice, and hearing interface with an analytic consideration of the Ordo Virtutum? While the sources may be eclectic, my answer to the question is, at its core, quite traditional (if not conservative). I argue that Hildegard’s philosophy of sound falls in line with that of both St. Augustine’s and Boethius’ conception of divine Providence, two classical pillars of a Christianized Neoplatonism inherited by the medieval West, widespread in their influence. While the argument is traditionally founded, its application to the discipline of music-theoretical analysis is, without question, new. Let’s begin with a consideration of Providence and fate before moving to its analytic implications.

In Book iv.6 of Boethius’ De Consolatione Philosophiae (ca. 524) Providence is understood as divine reason itself and is characterized by an unmoved clarity and steadfastness which enfolds all things, however disparate and boundless. When we consider the very same reality but look instead to the separate motions and movements of its individual elements, classifying them according to place, shape, and time, the same arrangement of elements is now understood as fate. Thus, creation can be envisaged through the single nature of Providence (de providentiae simplicitate) or the chain of fate (de fati serie). In fact, the two terms mutually entail each other insofar as fate is unfolded Providence, and Providence in-folded fate. Boethius writes, “this unfolding of temporal order being united in the foresight of the divine mind is providence, and the same unity when distributed and unfolded in time is called fate” [ut haec temporalis ordinis explicatio in divinae mentis adunata prospectum providentia sit, eadem vero adunata digesta atque explicata temporibus fatum vocetur]. Boethius’ idea of folding will become a key concept in describing how musical analysis can help us grasp structures in the mind’s ear outside of the linear flow of time, and even simulate a providential image.
Augustine’s model of the interaction between Providence and fate as outlined in Book xi of the *Confessions* (ca. 400) is similar, but highlights the constituent phenomena in relation to music, bringing us one step closer to Hildegard’s thought. Augustine begins with an intellectual understanding of wholeness experienced just before one begins to sing a psalm. We could say that he posits the possibility of forming an *image of sound before song*. That is, before he begins to sing, Augustine is sure he knows and understands the psalm taken as a whole, outside the bounds of time. He then equates this to the providential mind of God (“If there were a mind endowed with such great knowledge and prescience that all things past and future could be known in the way I know a very familiar psalm, this mind would be utterly miraculous”). I will, in turn, equate this image with an analytic understanding of a piece of music, an in-folded (implicate), non-linear organization of musical structure.

However, once a singer begins to sing Augustine relates the tension, or “distension” [*distensio*] experienced, as one is no longer able to hold the image of wholeness in one’s mind as the image now enters the stream of time and is there torn asunder and fragmented, giving us a more volatile and chaotic reading of fate than that of Boethius. The current chapter will augment the distended reading of fate through reference to both medieval and contemporary notions of chaos, as well as contemporary phenomenologies of hearing, which develop nomadic and immersive theories that correlate, in turn, with the soul’s groping toward salvation in the drama. What glimpses of Providence can be gleaned from within our distended and “thrown” state? To what extent do the mysteries of God remain unknown, utterly transcendent, and wholly other, even as we approach them in our thought, writing, and music (approaches that form partial images in an attempt to think beyond our limited, all too human capacities)? How do these attempts, in turn, relate to a theoretical strategy to hear providential musical structures in the mind’s ear from within the throes of a distended, linear, musical time? Such are the challenges posed to the listener.

The *Ordo* parses into three large parts (see Chapter 2, Table 2.1a–c for an ordered list of all sections of the drama). And, although Part I is riddled with musical distensions, deformations, and deterritorializations, in asking what glimpses of Providence might be had from within our distended state, we land upon the idea of *immanence*, a Providential immanence both musically and textually founded, which imparts flashes of the heavenly city from within the unfolded experience of fate. After a general introduction to the topics (Chapter 1), and the music-theoretical introduction (Chapter 2), Chapter 3 will provide a detailed analysis of Part I of the drama and its in-folded immanence as located within the more apparent distended textures. Part II of the *Ordo*, which takes place outside of narrative time (and thus outside the *polis* of human affairs), inaugurates a site for the construction of the celestial city, and will be the focus of Chapter 4. The site is the place of real contact between an in-folded perfection and the musical materiality of the drama. In some ways, the celestial city is “impossible,” what Catherine Pickstock calls an “immanentist” or “liturgical” city—its sounds, signs, and structures are at once things (*res*), but also that which...
exceeds materiality. The material sign invokes the limit-idea, a totality which extends beyond comprehension, but whose essence can be intuited as a vestige, or trace (vestigium) in the diagrammatic cipher of the written gram. Part III of the Ordo (Chapter 5) reinforces the return to (and arrival at) the heavenly city, largely through demarcations of the drama’s symmetrical form, the most notable aspect being the fact that the drama concludes with a beginning (in principio) in the mirror of Fatherhood (paternum speculum). Namely, that which is initially deterritorialized (distended) at the beginning of the drama is re-territorialized in its formal reflection at the end of the drama as the distended musical language is likewise restored to a normative condition.

Throughout the book the idea of the fold (plica) will serve as an important tool in the process of return to a providential unity. It provides a means of thinking the continuum connecting manifest and divine realities. The fold, or the unfolding power of immanence—to give it a more dynamic form—locates a presence, a trace of the divine embedded within material creation, thereby intimating a process of reciprocal in-folding and un-folding; the One enfolds the multiple (i.e., manifestation), while the multiple unfolds the One. This manner of thought likewise connects us with the writings of Gilles Deleuze who writes about folds in a number of his books:

The presence of things to God constitutes an inherence, just as the presence of God to things constitutes an implication. An equality of being is substituted for a hierarchy of hypostases; for things are present to the same Being, which is itself present in things. Immanence corresponds to the unity of complication and explication [i.e. “in-folding” (complicatio) and “unfolding” (explicatio)], of inherence and implication. Things remain inherent in God who complicates them, and God remains implicated in things which explicate him. It is a complicative God who is explicated through all things.

In this way we arrive at a number of variations of what is variously named “emanationism,” or “theophanic expressionism,” that is, the presence of theophanies, or the internal thoughts of God projected throughout creation. In the ninth-century philosophy of John Scotus Eriugena, for example, “each being, in its emergence and its essence, was a singular and contingent manifestation of divine plentitude, a unique theophany.”

Insofar as the transcendent essence of every entity originates from within an unknowable God, the “theory of creation . . . tends to develop in an apophatic conception of nature.”

Apophatic, or negative theology defines and knows the attributes of God solely through negation. Apophasis leaves a gap, a space to be filled by speculation, a space/place of speculation. Metaphysical speculation involves a “golden chain” of lineaments dating back to Plato, Pythagoras, the Chaldean oracle (second century AD), and other cosmological myths and sacred rites. From there, the chain continues on to Plotinus (AD 204–270) and Proclus (AD 412–485), who were interpreted, in turn, by the Latin church fathers, notably Augustine in the West, and Pseudo Dionysius (late fifth century) in the East. What connections can
be found between the Greek philosophical tradition of emanation and apophatic thought? In Proclus, for example, we find cycles of emanation and return where every effect remains enfolded in its cause as it proceeds (prodos) from the divine source (the unparticipated monad), and simultaneously returns to it (epistrophe). For Dionysius, the emanation flows out of the One like a fountain outpouring from an overabundant source, an image frequently encountered in Hildegard’s writing and present in the Ordo as well. For example, in Ov 34 the Virtues sing to Faith “we shall arrive at that [true] fountain through you” [pervenire ad verum fontem per te]. The generative capacities of the good as it overflows its source in ecstatic desire (erōs) creates descending grades of hierarchy, or henads. The outpouring itself is the cataphatic (from kataphasis, or “affirmation”) and is marked by the attempts of the human mind to celebrate and document God’s manifest multiplicity by making use of all its resources; writing, music, illumination, language, prayer, etc.

The effects of divine providence are described in a profusion of images and propositions drawn from scripture and philosophy. “The cataphatic is, we might say, the verbose element in theology, it is the Christian mind deploying all the resources of language in the effort to express something about God.”

But at the same time, the source always withdraws, always remains hidden. And so, the return to the One, or the human desire to return (a form of erōs) is always an apophatic process of negation (it is important to note when we turn to Hildegard, the role played by the reciprocal forms of desire present in the procession and return are representative of divine and human forms of agape and erōs respectively). Negation doesn’t cancel out the procession, but rather serves as its source, the dwelling place of the transcendent. In fact, the opening of Proclus’s Commentary on the Chaldean Oracles gives us an image of this dwelling place in its claim that the “eternal orders” of the One are the “temples and habitations of the Gods” (the architectural place of the Other), an early archetype for the celestial city as it appears in Revelations, in turn derived from the temple of Solomon, famously echoed in Augustine’s De Civitate Dei. Such a placeless-place likewise serves as the goal of the Ordo Virtutum.

For Dionysius, the entire process of the return to the One is itself a movement from the perceptual (i.e., the manifest) into the conceptual (or abstract), which then resolves itself back into the silence of unknowing, and non-being. Likewise, I consider the process of musical analysis to also be a movement from the manifest into the abstract, a kind of gathering-up and return to a speculative presence in the mind’s ear.

The principal image of the One as a sonic entity in Hildegard is developed in her collection of visions, Scivias (III:13), where she discusses the sound of the celestial symphony (symphonia) as being like “the voice of the multitude” [ut vox multitudinis], one of its unique qualities as a providential signifier. This sound is non-discursive in its ability to provide immediate clarity given its capacity to enfold all meanings and significations into a symphonic image, comprehended
all at once. Non-discursive thought does not search for its object, but possesses it internally in an undifferentiated immediacy, without having to trail through successive stages of logical enunciation.9

In Boethius’ famous poem *O qui perpetua mundum ratione gubernas* (“O You who, with perpetual reason govern the world”), located at the precise midpoint of the *Consolation*, the principle of the soul is founded between mind and matter, where it serves as a mediating principle, allowing the two poles to be joined. For Hildegard, sound and the voice occupy the continuum that the soul will traverse, connecting Providence and fate. Thus, when Hildegard’s priest sings, a “conversion” occurs; *converto*, a circular revolution (also a path, or *dux*), the point at which procession and emanation are transformed into a return, and enfolded back into the One.

**Statement no. 1: concerning the outside**

The space of the divine Other cannot be contained by recourse to interior understanding in much the same way that time cannot be understood from inside the stream of time itself. In both cases, we have to get outside of the series (*hors-sujet*), so to speak, to adequately see the phenomena.

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non utique in caelo neque in terra fecisti caelum et terram
Neither in heaven nor on the earth did You make heaven and earth
[ ]
neque in universo mundo fecisti universum mundum
Nor in the whole world did You make the whole world
[ ]
quia non erat, ubi fieret, antequam fieret, ut esset.
Because there was no place
where to make it, before it was made, that it might have being.
Augustine, Confessions xi:510
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The *hors-sujet* can be understood as a network, a non-linear mesh that serves as the backdrop, horizon, or matrix upon which and in which something comes to be. In music theory, network-logics have become pervasive as an analytic tool, although very few philosophical ramifications of these logics have been explored. To this end, the present book proposes a conjunction between a theoretical-network logic and the philosophical adaptation of the network as a means of interpreting a medieval providential reality. The above passage from the *Confessions* captures the difficulty of conceiving of the “place” wherein place itself comes to be, or the “time” in which time itself comes to be, etc., putting us squarely in an “apophatic” context, where elements of divine reality can only be defined negatively. Apophasis applies to the imperfect perception of the divine owing to a lack of access, a perception thus in need of supplementation. The tradition of medieval speculative philosophy provides this supplement, giving the philosopher techniques with which to think beyond the restrictions of language.11
Apophasis speaks both to the philosophical traditions of the twelfth century, as well as to the difficulty of totalizing the musical language of the *Ordo Virtutum* given its numerous extensions, multiplications, oscillations, and bifurcations.

**Statement no. 2: concerning the role of theory as a speculative tool**

Theory is a tool with which one might assemble *an image of the “outside the series”* [*hors-sujet*]. It may not succeed, but nevertheless points us in the right direction.

A theoretical image is likely not to succeed precisely because the Other exceeds our capacity for knowing, it remains factical. We only ever have partial access to Otherness, a statement that draws connections between apophatic theology, post-structuralist thought (explored in Chapters 4 and 5), the phenomenology of perception (of which music is most certainly a part), and ontology. The creation of a factical image recognizes the necessary distance and necessary tension between an object and its constellation of qualities (both accidental and essential), as well as between the object, its qualities, and the theoretical image which seeks to represent them. Nevertheless, I hold that such an image remains useful.

Facticity, as I use the term, refers to a horizon for thought. “Facticity understood as *thrownness* [into a spatial world], reveals that *Dasein* can never go back beyond this ‘throw’ [i.e., before time or creation] to recapture its being from the ground up.” On the one hand facticity has to do with construction; the construction of thought and the making of ideas. But such a construction is never transparent, and always occurs on a site which resists reduction. Transparency assumes a clear perception of essences, but on the factical site, essences are always melded back into existence, experiences, and perceptions of the world. The site can therefore be seen as a kind of dense wilderness landscape in which we cannot totalize the horizons of our circumstance. For us, the “fact” of the world cannot be understood from outside of that world, and yet, this is precisely the definition of Providence. Raffoul and Nelson argue that being thrown in the midst of this wilderness site initiates a *praxis*, in which thought operates as a form of inhabitation. The world, then, becomes the place of a possible dwelling, the place of a possible taking-place. The inability to recapture our being is another way of saying that we lack access to the total extension of our being, thereby showing “being” and “becoming” to have manifested qualities similar to those of a network, which always exceeds totalizing procedures.

With a basic understanding of facticity, the network becomes an image of the theoretical inability to totalize the givenness of a contextual landscape (a space of heterogeneous associations) into which we are thrown, despite our projections of use and potential actions (futures) on and in that possibility space (because networks draw diverse materials together in new associations). Our projections of potential actions appear to mobilize and ground us, despite the topological uncertainty of the territory in which we find ourselves. Therefore a network is a form of *hyperobject* (a non-totalizable object “massively distributed” across space...
and time), a term I will return to in the discussion of large-scale musical forms. Networks are, in turn, inhabited by any number of network-actors (philosophers, scribes, musicians, interpreters, or analysts, etc.) who stabilize/reify local centers and regulate flows resulting in the composition of spaces of influence—neighborhoods and knowledge bases—despite the existence of the outside forces that continually threaten to destabilize established conjunctions. The tension between local structure and global extension constitutes a fragile interplay between metastability and metastasis itself.

Facticity’s contingency, namely the unforeseeable provision that an entity exists in unknowable contexts, seems to undermine the very possibility of theory (or theology’s) veracity. This, in turn, is related to the idea of correlationism, which states that we only ever have access to the correlation between thinking and being, and never to either term apart from the other. Which is to say that a relation between us-and-thing does not yet understand the thing as it understands itself (which would constitute the “real”).

Speculative materialist philosopher Quentin Meillassoux (b. 1967) argues, however, that there is access to the in-itself, whereby the primary qualities of an object, i.e., those qualities independent of human correlation, can be considered intrinsic to the mathematical properties of that object, in a manner not entirely different from the geometric proofs of Thierry of Chartres (1100–1150), and his contemporaries who, following the lineage of Calcidius explored the extension (by means of ratio) of the Platonic laws as they were mirrored in the thoughts of humankind. For Thierry, mathematical proofs, like the in-itself, display an innate ability to exceed and extend themselves towards a limit-ideal that lies beyond human comprehension. (And, while we will never know for certain what books Hildegard read in her libraries, Peter Dronke, in examining her idiosyncratic Latin phraseology and cross-referencing excerpts of her writing with other Latin authors, has found notable concordances between Hildegard’s writing style and Plato’s Timeaus, as well as Augustine’s On the Psalms and Bernardus Silvestris’ Cosmographia, both of which bear the strong imprint of a Platonic and Plotinian cosmography.)

A characteristic of the in-itself according to Meillassoux is its ability to become-other. This is not an ontological failure, but rather a feature of being. Speculative materialism has the ability to register uncorrelated realities by means of a reversal: “Meillassoux re-renders facticity not as an ‘incapacity’ but as a feature of the in-itself. . . . The absence of reason [understood as a mathematical hyper-chaos] will be taken as an actual feature of our reality,” giving us a twenty-first-century analogue to Bernardus Silvestris’ twelfth-century silva which appears in the opening passage of the Cosmographia: “Silva, intractable, a formless chaos, a hostile coalescence, the motley appearance of being, a mass discordant with itself, longs in her turbulence for a tempering power . . . she demands the shaping influence of number and the bonds of harmony.”

Starting from a formless, hostile, and momentary coalescence, reason (or theory) acts in the capacity of a sieve. It cuts, differentiates, and winnows. To theorize is an act of regionalization, a shaping influence from out of chaotic
embraced by God, and thus their “return” is really a memory, a re-calling origins. Theory’s abstractions are a set of tempering powers, segmenting, and shaping the possible extensions of number originating within the chaos.

Along lines that resonate with Meillassoux, philosopher Michel Serres (b. 1930) draws connections between classical myth and philosophies of noise in his book Genesis, where he writes about Protus, god of the sea, a prophet who contains all the information, but admits none: “He’s the possible, he’s chaos, he’s cloud, he’s background noise. He hides his answers under the endlessness of information.” From Serres I draw the question: what can be discerned in noise, in the sound of multiplicity?

Serres’ program, which favors the openness of hearing as opposed to the logical closure of the seen, presents a template steeped in the phenomenology of the heard (and by extension, music) applicable to the rereading of medieval author (like Bernardus Silverstris, William of Conches, and Hildegard) all of whom allow certain degrees of chaos into their ontological systems, a non-discursive multiple which functions as the site of an “exemplary potentiality.”

Facticity is not merely the incapacity of our human perceptions, which fail to get at the thing-itself and are therefore unable to master the context of our territory, but rather a form of radical contingency which represents the very structure of the in-itself. Through a process of reversal, Meillassoux transforms the absolute contingency of knowledge into the contingency of the absolute: “In essence, he proposes that we turn the absence of metaphysical necessity, and the possibility for every entity to become otherwise, into an ontological principle that refers to an absolute [hyper-chaotic] time affecting all entities.”

The mathematical essence of an object, its eidos (the primary qualities existing beyond our perception) is its very capacity-to-become-other.

The capacity-to-become-other is a transformational capacity. And, transformations will be the focus of my musical and textual interpretation of the Ordo Virtutum.

Speculative materialism begins to map, imagine, and image that which is inaccessible in sensual perception. It opens and explores a vectorial subjectivity, or a trajectory of becoming which outlines the horizons of the theoretically possible “subsisting beyond correlated realities.”

**Networked space and providential folds**

The vectorial subjectivity of the present book will be represented by means of network constructions, which will serve both as formal and poetic agents.

Networks present an architecture without a center (or, an architecture of multiple centers), and a topology in which absolute distances, along with the means of measuring them, are collapsed.

(Actor-network philosopher Bruno Latour once asked if a railroad is local or global, and notoriously answered, “local, at all points,” giving rise to a mesh of continuous, extended paths. The same track, or pathway between nodes at once connects neighboring townships but also extends, indefinitely, ignoring both local
and national borders as part of a single, smooth, and I will argue “speculative” extension.)

The networks in this book render “spatial” the temporal elements of music in a way that mirrors both Boethius’ and Thierry of Chartres’ understanding of Providence, a theological model that renders simultaneous the linear chain of fate, resulting in a folded form. To reiterate, the fold gives us a surface that complicates the relation between interior and exterior. Thierry uses the image of a mirror (speculum) to describe the embedded process:

For just as one face gleaming in different mirrors is still one in itself, but through the diversity of mirrors this one is taken as another . . . so too the divine form shines in a certain way in all things, but only as one form-in-itself of all things, if you consider that pure and true simplicity of which the different forms are thought.\(^{25}\)

The One enfolds the multiplicity, while the multiplicity (i.e. manifestation) unfolds the One in and through time. Thierry’s use of a mirrored reflection as the means by which the One propagates itself will become a useful tool in the musical explication of Hildegard’s providential forms through tetrachordal reflection and replication. The mirror also helps clarify the notion that a providential form might be introduced into the manifest world without violating the asymmetrical principle that “God’s essence is also transcendent and unknowable,”\(^{26}\) even in its procession.

John Scottus Eriugena expresses a similar idea of “return and recollection” as existing in dialogue with the actual and virtual presences of nature through the idea of the “fold” [sinus]. In this context, “recapitulation is itself a form of recollectio or return of all things to the One.”\(^{27}\) The term sinus defines a “fold” or “recess” in the Periphyseon (Book I.444c), where Eriugena discusses the virtual potential of primary causes contained in non-being and their relation to actual things. Here Eriugena uses the phrase, “in seretissimis naturae sinibus” [within the most secret folds/recesses of nature] to show how the actual is enfolded within the virtual.\(^{28}\) In a folded ontology, creation is reframed as “a flow at the heart of things, rather than a creator set over against a thing created.”\(^{29}\) Hildegard’s text to O magna res (one of four songs without neumes) exhibits a similar type of virtual causation, one that is hidden, or folded in non-being: “O greatness / That lay hidden in no created thing / So that it was neither made / nor created by anyone / But abides in itself.”\(^{30}\)

Folding leads to a more complicated version of a Neoplatonic hierarchy insofar as divine creation is the expression of the Word, and “the Word enfolds in itself the Ideas or Primary Causes of all things and in that sense, all things are already in God.”\(^{31}\) A fold complicates the simple binary of interior/exterior when an exterior space becomes folded within an interior space (the same applies to the relations between self/other). In-folded and un-folded versions present two views of the same reality; the first view presents the immanence of God in the world, while the second shows the world as folded into God. We might further add that
created souls are often depicted as ignorant of the fact that they are already embraced by God, and thus their “return” is really a memory, a re-calling (revocare) of an originary condition. Part of the Christological complication of the term “future” and its associated expectations is that a future is both a return and a fulfillment of processes already begun. A future is thus suspended between the always-already of the resurrection and the not-yet of a consummation within the celestial city. \(^{32}\)

With Hildegard, the simultaneous enfolding/unfolding leads to an “acute foreseeing” (acute previdisti) in Ov 71, where the embodied souls are already enfolded in the heavenly city. In Scivias III:13.9 (part of the Exhortio Virtutum, an un-nuemed text-only version of the Ordo) the Virtues proclaim, “We virtues are in God, and we remain in God; we are soldiers for the king of kings . . . we appeared in the first action where we existed as victorious.” \(^{33}\) The text following the quoted section of the EV is that of Ov 4, where the embodied souls, after lamenting upon how they have wandered into the shadow of sin, show an alignment with the Virtues when they sing, “O living sun, carry us on your shoulders back to that most just heritage we lost in Adam. King of kings, we are fighting in your battle” (Ov 4).

Texts that imply similar types of enfoldment can be found at Ov 5, 15, 18, 37, 42–43, 55, 69, and 71, discussed further in Chapters 3–5. For Hildegard, like Thierry, the mechanism of negotiating the folds is a mirrored imitation: “Therefore let us even now be soldiers [for the King of kings] . . . leading through to the blessed mansions those who will have wished to imitate us,” \(^{34}\) a process crucial to the structure of the drama. An entire architecture of reflections will be constructed in Part II of the Ordo Virtutum.

In his Commentus (II.49, H 84), Thierry adds yet another dimension to the fold by describing it as a speculative extension into the unknowable: “Therefore the very form that the mutability of possibility [of matter] unfolds (explicat) through the diversity of plurality, the divine form likewise enfolds (conplicat) into one and recalls to the simplicity of a single form in an inexplicable (inexplicabili) way.” \(^{35}\) The unknowable aspects of the divine mystery, its in-ex-plica-ble qualities involve a fold, connecting the mystery to an expression of the One in its superessential simplicity.

The transformational capacity for any object to become-other, coupled with the notion that the same reality might fold between providential or temporal versions, leads to the fluid nature of scriptural interpretation, a point which leads John Scottus Eriugena to recognize “the multiplicity of interpretations that can be put on scripture, and hence the multitude of philosophical interpretations of the nature of the world which are possible.” \(^{36}\)

To what kind of interpretive landscape does this condition give rise? Again, a factual, networked landscape.

The factual horizon is a network, a mesh comprised of a multiplicity of pathways through an “essentially pathless land.” \(^{37}\) More specifically, a networked landscape is a pathless topology because no single trajectory can explain the original multiplicity. Possible maps are traced with the conceit that other schemas
must necessarily exist alongside the first as part of the landscape’s structure (the hyper-chaotic capacity of the in-itself to become “other”). This is also true regarding maps of the Ordo Virtutum, to which we will now turn. The remainder of the introduction will present an assemblage of conceptual nodes that comprise the networked logic of the book.

Time and the soul

Anima: a current of air, a breath, life, mind and soul; the moving principal inhaled and exhaled, the matrix for all sounds of song.  

What role does sound play in Hildegard’s speculative pursuit of the divine and how does this relate to the Ordo Virtutum? What narratives, or processes of becoming are forged in and through musical sound and shaped by its form? What can the movement from breath, to voice, to prayer tell us about the drama that its text alone cannot? In order to answer these questions and before delving into the theoretical intricacies of the Ordo, I’d like to start with sound itself. Specifically, the possibility of sound before song, before the written gram. Aquinas wrote that song is the speculative leap of mind in the eternal breaking out into sound, and with Hildegard this leap becomes a connective ratio between the manifest and the Other.  

Sound gives rise to a contemplative, suspended listening that focuses attention in the moments just before we begin to sing, before we call out to the Other in the apostrophic gesture of prayer. For Augustine these moments are imbued with tension; in order to perform a psalm, we have to be able to hold an image of that psalm in the mind’s ear before we begin.  

There, outside of musical time, an image of the whole is called to mind, is “recalled.” Can we hear its conjured image? Yes, but not with our physical senses, but rather as an ambient presence arising in a contemplative (but also, I will argue, an analytic) gaze.  

For Augustine, as soon as we begin singing, however, the image of wholeness is torn asunder and becomes a distension (distensio); an incessant, chaotic flux (hyle), a form of facticity in sound recalling Bernardus Silvestris’ Cosmographia: “When the mass ebbs and flows, at odds with itself, when hapless elements are borne about at random and the whole body is rent by sudden agitations.” When a musical performance begins to unfold in time, something is lost, the singular image of its wholeness.  

The experience of musical distension leads Augustine to ask after the experience of musical providence, or rather, a conception of providence gleaned from the understanding of the musical image before it enters the stream of time: “Suppose I am about to recite a psalm which I know. Before I begin, my expectation is directed towards the whole” (xi:28). Augustine uses the scenario to posit the question of the place in which God existed before s/he created manifest space and time as we know it. “Because there was no place where to make it before it was made, that it might have being” (xi:5). Even though he knows he cannot grasp its true magnitude, Augustine writes that this space, this receptacle, must in some
way be mirrored in his own ability to grasp a totality before he begins singing. A form of theoretical simulation is thus enacted:

Certainly if there were a mind endowed with such great knowledge and prescience that all things past and future could be known in the way I know a very familiar psalm, this mind would be utterly miraculous and amazing to the point of inducing awe. . . . From such a mind nothing of the past would be hidden, nor anything of what remaining ages have in store, just as I have full knowledge of that psalm I sing.41

(xi:31, emphasis added).

Musical analysis likewise maintains the capacity to generate an image of wholeness that exists outside of musical time, and in this way, might also simulate Providence.

Apophasis surrounding the superessential divinity often combined reason with more literary aspects of the fabulous (narratio fabulosa) as techniques for humankind’s speculative “recollecction” of the unknown. In this capacity, medieval literary models provide another template for the musical understanding. Metaphysical literary technologies found theoretical justification with classical writers like Macrobius, who made use of them in his Commentarii in Somnium Scipionis (“Commentary on the Dream of Scipio”), a work widely disseminated across medieval Europe, in order to indirectly contemplate, as he writes, “certain kinds of virtue and holy truths.” In fact, Macrobius felt the need to open the treatise with a defense of Cicero’s use of dream and the role of the fabulous in narration. After discussing Cicero and Aesop, Macrobius moves to reflect upon Plato’s “vision of Er,” a story at the conclusion of the Republic concerning a soldier’s return to life and his recounting of the afterlife some days after his own death. For Macrobius, the appropriation of Plato’s Er served as a speculative use of dream and allegory.42

When a philosopher wishes to speak not only about matters of the soul, but also to the nature of the Good, Mind, and Intellect (noûs), whose attributes surpass the limits of speech and comprehension, one must invoke fabulous narratives. In Chapter II of the Commentary, Macrobius writes that philosophers use such narratives because Nature is, at her core, impenetrable to human thought, “her sacred rites veiled in mysterious representations”;43 techniques which, in Chapter III lead to “enigmatic,” “oracular,” and/or “prophetic” forms of vision. MACROBIAN thought came to influence a great deal of twelfth-century dream theory and its numerous authors, including William of Conches, Adelard of Bath, Bernardus Silvestris, John of Salisbury, among others as a way of understanding meditative processes involved in the hypostases of a Timaean cosmology, that is, the Neoplatonic hierarchies inherited in twelfth-century Europe. The present study takes these paradigms and connects them to the interpretation of providential form in Hildegard’s music.

Taking into account the fact that the medieval dream-vision (the fabulous-as-speculative-tool) becomes synonymous with the extension of a continuous (hypostatic) Platonic ratio and the expression of experiences of uncertainty, disorientation, suspension, and the like, it is possible to read Augustine’s distension
as the sonic effects of an impossible (hyper-chaotic) mediation. “Because it leaves
the dreamer in a position between clearly defined entities, the dream becomes an
important way of exploring ‘betweenness.’” Experiencing the sonic effects from a human vantage
point, the uncertainty of this betweenness manifests as a distension in the mind
of the perceiver. As will be shown in Chapters 2 and 3, Augustine’s *Confessions*
emerge as a crucial point of reference for my analysis of the first thirty chants of
the *Ordo Virtutum*, a span of music that, following the soul’s confusion in the text,
manifests its own composed distensions involving incessant modal (trichordal,
tertrachordal) oscillations, “modulatory intervals” with their ever present shifts of
“scale-degree qualia” between D and E centricities, all existing within a com-
pressed vocal range, and coupled with the listener’s apperception thereof.

For Plotinus, whom Augustine venerated and studied in his youth, it is the
individual soul that is responsible for temporalizing time, as it were: “Time is the
soul’s passing from one state of life to another, and is not outside the soul” (*Ennead* 3.7.11), another way of stating that the confusion lies in the soul’s
attempt to mediate that which it cannot wholly comprehend, insofar as fate cannot
see Providence from outside the flow of time. Time’s motion originates in *Anima’s*
turning away from the *noûs* which, in its eternal perfection, is timeless. Out of the
soul’s movement away from the One emerges the very notion of succession and
linear unfolding, resulting in a serial distension that draws the soul in various
directions. Philosopher Claude Romano presents Augustine’s account of time as
being placed wholly “in the mind [of the soul]” thus leaving the eternal and
unchanging One, which is not subject to becoming, untouched. Time thus mani-
fests as another residual quality of an unfolded reality.

In the *Ordo Virtutum*, the passing of time in which the soul achieves a victory
(and the time in which *Anima* is “recalled” to the celestial city) could also be
viewed as a construct of the soul, an architecture or edifice (“a/edificare,” see *Ov* 2, 6) constructed of and by the soul’s repentance. Time, as created by the soul,
not only serves as a poor simulacrum of God’s eternal presence but is also an
imperfect mode by which the soul becomes present to itself. The distensions of
Part I will be read in this light.

**Listening bubbles**

What is transformed in the focused attention before song? From a modern
phenomenological perspective, listening subverts the gap between subject and
object, opening an ontology of the heard which cannot be separated from hearing,
insofar as “the auditory is generated in listening practice.” To use Jonathan
Sterne’s terminology, hearing is “spherical” and “immersive” whereas vision is
directional; hearing places you inside the event. Between an “I” and its object
lies a space of open and mutual resonance, an animated sphere, a bubble that
dilutes polarities into a zone or *matrix* of interaction, a biune shared space of
experience. Therefore, as Peter Sloterdijk has written, every creation of a bubble
or sphere is also the creation of a resonant interior. This interior, in turn,
provides a phenomenological model for the interaction between the human and the divine mind.

Sound studies often draws sharp lines of distinction between the auditory and the visual, criticizing the presumptions of the latter and lauding the open-mindedness of the former. For many, the visual represents the arrogant desire for wholeness and a rigidly hierarchical structure; a panoptic totalization that manifests in the fixity of an object under analysis. Hearing, on the other hand, leaves us in the dark to grope, explore, and make connections which, in turn, lead to the gradual efflorescence of an ephemeral, phenomenological eidos. Michel de Certeau pits the synoptic assurances of vision against the nomadology of the migrant who connects and creates as s/he walks the seemingly infinite number of alternate routes through the city. The nomad’s trajectories create a “delirious” (distended) city of experience, one opposed to the grid-like formalism of the visual map. Apophatic models end up being rather similar to twentieth-century phenomenological models insofar as the system in which we are implicated cannot be totalized from within perception but can only be explored through the logic of the promenade; a form of “looking-around” (or, “hearing-around”) as opposed to a “looking-at,” a logic that favors the restlessness of a complex, multiply directed attention in the assemblage of meaning within the complex spaces of experience.

As musical process, the Ordo Virtutum unfolds a phenomenological city of experience, an assemblage of perfections accumulated and thwarted as part of the pilgrimage to the celestial city (Ov 48: tu es in edificatione celestis Jerusalem; Ov 86: ita ut et nos eos hoc modo perducamus in celestem Ierusalem); an unknowable non-discursive city that, much like the structures of Hildegard’s visions, does not conform to the rigid, human prescriptions of sight, but rather the mutation thereof. Absorption in sound celebrates the traces and intimations of the heard, and teaches us to tease-out fragile, virtual structures from within experience.

The soul’s pilgrimage is bound to seem partial, fragmented, distended, owing to its inability to totalize the religious experience from within the unfolded regime of fate. We can only seek out the existential gulf that opens at the root of our being, a place that, far from resembling a completed city, constitutes the corner of a maze, bringing to mind Italo Cavino’s wondrous attempt to construct a human view of Utopia:

For these ports I could not draw a route on the map or set a date for the landing. At times all I need is a brief glimpse, an opening in the midst of an incongruous landscape, a glint of lights in the fog . . . and I think that, setting out from there, I will put together, piece by piece, the perfect city, made of fragments mixed with the rest, of instants separated by intervals, of signals one sends out, not knowing who receives them. If I tell you that the city toward which my journey tends is discontinuous in space and time, now scattered, now more condensed, you must not believe that the search for it can stop. Perhaps, while we speak, it is rising, scattered, within the confines of your empire; you can hunt for it, but only in the way I have said.
Although scattered and discontinuous, glimpses of Utopia nonetheless arise from within our present experience, within our earthly cities and symbols, our musical symbols, forming a trace of the heavenly city. Calvino allows these fragments to provoke a sense of awe and wonder. Likewise, God does not offer finite beings a complete view of the heavenly city. Or, perhaps it is more accurate to say we would not be able to totalize it, even if such a view were given. Rather, what is offered is an eternal growth and discovery, a continued unfolding, *pli selon pli*. Speaking to the relation between Babylon and the City of God, Thomas Merton writes, “Do not think the destroyed city is entirely evil. As a symbol is destroyed to give place to a reality, so the shadow of Babylon will be destroyed to give place to the light which it might have contained.”\(^{55}\) Merton touches upon the thorny topic of textuality and the role of absence in the interplay between text, symbol, erasure, and the infinite potentiality of language, all topics that will be engaged as the book progresses. For Merton, the potentials of erasure serve as the factual mean, or *ratio* that connects Babylon to the Augustinian city as a deterritorialized archetype.

**External immanence**

I would lay the ears of my body unto the sound bursting out of his mouth.  
*Confessions* xi:3\(^{56}\)

In *Scivias* II:6.20 Hildegard discusses the role of sound in the administration of the communion. Specifically, the external rendering of an internal devotion that occurs while the priest is singing, a similar breaking-out into sound of mind as found in Aquinas. Sound and song, like communion itself, become material traces of eternity (recalling Augustine’s *vestigia trinitatis in creatura*). Sound acts as an in-folded agent of liberation capable of unfolding onto the dwelling place of the Other:

While the priest was signing the song of the innocent lamb—“Behold the lamb of God who takes away the sins of the world”—and was showing the host to those who would be receiving Holy Communion, *the flame then took itself back to heaven*. This refers to the priest singing the praise of the one who bore the redemption of the people in innocence. When the priest uncovers his interior devotion for this sacrament *within* his breast *externally*, that flame—which shows its power here—takes itself back to the heavenly mysteries.\(^{57}\)

Hildegard’s wording is exceptional in its description of an interior devotion uncovered within the priest’s breast “externally”—the external rendering of an internal devotion occurs while the priest is singing. Song, like communion itself, becomes an external (audible) form of the unknowable connecting the providential and the manifest. Related passages include *Scivias* II:6.6 where the Church, through the voice of the priest, “seeks her dowry, which is the body and the poured-out blood of My Son” for the saving of souls. And in *Scivias* II.6.11 when
the priest sings, heaven and its limitless brilliance descends, giving the “fruit of the noble life” and the “fresh living breath of the royal kiss,” a purified breath which then becomes a stone in God’s wall—creating a link between anima-as-breath and a heavenly architecture—causing the messenger to “utter the sweet sound of the threefold invocation of the Lord of Hosts” which, in turn opens the glorious tabernacle onto the mysteries of the sacrament, the unmovable citadel of the divine mind. *Scivias* II:6.12 transfigures the voice of the priest into a light that no human eyes can see, but which illuminates the secret places of heaven. Thus, the audible exists in ratio with the invisible and unknowable. The apostrophic call to the Other in prayer serves as a passageway that opens onto the “place” of heaven. The faculty of vision fails to witness the mysteries of the sanctification of the sacraments, and Hildegard returns again to the image of breath in order to describe the transformation:

as a person draws in a breath and lets it out again, when by the wonderful arrangement of God he draws into himself the breath that makes him quicken and live, and then, also that he may live he expels it.  

*Scivias* I:4.23 provides further insight as to why Hildegard uses the image of a priest singing to describe the external unfolding of an interior devotion at an even more elemental level: not song, but sound. Sound is itself an intermediate substance, an invisible, vibratory form responsible for projecting one’s innermost thoughts outward. But both in the intellect and in the will reason stands forth as the loud sound of the soul, which makes known every work of God of Man. *For sound carries words on high, as the wind lifts the eagle so that it can fly.* Thus the soul utters the sound of reason in the hearing and the understanding of humanity, that its powers may be understood and its every work brought to perfection.

*Sound inaugurates a mode of passage.* It carries words up into the heights, where it delivers and translates them in concert with the unknown. Concerning the origination of the sound, in a correspondence with Elisabeth of Schönau, Hildegard intimates that as earthen vessels, humans are merely the instruments chosen to “sound the mysteries of God like a trumpet.” The trumpet (*tuba*) renders sound but does not produce it “unless another breathes into it in order to bring forth the sound.” Not only are our words lifted up into otherness in and through sound, but as hollowed out vessels we render the mysteries of God in sound when He breathes through us, animates us, and we become the somatic vehicle for the resonance of, and interchange with His Word (another bubble).

In addition to the rendering external of the internal, and the inauguration of a mode of passage, sound is ascribed two additional capacities: the power to “bind” and to “separate and expel.” When people stubbornly disobey God’s law, the sound of the priest’s voice can bind them and show them His powerful presence.
The binding of His words becomes an agent of transformation through the winnowing of chaos, which has no place in heaven. Sound separates and clarifies as it connects with the transcendent. Of course, being “bound by law” also conveys the sense of simply following the law. However, given that the serpent is bound in the *Ordo* (*Ov* 78, 80: *Gaudete, o socii, quia antiquus serpens ligatus est*), as is the “black and hairy worm . . . whose hands and feet were already bound” at the outset of the following vision in *Scivias* II:7, both interpretations remain relevant. If we follow the extensive thread of *Scivias* II:6 to its conclusion, we find that sound is the means by which the rebels who oppose God’s law will be bound and summarily driven out of heaven. Sound acts as a sieve that winnows out the wicked, purifying heaven. Addressing the priests in *Scivias* II:6.96, Hildegard writes:

> When people obstinately disobey my law, you ought to strike the fear of my judgement into them. And if they still do not correct themselves, extend over them your power of binding ([*ligaturam vestram super eos extendite*]. How? Since they are rebellious, you should bind them in My words with a clear voice ([*apertis vocibus*]).

The term “clear voice” as translated by Bishop and Hart is worth looking at in relation to the *Ordo*. What kind of clarity is this? Possibilities of “apertus” include: without covering, open; with regard to the sky, cloudless; the openness of a place, or the opening of an entrance (say a gate); and with regard to mental objects, the disclosure of something previously unknown; the revealing of a future; the revealing of one’s character, etc. Intimations of this meaning are found in Part II of the drama. In the midst of the mirrored reflections of the fountain (*Ov* 33, 34), at *Ov* 35 Hope sings, “Darkness cannot cloud my gaze” (*o tenebre, non potestis me obnubilare*), a form of cloudless clarity defined in the negative. Then, at *Ov* 36, a reflexive series of constructions concludes with the verbal form of the term, a seeing-eye that opens the closed/locked heaven (*et vidente oculo clausuram celi aperis*). Soon thereafter at *Ov* 43, the virtue Heavenly love (Amor Celestis) sings, and refers to herself as a golden gate/door (*Ego aurea porta*) that is fixed in heaven (*in celo fixa sum*). And, whosoever passes through her (*qui per me transit*) will never taste the rebelliousness in their own mind. The unobstructed clarity of the voice, given a more active interpretation, connects with an opening in heaven for those to enter who have followed God’s law. Hildegard continues her exposition on the topic in II:6.97, quoting Matthew 16:19 (“I will give you the keys to the kingdom of the heavens”). The golden gate in heaven from *Ov* 43 finds concordance with the gift of the keys to the kingdom of heaven from Matthew 16. Those who imitate or mirror God will be given the power to declare judgments and bind sin on earth. Which is to say: “while on earth, you may overcome sin in its evilness and may separate it from the person and throw it away [*separata et projecta*] from heaven where no sin is allowed to have freedom or a place to dwell.” Just as *Silva*, the chaotic and “hostile coalescence” from Bernardus Silvestris’ *Cosmographia* longs in her turbulence for a tempering
power and demands the shaping influence of number and the bonds of harmony, so too God’s law for Hildegard orders, separates, and discards the rebellious and unlawful components of heaven, thus allowing the faithful, in Scivias II:6.99, to be “recalled to the celestial country/Fatherland” [ad coelestem patriam revocatum est], a voyage described in the text of Ov 86, the second to last song of the Ordo.

From sound to word: the vineyard of the text

Considering further sound and song as a speculative ratio, or fold, in which exterior and interior contain each other, the voice signifies human perceptions by means of what Hugh of St. Victor names the “unsubstantial word,” whereas the word of God (Verbum), the Logos, is a resemblance of the divine idea. As a contemporary of Hildegard, Hugh of St. Victor serves as a probable means of connecting her to Augustine’s corpus. For Hugh, an utterance comprised of unsubstantial words involves a series of events strung together in temporal succession, resulting in sounds and signs that must perish, in linear order, before one word can give way to the next. In contradistinction, the divine word is eternal: “It ought to be known that in the divine utterance not only words but even things have a meaning—a way of communicating not usually found to such an extent in other writings.” Words, reading, and sight create subject/object distinctions, but to reiterate, sound is intersubjective and immersive, and, as such, better approximates a relationship with the interactive Logos:

The philosopher knows only the significance of words, but the significance of things is far more excellent than that of words, because the latter was established by usage, but Nature dictated the former. The latter is the voice of men, the former the voice of God speaking to men. The latter, once uttered, perishes; the former, once created subsists.

The passage continues in a manner that recalls Hildegard’s mediation of interiors and exteriors through sound:

The latter [word] is the voice of men, the former [things/res] the voice of God speaking to men. The latter, once uttered, perishes; the former, once created, subsists. The unsubstantial word is the sign of man’s perceptions; the thing is a resemblance of the divine Idea. What, therefore, the sound of the mouth, which all in the same moment begins to subsist and fades away, is to the idea in the mind, that the whole extent of time is to eternity. The idea in the mind is the internal word, which is shown forth by the sound of the voice, that is, by the external word. And the divine Wisdom, which the Father has uttered out of his heart, invisible in Itself, is recognized through creatures and in them.

Hugh echoes Augustine’s Neoplatonic reading of the Verbum in Book xi of the Confessions, where the linearity of words is counterposed against the non-
discursive word of God: “everything is said in the simultaneity of eternity” (xi:7 *sed simul ac sempiterne omnia*) insofar as, “it is not in time that you [God] precede time” (xi:13 *Nec tu tempore tempora praecedis*). Applying this understanding to the reading of scripture, Hugh observes that we often encounter passages where “certain things belonging to future time are recounted as if already done,” to which he offers the following answer: “because those things which, from our point of view lie in the future, have, from the standpoint of God’s eternity, already been done.” We’ll return to the problem of an outside-of-time-within-time a little later, but for now I would like to bring the focus back to the sound of the voice.

In prayer, words and sounds are granularized as the particles of the voice assume something of a holographic quality, and external vibration mirrors the internal movements of thought. Here, in this between-space, listening serves as the connective *ratio* between the eternal word and the individual; between the ineffable and the manifest. In the twelfth century, figures such as Guigo II along with Hugh of St. Victor practiced techniques of divine reading (*lectio divina*) to inaugurate a pilgrimage or passage through the vineyard of the text, the leaves of the book: “When Hugh reads, he harvests; he picks the berries from the lines. . . . The lines on the page were the thread of a trellis which supports the vines.”

Listening to the text, slowly repeating it to oneself—and, as Guigo reminds us, “Listening is a kind of reading”—the sweet grape of scripture is put into the mouth. Reading/listening is thus equated with seeking, the start of a voyage, putting the food in one’s mouth, while meditation and prayer deepen the experience. In summary, all of the dimensions of sound discussed above are folded into the consumption of a text. In contemplation one no longer seeks, but rather “tastes” the sweetness: “It [contemplation] inebriates the thirsting soul with the dew of heavenly sweetness.” Starting from sound and the letter, one enters into a process that mediates between an individual’s microcosmos inhabited by the forces of chaos, change, and instability on the one hand, and the “macrocosmic church,” a providential, unmoved eternity on the other.

Reading and listening were a thoroughly integrated aspect of daily life for Hugh’s Benedictine monks, as indicated by the dictum *ora et labore* (pray and toil), creating a symbolic framework of listening and divine reading to regulate one’s way of life in which “The whole body is involved in lifelong reading.” Throughout the workday, monks would assemble and listen to recitations and Psalms sung on reciting tones (*recto tono*). For Tillich, “These lines are the road of his pilgrimage toward heaven, both when he prays and when he works. Reading impregnates his days and nights.” In medieval manuscript culture the opposition between the auditory and the visual were not so clearly delineated, both were seen as inherently faulted in their attempts to perceive the divine.

**Theory as speculative response**

How does music theory fit within the phenomenology of hearing? Almost pre-reflexively theory is equated with visual (objective) mapping, insofar as it is

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**A metaphysical medieval assemblage**

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**VOUCHERS**
capable of diagramming large-scale architectonics that allow, in the case of the *Ordo* for example, the temporal span of an hour’s worth of music to be scanned at a glance. But I would maintain that this theoretical scanning is not a totalizing procedure, but rather a perception, the creation of connections. It creates a (scannable) image of the whole but does not perceive that whole in itself. In essence, theory asks if we might experience de Certeau’s nomadic trajectories at higher levels of structure, and thereby retain the philosophical *eidos* of exploration that occurs in and through hearing. I believe the answer is “yes,” so long as that higher-level structure is a network.

Networks introduce connectivity at all levels of scale, undoing many of the structuralist tropes for which music theory as a discipline is often criticized. Within a network, connectivity goes all the way down (and also, therefore, all the way up). Theory and analysis do not fix materials, but rather connect materials. Relatedly, the theory of medieval mode I will present in all that follows looks at mode as a networked location, a topological site that “provides a situation [hedran] for things to come into being.” This, in turn, will develop (in Chapter 4) into a larger discussion of “place,” and Plato’s notion of *khora*, the “Receptacle of becoming” discussed in the *Timaeus* [49a–52e]. The argument will show how the musical connections formed of and in Hildegard’s chants in the *Ordo Virtutum* become the performative site for the soul’s return journey to the One (*epistrophe*), and likewise serve as the site for the construction of the celestial city, the *Ordo*’s teleological goal.

How does one begin to assemble a speculative analytic language?

Theory, in music at least, is an intriguing blend of intellectual rigor and reckless risk taking; its role is not so much to tell us how it is, but rather to provide grit, to set up unyielding points of reference against which over-familiar observations may be measured, and so guard us against the kind of easy, “with the grain” interpretations. In isolation, Cook’s notion of “setting up” unyielding points of reference reads as somewhat paradoxical, implying that analysis is, on the one hand, an artificial construct and therefore malleable, but at the same time part of an unyielding methodology. And yet, this contradiction pinpoints a critical issue; the synthetic design and construction of analytic devices to produce real effects, effects that can, in turn, be used in unyielding ways. I emphasize here the constructive dimension of Cook’s definition as a principle component of music theory. Analytic models will likely always retain some manner of a prescriptive structural trace (read “brute fact”), it is quite simply a part of their cultural reception. In fact, Cook observes that musical analyses tend to “succeed as structure or not at all,” noting that the words “analysis” and “structure” are basically synonymous in music-theoretic discourse. However, I argue that the creative design, construction, and various extensions of analytic technologies can serve an immersive, speculative response to an unknowable (but importantly, *not unthinkable*) medieval circumstance; a condition of facticity mirroring Augustine’s invocation of the image of
song-before-sound as a way of conceiving of the place in which God manifests creation. Augustine was aware that his providential image fell short of the Real, as will mine, but the fact that he chose what I consider to be an analytic image of a psalm is significant and offers new possibilities as to how analysis itself might be invoked in an inquiry into the Ordo Virtutum. Analysis gives us a version of an image of a providential reality, one that cannot be totalized, or heard in linear time, but can be thought, and therefore, can be heard.

Part of the late antique tradition of Neoplatonism and its fusion with Neopythagorean theologies involved the deployment of mathematics beyond mere arithmetic operations into the field of philosophy proper. Augustine’s rumination on musical comprehension as a means of intuiting the unknowable space that must have existed before space and time were created can be seen as an outgrowth of a similar speculative tradition. Syrianus (ca. 375–437), a contemporary of Augustine, thought that the mind contained universal ideas which, “being part of our own cognition a priori, make possible the epistemological experience of recollection.”

Universal ideas enfolded in the mind allow for an immanent interior recollection of the transcendent Other. In Scivias III:13.7–10 (to which we will turn shortly) Hildegard develops a series of recollections through the repeated use of the word revocare, literally to “re-call,” or “call again,” a recall that supersedes an individual’s memory and involves a form of mediation of the One. It also involves what we might call an epistrophic projection, or return journey, a being called-back-into the One, being drawn-up, being inhaled. A circuit is thus established between manifest being, memory, otherness, and return.

For the Neoplatonic philosopher Proclus, numbers serve as images of the One itself. Similarly, for Augustine and Hildegard, musical understanding holds an esteemed position involving a dualistic trade-off. On the one hand, musical/numeric images have a stable figuration capable of being grasped by the senses, but on the other hand this figuration then becomes the vehicle for the unfolding of thought into the virtual orders of infinity. Ordo Virtutum, the orders of the virtual; Limit extended into the Unlimited. In the same way that for Proclus, mathematics becomes the best language for the expression of the divine, it is my contention that musical language and the diagrams thereof fulfill a similar role. In fact, towards the end of his life Proclus favors geometry over arithmetic for its diagrammatic capabilities which allow one to visualize and convert the “soul’s invisible ideas into a graphic discourse.” And, as geometry spatializes arithmetic, so too theory spatializes music’s speculative form.

That Augustine chose music as a model for framing his understanding of a quasi place-before-place and time-before-time, as well as his reliance upon the voice and its acoustics to frame these ideas leads me to ask if additional philosophical and theological reflections might be served through the consideration of musical analysis as a form understanding that also exists largely outside of (linear) time. What exactly is “the full knowledge of that psalm I sing”? I believe an analytic understanding is perhaps the closest, insofar as it presents to the mind an image of a non-discursive mode of intellect which for both Augustine and Plotinus serves the highest form of thought. Of course, analysis is not atemporal.
It too unfolds in time, and as such could only be an image of such a thought. Nevertheless, analytic thought is capable of scanning through and thinking about a piece of music outside of musical time in a non-linear fashion.

From Augustine to Lewin, Straus, and Hanninen

Pivoting now into the twenty-first century, I will begin to discuss music-theoretical networks with an eye to how they might be merged with a speculative philosophy. Picking up where Augustine left off (that is, imagining a providential music from within its linear flow), I often sense a creative tension in David Lewin’s writing between the effective linear analysis of musical works on the one hand, and the exploration of a non-temporal, analytic domain-space on the other. These varied inclinations highlight vastly different possibilities concerning one’s approach to an analytic domain. The diagrammatic dimension of music theory—the most overt locus of its representational space—leads to an important distinction that must be drawn between motivated or indexical signs, which indicate an intrinsic relationship between signifier and signified, versus unmotivated signs, which indicate an artificial, or external relationship between elements of the sign-system. This semiotic approach is originally derived from Charles Sanders Peirce, who discounts the possibility that a sign could ever be “perfectly determinate.” Expanding upon this notion, it could be argued that analytic diagrams and the understanding they encode and transmit are likewise part of an unmotivated condition.

About halfway through his analysis of Stockhausen’s Klavierstück III, for example, Lewin interrupts his prose to raise the question as to how the analysis influences his own hearing of the work. He first wants to respond to a pointed question concerning his network constructions and perception, namely, “can you hear [them]?” He interprets the question to mean something to the effect of: “on hearing the piece for the first time, would you infer the grouping of its pitches in the form presented [in his analysis]?”. Lewin initially answers “no.” He elaborates, saying that he would not expect anyone to be able to do so. He then rephrases the question along less pessimistic lines to mean something like: “After studying [the diagrams of his analysis] do you find it possible to focus your aural attention upon aspects of the acoustic signal that seem to engage the signifiers of that analysis?” To this question he answers, “yes.” Engaging the signifiers of the analysis constitutes a different kind of hearing, an atmospheric, networked hearing—a hearing of associations internal to the analytic exploration of a domain-space. He speaks of giving a fuller sense to the space of “potentialities” rather than mere “presences.” The signifiers of the analytic domain-space are different from the signifiers present during the linear hearing of a performance and its related pitch groupings. I argue this is because the generalized signifiers internal to Lewin’s ontology are in fact unmotivated in nature. Instead of following the piece linearly, Lewin asserts a network that shows potential functional interrelationships, arguing that musical notation has its own built-in biases. Again, he reveals that
the exploration is of the posited analytic space, and not only of a work or performance unfolded in that space.

Going further into the analytic process, I would next like to discuss Joseph Straus’s concept of total voice leading as an example from the theoretical literature of a networked site that includes criteria for possible alterations of all possible individual cases (similar to Meillassoux’s hyper-chaos). In the most general sense, Straus differentiates traditional voice leading from his total, networked voice leading in the following manner: given three hypothetical chords, X, Y, and Z, traditional voice leading shows the single path of each voice traced from a chord member of X to a chord member of Y, to a chord member of Z, see Figure 1.1a.

![Figure 1.1a Traditional voice leading (with instance of voice-crossing)](image1)

Total voice leading, on the other hand, reveals all possible migrations of a member from chord X to its destinations in chord Y, and Z (Figure 1.1b). More formally, Straus writes: “I define the total voice leading between sets X, Y [and Z] as the complete collection of ordered pc intervals formed between the pcs in X and the pcs in Y [and Z].” The combinatorial result of this operation gives rise to “interval multi-sets” (*imultisets*).

![Figure 1.1b Total voice leading](image2)
My primary interest in Straus’s work lies in the configuration of the singular-multiple initiated by an analytic event. Total voice leading diagrams reveal numerous possible orderings of an assemblage (“assemblage” demarcates the initial phases of a set-syntax open to continuous conjugation where single orderings of elements are not particularly relevant). Straus creates networked diagrams that rigorously prevent singular interpretation, but nevertheless manage to “color” the progressions with the exploration of their horizontal content.\(^{82}\) I believe that his research presents a clear formulation of a singular-multiple through its consideration of the contextual environment, the “envelope of the situation,”\(^{83}\) rather than focusing on the paths traced by individual tones. The envelope of the situation is an ontological identity \textit{(eidos)} that none of its manifestations are capable of exhausting. In this way, the envelope functions much like an in-folded, providential image. It is also a network.

Although Straus’s principle thesis does not focus on perception, he nevertheless raises several relevant issues in his discussion of elements capable of being “marked for attention” (par. 2) within the envelope of the situation. This leads to a crucial point: I think it fair to say there is a tacit assumption in the theoretical community that an analysis of a work or performance not only influences, but also helps shape the perception of that work or performance in a top-down manner, functioning as the sheath for an ontological identity. For example, Christopher Hasty writes: “It is important to remember that higher levels of structure in a sense subsume the detail of lower levels, but cannot exist independently from that detail.”\(^{84}\) If we posit that higher-level structures are in fact audible, then we can view the higher levels as framing our perception of the lower levels. More abstract is Dora Hanninen’s stance: “music is not sounding events, but mental experience or ‘thought’ focused on sounding events that combines cognition with attentional disposition.”\(^{85}\) The idea of becoming aware of one’s thoughts of sounding events as a framing device, a frame that leads to a reconstruction of materials, is likewise effected, I believe, by an unmotivated condition. The layer of abstraction created in this kind of awareness is what allows theory to generate and utilize its own machinic constructions in listening. Elsewhere, Hanninen has explicitly written of analysis as ontology:

\begin{quote}
As an analyst, however, I tend to identify musical “reality” with a kind of rich perception by \textit{individual} listeners and analysts that supervenes on, but is far from identical with, the output of basic principles of human perception and cognition.\(^{86}\)
\end{quote}

Here we see the interfacing of a set-theoretic ontology with perception, insofar as supervenience involves a set of properties \(A\) (the internal, machinic elements of a theory) that supervenes on another set \(B\) (the material or mental objects discerned in listening).\(^{87}\) Theory, therefore, helps select, frame, and identify significant relationships inclusive to musical hearings.\(^{88}\) What I find compelling in Straus’s analyses is the explicit attempt to emphasize a networked meta-view of a musical work or passage, a state prior to a singular framing condition.\(^{89}\) This kind of view
invokes a non-totalizing and unmotivated role for analytic distance—an elevation that transfigures the role of the analyst into that of a neurotic voyeur of possible segmentations, unable (or perhaps unwilling) to decide upon a single path, much like de Certeau’s nomad wandering the multiplicity of alternate routes through the city. A voyeur *qua* pilgrim who becomes capable of intuiting the multiplicity of trajectories that lies just beyond the site’s presentation.

Similar to Straus, Hanninen maintains a rigorously open view of segmentation that also posits a potential form of “atmospheric” networked listening: “A move toward explicit recognition of diverse segmentation criteria and their interactions that recommend individual segments is no mere analytic exercise: it is an important means to explore, access, enrich, and transform musical experience.” Although she shows a great breadth of knowledge in the field of psychoacoustics, cognition, and computer modeling, Hanninen is cautious and does not ultimately regard segmentation as a predicative endeavor based on scientific tenets, but rather claims it is a humanistic one, based upon decisions of perceived musical contexts, and an analyst’s own judgments. I would simply add that what Hanninen names “humanism,” I call an unmotivated, contextual, networked perception. All of these points culminate in Hanninen’s conclusion that *the listener/analyst constructs his or her own set of associations, what she terms the “associative landscape” of a piece*, bringing us back to the question of place and its relation to analysis.

Even though parameters such as register, instrumentation, and dynamics may well designate certain pitch-classes (pcs) to stand out, Straus notes that “all [pcs] are at least potentially in play,” and then makes the crucial assertion that “most of the intervals that comprise the total voice leading are near the forefront of musical consciousness, or can be easily summoned there.” In essence, Straus *invokes a category of argument that specifically speaks to the interrelationship between music theory and possible perceptions*. He then notes the similarity between total voice leading and (a post-tonal) hexachordal awareness, insofar as the perception of a hexachord’s fifteen intervals is more dependent on a conceptual awareness of the hexachord’s construction as an influence before, or even in place of the “discrete discernment” of pitches that the ear individually picks out. As we will see, a common thread emerges in Straus, Hanninen, and Lewin’s work, and that is a plea to the perceptual challenges involved in hearing. These theorists ask their readers to learn to hear the *eidos* (the modified version of Platonic essence) within experience, or perhaps vice versa. Straus writes that these perceptual challenges are worth exploring, and furthermore, that hearing these abstract structures is a “perfectly attainable goal of focused attention,” an assertion that for him was the result of “quiet, sustained introspection,” a comment that invites phenomenological discussion of a site’s qualities. He adds that although the manifestation of the total voice leading in the actual musical surfaces necessarily varies, and therefore that the constituent intervals of the *imultiset* are not all “equally vivid or functionally the same,” the view of the totality nevertheless participates in “coloring” the macro progression. Straus reiterates this point one last time toward the end of the article, stressing that the components of total voice leading are not all experienced with “the same degree
of immediacy.” He even goes so far as to say that some of the intervals resulting from total voice leading are, in fact, “more associations than directed motions, providing a context or atmosphere for the others” (par. 41), again aligning himself with Haninnen’s associative landscapes.\textsuperscript{96} My nodal parsing of Hildegard’s music in the coming chapters likewise intuits a new form of theoretical landscape that, in turn, opens a set of possible hearings.

Imagine I have before me an analytic sketch of an entire chant that I’ve fit onto a single system of staff paper. I can glance at it, make connections, and hear these connections “atmospherically” as an ambient trace in the mind’s ear without having to audition the chant to myself in a linear fashion, or without having to sing it out loud. In fact, this form of scanning of the diagrammatic image could be construed as a “refractive” network principle. Such a principle continually reworks the relations between parts and wholes “giving rise to structures in which parts and wholes fundamentally exceed each other.”\textsuperscript{97} Compare this experience with the attempt to comprehend a chant I have never encountered, say a long eight-minute sequence, which I try to analyze as I am hearing it in performance in real time. This second scenario would serve as an example of a distended musical experience, where I might grasp something, then lose focus, or shift my attention to some other parameter, daydream, etc. While listening to a performance it is almost impossible to assemble an analytic image of that performance, and even if, for argument’s sake, it were possible to assemble it, one would not be able to scan it in the way described above. Listening to a performance is a very different kind of listening from that of an analytic, atmospheric listening. The two, of course can and should overlap, but here I am choosing to focus on the virtual potentials of analytic thought as a technique for speculative hearing.

Viscosity and intersubjectivity

Returning again to sound studies, there is a form of viscosity associated with the subject in sound. Sound and subject are said to be intersubjective (mutually co-creative) in nature.\textsuperscript{98} Sound is close at hand, right here, it is so close that it seems to stick to me. I cannot separate myself from it, like a swimmer and the water in the pool. I create effects and patterns in the water, and it in me. Sound is the wave that flows through me. I am its membrane, its tympanum. But it also flows in eddies and whorls of time, preventing me from grasping its totality. It interacts with but also enfolds me. Just as often it confuses and hides as much as it reveals.

For the early church fathers who integrated a Platonic lineage in service of elucidating the mysteries of Christianity, God is often invoked as an unknown, utterly transcendent and yet wholly immanent entity. God exists both at a hierarchical, seemingly infinite distance from me, but also close-at-hand, in a collapsed and overlapped distance. This simultaneously hierarchical and intersubjective reading was one of John Scottus Eriugena’s primary contributions to theology, leading Dermot Moran to argue that his philosophy presents us with a form of medieval idealism (anticipating the systems of Schelling and Hegel), specifically a “speculative rationalist system which identified substance with subject, merging
all things in the Absolute Spirit” and in an infinite subjectivity that is “resolved back through reason to its source in the One.” In this model, the degree to which the human soul is drawn into consort with the Providential mind constitutes a form of intersubjectivity, a development not present in previous Neoplatonic models.

The intersubjective argument can be expanded through reference to additional passages from the *Periphyseon* in which Eriugena writes of a bonding that occurs in the mind through intellectual penetration: “Whenever the pure intellect knows something perfectly, it is made in that thing and becomes one with it.” The passage’s continuation reveals how the traditional hierarchy of an angel placed above the human is subverted, or folded through the soul’s proximity to the divine:

> The angel is made in man through the intellect of the angel which is in man; and a man is made in an angel through the intellect of the man established in the angel. . . . So the intellectual and rational nature of the angel has been made in the intellectual and rational nature of man. . . . When I understand what you understand, I become your understanding (*intellectus*), and in some ineffable way I am made in you.

Becoming-other through mutual embrace or absorption represents a medieval complication of the purely top-down hierarchies often representative of classical Neoplatonism. They are complicated insofar as, at one level of structure the hierarchy remains, but at another level, it is transcended and included in a wider notion of a single divine-self (i.e., network-refraction). A later medieval concordance is found with Thomas Aquinas, who in the thirteenth century wrote that, when a spiritual entity exists fully and completely in something, it contains that thing and is not contained by it. In medieval philosophy in general, and with Hildegard specifically, hierarchy could be said to create the favorable conditions for its own transcendence.

In Hildegard’s *Homily* 7 on “The Lord’s Birth” (Luke 2:1–14) we find an intimation of an intersubjective approach to rationality by which humankind interfaces with the divine, resulting in a uniquely medieval development of the Platonic hypostasis, or “scale of being.” Hildegard first writes: “The human understood all things, because he had rationality, since God created him in his image,” reinforcing the expected traditional hierarchy of humankind as a subordinate reflection of the divine (the gradations of hypostases were commonly described as a series of mirrors, a viewpoint shared by Plotinus and Macrobius, among other classical authors, eventually leading to the medieval virtues and their role as mediators of these reflections). By the end of the homily, however, Hildegard upsets the purely top-down ontological scale by noting a hierarchical inversion between the human and the angel, an inversion that results from the angel’s acquisition of knowledge about God from humanity owing to the latter’s relationship with the incarnate *Logos*, the light and creator of manifest form.
As Peter Dronke explains, “Rationality created all things, but without rationality was made nothingness, which is contradiction (nichil, quod est contradictio). God also made the first angel rational, but in him rationality contradicted God.”

While the first angel is therefore associated with nothingness, wherein the light of the Logos does not shine (since Lucifer was not saved), in human beings the Logos (Verbum) was made flesh and dwelt within them (Sic verbum caro factum est et crevit homo et habitavit in nobis). And, because the Logos dwells within humanity, Hildegard writes that the angels can learn about God through us:

When the human was created and placed in Paradise under the angels’ protection [there was] a great miracle in the whole heavenly host, “praising God” about the human; because divine works shone forth in him, since rationality was supposed to work in him. For the angel is rational only in praise, but the human in both praise and deed. Once they had seen the human, the angels knew God to a greater extent.

A passage from Scivias III:1.7 provides another intersubjective image reminiscent of Ov 2:

He feeds it [the redeemed flock] by His law, which He planted through me . . . and by His virtues and His law He will take them up into His bosom. How? By lifting them above the height of the heavens and making them members of Himself. . . . Therefore the human form is to be seen in the inmost nature of the Deity, where neither angels nor any other creatures appear. . . . And He has stretched out His hand to them and drawn them back to Himself. . . . And you see them appear in the bosom of the Father. This means that the Son of man is perfected with all his members in the secret heart of His Father.

Following in the footsteps of Eriugena, Hildegard boldly admits the possibility of an individual who is raised above the angel, implying an intersubjective contact within the Godhead. In this unique medieval interpretation of the ontological scale, the Platonic mean serves not as a lower reflection but as a type of interface linking divine and sublunary worlds within the mind of its user.

Dermot Moran convincingly argues that in the philosophy of Eriugena the objective Neoplatonic chain of being is always counterbalanced by an “antihierarchical subjectivist tendency,” which he calls idealist in nature.

[T]he hierarchies appear to stand as objective intermediaries between the human self and God; and God’s grace is seen to be channeled down these hierarchical rungs of the ladder of being. In essence, Eriugena wants to safeguard the human ability to have direct access to the divine and, in fact, to become divine. He argues that there is no intermediary between the human being and God. . . . Even though humans are placed halfway down the ladder of being, nevertheless they also transcend and contain the entire ladder of being in themselves, and as a kind of transcendent non-being are able to merge with God.
It is well known that in *Scivias* III:8, which discusses the Pillar of the Humanity of the Savior, Hildegard represents the Virtues as agents of mediation; they descend and ascend this pillar, which functions as a ladder (*scala*) between manifest world and heaven. A couple of details are important: first, the pillar is set in the shadow of the pillar of the Trinity—“It was so obscure to my sight that I could not tell its size or height,” once again showing the human limitation of the senses in the presence of the divine. Second, the steps of the Virtues operate through mirror-like reflection (Humility, the queen of the Virtues is even depicted as having a shining mirror on her chest), a reflection that begets imitation (since Aristotle and continued through Plotinus, the virtues are habits to be imitated in the striving for perfection). Towards this end, Humility says the following:

> I am the pillar of humble minds and the slayer of proud hearts, I began at the lowest point and ascended the steep slope the heaven. . . . Whoever wishes to imitate me and be my child and embrace me as a mother and carry out my work, let him start at the foundation and gradually mount upward from virtue to virtue, with a sweet and tranquil mind.

The passage clearly establishes the presence of a hierarchy and the mediative role of the Virtues therein, presenting half of the equation. In what follows, it will be important to consider the ways in which hierarchy is subverted, opening intersubjective sets of relations in the drama.

Moran refers to these communicating intelligences (i.e., the human merged with and in God) as constituting an “intersubjective” domain and concludes his chapter on medieval idealism by referencing a circular figuration: “Eriugena does not have a modern understanding of the self-enclosed isolated subject. Rather, he has the idea of a nous which as a ‘circular’ motion around God, and can come into a unity with Him.”108 This, of course, almost exactly mirrors Boethius’ description in the *Consolation* (iv.6) of the relation between Providence and Fate as a set of concentric orbits around an axis, with Providence as the unmoved axis itself and Fate as occupying the outermost orbits, which must traverse ever longer distances around that center. And, the degree to which a soul can infuse itself with the center it can also be absorbed in its undivided, non-dual nature, and cease to experience the distension of being torn in multiple directions. Unlike other studies of the *Ordo Virtutum*, this book details Hildegard’s anti-hierarchical musical structures as they unfold at the phrase level, and their impact upon the *Ordo*’s large-scale form. This, in turn, will directly relate to the atemporal structures of Part II, which stand in opposition to the temporal distensions of Part I.

**Twelfth-century concordances with Eriugena’s ladder of being**

We find similar references to top-down hierarchies that are both contained and transcended in the writing of a number of Hildegard’s contemporaries, beginning with Hugh of St. Victor. Grover Zinn locates radial structures which he names
“mandalas” in Hugh of St. Victor’s De arca Noe morali and De arca Noe mystica. These two works (written ca. 1129–1130) take a biblical object, the ark, and derive equivalent allegorical and tropological counterparts. Zinn explains that:

Above all the mandala exists as the presentation of a way to achieve unity of consciousness and ultimate detachment from the world. . . . As a cosmogram the mandala represents a geometric projection of the world reduced to an essential pattern. . . . This cosmology intends to show the fragmentation of experience and the cosmos, while providing insight into the ultimate ground of this process of multiplicity in the Absolute.110

One of the engaging aspects of Hugh’s scheme of the Ark is its ability to hold both linear and concentric (i.e., fragmented vs. integrated) structures of the world as part of the same image. In this way, the ark, much like Thierry’s Providence, also contains potential folds. For example, the keel of the ark represents the lineage of Christ, a time-line, from the start of creation up to the present time. Furthermore, the earth is described as a map, “a feature which stresses the significance of history as opposed to the simple presentation of the elemental nature of the earth.”111 At the same time, however, Christ is figured concentrically as embracing the cosmos, placing the linear and historical aspects of creation into a radial embrace.

Hugh’s cosmos is divided into three concentric rings; the earth, air, and aether. His view of the Ark not only presents a top-down hierarchy, but also involves a form of containment, showing the three stories of the Ark as nested rectangles, with each level connected to the former by a series of twelve ladders. Each ladder, in turn, is associated with a particular virtue, allowing one to climb, step by step, the levels of spiritual perfection. Hugh writes, “Through these steps men and women ascend to the highest cubit, as though to God himself, in different ways through the individual ladders.”112 On Hugh’s third ladder is written an excerpt from Exodus, “Here ascend those who have forgotten the world like flying things in the Ark, and Moses alone upon the mountaintop in a cloud with the Lord,” (Exodus 24: 18). In addition to the virtuous “steps” of nested growth, the image of being enveloped in cloud with the Lord intimates a non-linear form of containment and transcendence, reminiscent of Eriugena’s idealist formulations.113

Hugh’s representation of the virtues thus serves not only to foster intermediary stages of growth, but also as a means of transcending and including the ladder of being itself.

A concordant ladder schematic of the virtues is found also in Hildegard’s contemporary, Bernard of Clairvaux and his De gradibus humilitatis et superbiae (“The Steps of Humility and Pride”). Bernard’s model of virtuous ascent follows that of Benedict, and like Hildegard, shows Humility to be the foundation responsible for carrying the monk from the scriptural teachings of Christ up into the highest truth, the rapture of Paul, from the basic pedagogical principles up into the transcendent unknown. “Paul must have passed through these three degrees
[from the ‘school of humility,’ to the ‘storehouse of charity,’ and finally to the ‘chamber of the King’] when, as he tells us, he was rapt up to the third heaven.” Bernard’s model moves from a linear, goal directed intention on the part of the monk into a non-linear spiritual absorption into the “third heaven” where the soul “sees things invisible and hears things unspeakable which is not given to man to utter,” another example of an uncircumscribable and obscure divinity. While the first two stages of Bernard’s ascent are to be carried out through the intentions of the spiritual seeker, the final stage breaks the model of an individual’s intentionality insofar as, “The Apostle [Paul] could climb to the lowest and the middle heaven by the help and guidance given him, but to the third heaven he had to be lifted up.”

The Ordo as object: a methodological reversal

While there have been (and will no doubt continue to be) any number of diverse interpretations of the Ordo Virtutum, in terms of pairing the Ordo with the Scivias visions, I would like to start with a few basic points along with their ontological implications. First, there exist both neumed and un-neumed versions of the play. The neumed version is found in two forms: a twelfth-century version housed at the Hessische Landesbibliothek (Hs. 2) in Wiesbaden, commonly referred to as the Riesencodex (R) which, from a “codicological-palaeographic” point of view, is found in the fourth part of that manuscript (f. 466–481) along with the collection of Hildegard’s other chants; the second extant copy of the Ordo with neumes is located at the London branch of the British Library, Additional Manuscript 15102 (A). The British Library MS can be dated to 1487. Vincent Corrigan has published a critical edition comparing the two versions which are mostly in concordance, save for different neumatic renditions of the same melodic gestures, and occasional pitch discrepancies (I refer the reader to his publication without reproducing its findings here). There also exists an un-neumed version of the play as part of Scivias III:13, the last vision of the cycle, which includes the texts to fourteen chants along with a “short dramatic text”—really, a condensed version of the play—what Margot Fassler calls the Exhortatio Virtutum (EV).

The above leads to what seems like an unnecessary question: How do we distinguish the Ordo from the other elements with which it is bound in the codices? The question is akin to asking how do we separate one poem from another with which it is bound in a volume, or the differentiation of encyclopedia entries from each other, and so on. But this line of inquiry is, in fact, ontologically relevant. Analysis looks to an object, and in this section I will defend the analysis of the Ordo as an object outside of its relations to Scivias, in particular, or other contexts which threaten to engulf it.

In the case of musical objects, I think a naïve approach makes the most sense (as opposed to a rigorously critical one). “An object is anything that has a unified reality that is autonomous from its wider context and from its own pieces.” While the naïve approach keeps us from second guessing whether pens or tables really are objects or not, the above definition also admits some less obvious
entities into object-hood. For example, while it may seem perfectly obvious that the bankers lamp on my desk fits the criteria for object-hood, so too does the state of Mississippi, in which both the desk and lamp reside. Again, while a musical score is obviously an object, so too is a musical performance, the discipline of music theory, or the American Musicological Society. As we will see in a moment, relationships also fit the criteria for object-hood. Following speculative realist philosopher, Graham Harman, objects separate themselves, ontologically, from their contexts in two ways: they emerge “as something over and above their pieces, while also partly withholding themselves from relations with other entities.”121 The first half of the definition refutes the claims of a critical material-ism—that objects can be “undermined” by referring to something more basic out of which they are constructed (tables aren’t real because they are made up of atoms and molecules, which are the true objects). With regard to this position, only the most basic elements are “real.” I don’t think this line of thought needs to be pursued very far for our purposes. Few would claim that the ink or parchment are real but the Riesencodex version of the Ordo is not, or that the neumes of the Ordo are more real than the concatenated wholes they form. Objects can and do emerge “above” their parts. Of course, relations can be illuminating (I have drawn relations between Neoplatonic philosophies, negative theology, and networks as a preliminary rational for my methodological approach). And, of course, similarly, cultural/contextual relations are equally relevant to musicological inquiry. So, what is the point of this exercise of separation only to bring objects back together into relation? The point is, in fact, that objects are never really brought completely back into contact with each other, a viewpoint that theorists or musicologists rarely, if ever consider.

The reality of objects is never fully deployed in their relations. Instead of trying to eliminate the paradox of objects and relations by turning the world into nothing but a system of relations, we need to understand the polarizations at work in objects themselves.122

In attempting to implement a speculative approach (in Harman’s sense) to musical analysis, some practical concerns arise. First, no matter how detailed and thorough, analysis (of any sort) will never exhaust its object, a statement that maintains interpretive, theological, and metaphysical consequences. I wonder how many philosophers have meditated upon apples throughout the ages? The apple I plan to eat for breakfast catches the morning light as I turn it around in my hand, generating numerous profiles of difference and revealing ever new features with each rotation; changes in coloration, reflections, shadows, dents here, bruises there; a sticker with a batch number that I remove before eating which nevertheless leaves a trace of synthetic residue, asymmetries in the fruit’s morphology, and so on. Every turn offers up a different profile to the understanding. But common sense also tells me it is the same apple. (I experience this every time I return to listen or study a piece of music; new qualities can always be discerned in the same piece, endlessly.) The apple I bought three days ago when it was still green-ish
remains the same apple, even as I let it rot and deteriorate over the course of two weeks. Husserl was one of the first philosophers to point out that all of these changing qualities of the object are not, in fact, essential, and that, strange as it may seem, the object is less than its qualities precisely because they could all be subtracted, but the object will still be this specific apple. Yet somehow, through all these shifting, glimmering, and temporary profiles, I believe I can still discern a specific object. But what makes it this apple, exactly? And, why am I so confident in this understanding? What differentiates it from other apples or anything else for that matter? Husserl believed this was the object’s eidos, or essence. Furthermore, this essence, as with a providential essence, has to be intuited, insofar as it is not perceptible to the senses. For Husserl, the essence of an object transcends its own shifting and unstable profiles. In this way, the object is both less and more than its qualities, a truly puzzling conclusion. Objects are both present-at-hand and withdrawn from perception.

Moving forward, theory and musicology might disagree over the second part of Harman’s proposition: that objects “withhold” themselves, in part, from contextual relations. In the same way that materialism might undermine an object through recourse to smaller constituent parts, Harman argues that many academics are guilty of “overmining,” something akin to a form of rampant relationism, a view that “a thing’s existence consists solely in its relation with other things.” This applies to the field of musicology in the belief that (musical) objects are necessarily subsumed in and by their cultural contexts. The specific context I am interested in here applies to the relationship between the Ordo and the Scivias treatise. For example, owing largely to the fact that a shorter, text-only version of the Ordo exists as part of Scivias III:13, Margot Fassler writes that, “the form of the play and its music were developed within the allegorical edifice Hildegard constructed in Scivias Book III.” Fassler’s view provides a great example of an “overmined” position, wherein the Ordo is exhausted by its presence for another (Scivias Part III), with no reality of its own held in reserve. The relational context of Scivias absorbs its identity. This is especially true concerning the music, which I would argue manifests its own form, separate from its textual and theological origins (as I will show in Chapters 3–5, the musical structures, especially Anima’s melodies, are often at odds with the text). Of course, I find no problem with drawing germane connections between Scivias and the Ordo, but I do not think such relations are ontologically primary. Furthermore, it is important to reiterate that theory is equally impotent in its access to the musical object. As I said at the opening of the chapter, theory will also fail in its attempts to explicate, but nevertheless points in the right direction. What I am saying is that the very lack of access helps us intuit an apophatic essence. By knowing what something is not, we come closer to intuiting its withdrawn, unknowable essence. By reversing the approach and making the Ordo a separate and primary object of consideration, I take an opposite tack with Scivias and ask what it tells us about musical sound and the voice as a prelude to my analysis of the Ordo’s music.

Fassler argues that the Ordo is a manifestation of the edifice of salvation from Scivias III. To this end, she assembles a table (which she herself refers to as
“visionary”)\textsuperscript{125} in which she “lists the virtues found in \textit{Scivias}, book by book, vision by vision” and aligns these with the virtues of the \textit{EV} and the \textit{Ordo}, arguing that the partial alignment of the order of virtues in \textit{Scivias}, when compared with their ordering in the \textit{Ordo} proves that the latter is derived from the former, and is thereby explained (read “exhausted”) in its contextual relation. However, the information listed in Fassler’s table is partial, and therefore skews the perception of the presence of the virtues toward Part III of \textit{Scivias}. In fact, a cursory overview of the treatise reveals several omissions: \textit{Scivias} I:4 discusses the Virtues as “living sparks” (I:4.7 mentions the shield of Humility, and I:4.9 depicts Knowledge of God, and in I:4.10 Knowledge of God speaks); in I:6.4 the Virtues appear and in “ardent charity build in them [the believers] a lofty tower.” Additionally, Fassler’s table does not list any virtues as being present in \textit{Scivias} Part II. Again, this is misleading: \textit{Scivias} II: 2.9 mentions “growing to the fullness of virtue”; II: 3 invokes the celestial virtues; II: 3.1 in reference to the celestial city, talks of the “wide base of virtue” and their great works; II: 3.4 “diverse goads of virtue”; II: 3.6 “fragrance of chosen virtues both hidden and manifest,” and the “desire for heavenly things in bringing the virtues to manifest”; II: 3.8 describes the Holy Spirit and “her most becoming adornments of virtue”; in II:4.3 the Trinity manifests itself by “verdant virtues”; in II: 4.7 appears Chastity; and II: 2.24 invokes both Virginity and Chastity, both of whom are referenced at \textit{Ov} 37–38. I am sure that I am missing additional passages in which the Virtues appear outside of Book III, but my point is that each of these passages presents alternate possibilities and chains of reference which might make their way into an explication of the \textit{Ordo}.

Fassler’s argument for concordance is based in large part on the order of the Virtues’ appearance in \textit{Scivias} III:3 (and their alignment with the individual virtues in \textit{Ov} 43–51), as well as the ordering of the Virtues in \textit{Scivias} III:7 (and their alignment with \textit{Ov} 22–37). These are, of course, notable correspondences, but they are far from complete in their powers of persuasion. I will engage the internal logic of these same passages in Chapter 4 of the present volume, comparing text with the macro-structures that arise in the music: \textit{Ov} 43–51 concerning the passage from the golden gate, and being raised-up through the construction of the heavenly Jerusalem, looking to registral and tonal implications as a formal preparation for the victory of Part III; and \textit{Ov} 22–37 concerning the role of tetrachordal mirroring procedures, and the relation between reflective and reflexive structures of the text in Part II of the drama.

When the ordering differs between \textit{Ov} and \textit{EV}, as it often does, Fassler claims:

So whereas the treatise follows a trajectory that moves systematically through the allegorical space of this walled and turreted edifice—from East, to North, to West, to South—the play does not. The play’s characters crisscross the structure, minimizing some towers or columns and their characterizations in the process of emphasizing others.\textsuperscript{126}

Therefore, when the orderings are not aligned, it is not the case that they are truly different, it is rather just that “the play offers a customized journey, showing how
a particular soul achieves victory.” The phrase “customized journey” seems a roundabout way of saying they are different. Any difference, then, is overmined and subsumed by the sameness generated in its relation, and the separate object, as such, is exhausted by that relation. Furthermore, we must remember that Hildegard herself, in *Scivias* III:2.7, shows a hermeneutic fluidity when she offers an alternate interpretation for each of the corners of the edifice and the meaning of the circuit connecting them. Lastly, the text of the neumed version of the *Ordo* does not satisfactorily back up supposed isomorphism between versions. For example, nowhere in the neumed version does Hildegard ever mention the “edifice of salvation,” or any of its towers (she does mention the heavenly Jerusalem, and the homeland, but she does in countless scenes of *Scivias*). The only possible architectural reference to the edifice appears at *Ov* 55 when Patience sings “I am the pillar that can never be made to yield, as my foundation is in God,” but this is far from an explicit reference to *Scivias* III: 2. And, as Fassler herself notes, the pillar of the Trinity, the wall of the old law, and the tower of the church, all structures in the edifice of salvation from *Scivias*, are absent from the text of the *Ordo*. Is the *Ordo* exhausted by its relations to *Scivias*, or are there qualities (in this case, predominantly music-formal qualities) that cannot be explained away through reference to *Scivias* Book III? In summary, I think there are, of course, numerous and germane resonances between the *Ordo* and the *Scivias* treatise. My own research looks for descriptions of sound in Hildegard’s writings and to the energetic and transformative qualities of her theology and how these might, in turn, inflect an analysis of musical structure. And while I find numerous resonances and traces, for the purposes of the present analysis, the evidence does not warrant a one-to-one correspondence between the structures of *Scivias* III and the *Ordo* in any specific capacity.

In order to avoid equivocation, we need to briefly return to examine the relationships that arise between objects, and how the identities of objects are capable of withstanding overmining. An object maintains its object-hood against the myriad of relations in which it may find itself thrown precisely because these relations are themselves objects. According to Harman, any relation immediately generates a new object, creating a bubble around a subject and the object it intends. Thus, my perception of the *Ordo* is an object because it is: 1) unified; 2) it is something new, emerging above its parts, since neither a recording nor the manuscript of the *Ordo*, nor I myself, in isolation, give rise to an *Ordo*-perception; 3) this perception of the *Ordo* maintains a richness, depth, and reality that exceed my capabilities of explication. Even though a perception might be fleeting, as opposed to say the sustained geological presence of a mountain, it nevertheless fulfills the ontological requirement for object-hood. I refer to the relation-object as a “bubble” because if my perception of the *Ordo Virtutum* is an object, that object does not exist in my mind. Rather, as a real part of the perception-object, I find myself in the interior of an object that contains both myself and the *Ordo*. The perception-object is not in me, I am in it—inside the relation where I confront the sensual image of the *Ordo*. Harman’s philosophy, then, helps clarify instances
of interaction developed earlier in the chapter. First, the mutual resonance, or phenomenological bubble that constitutes the shared space of experience in listening can further be understood as the generation of a new object, inside of which interaction occurs (but only partial interaction because we only ever have partial, sensual access to real, withdrawn objects). We saw a unique example of this with Hildegard’s description of the singing priest who uncovers his interior devotion within his breast externally (Scivias II:6.20). His interior connection with the divine occurs inside of an external object that connects the two, solving the paradox of an “external immanence.” Additionally, the notion of intersubjectivity in Eriugena’s philosophy, and its anti-hierarchical, bubble-like qualities can be given a closer gloss as well. Specifically, when Eriugena writes in the Periphyseon, “Whenever the pure intellect knows something perfectly, it is made in that thing and becomes one with it,” we can amend that statement, agreeing that in the relationship of knowing, a subject is brought into contact with an Other outside of the self, not in the interior of that Other, but rather in the interior of the relationship-with-that-Other-as-object.

Having invoked Harman’s philosophical view of objects, it is important to reiterate that, in addition to undermining and overmining (and the inability to reduce an object to lower or higher stratum of reference), strangely, neither do we have access to an object itself. We only have access to its sensual qualities, but none of its real essence (eidos), returning things to the speculative core of my analytic approach, and the sense of apophasis that lies therein. In a way, Eriugena’s paradox of an intersubjective closeness within a withdrawn and unknowable creator is reproduced on the everyday level of objects as well. An apophasis of the everyday arises in the interaction of any two objects, insofar as they are connected in the interior of a unique, emergent, biune shared space of interaction, and yet only ever have but partial access to each other’s qualities.

The above is an overly simplistic summary of Harman’s work, who has championed this mode of inquiry over the past decade with a branch of philosophy often referred to as “object-oriented-ontology” (OOO) or “speculative realism.” Both terms are useful, however, the latter might prove most relevant for medieval studies insofar as “speculative” inquiry (stemming from speculum or mirror) has a rich theological history involving humankind’s attempts to reflect and channel the divine in thought and word. Having raised questions concerning the relation of the Ordo as an object to its contexts, we also need to admit the limitations of successful analysis of the musical object itself, a set of limitations that again enliven questions of human perception of providential realities raised in Augustine’s writing at the opening of this chapter.

**The sound of Hildegard’s Symphonia**

Without claiming ontological dependence upon Scivias, what references to sound and the voice can be identified in Scivias III:13, the section that contains the “Exhortation of the Virtues” (the EV, or the partial text-version of the Ordo), as
a means of understanding the providential role of sound and music in Hildegard’s philosophical system? The vision opens with a brief passage describing a “symphonia” heard through an array of diverse music, a symphony that assembles all the previous meanings and significations previously encountered. Specifically, the symphonia produces a sound (sonus) that is “like the voice of a multitude” [ut vox multitudinis].

Thereupon, the sky got very bright, and I heard all the previously mentioned virtues sing in a wondrous manner to the various types of music. They persisted strongly in the way of truth as they sang the praises of the city of celestial joy [in laudibus civium supernorum gaudiorum].

(III:13, Introduction (Hozeski translation))

Then I saw the lucent sky, in which I heard different kinds of music, marvelously embodying all the meanings I had heard before [in quo audivi in omnibus praedictis significationibus mirabili modo diversum genus musicorum]. I heard the praises of the joyous citizens of Heaven, steadfastly preserving in the ways of truth.

(III:13, Introduction (Bishop and Hart translation))

The reference to “citizens” [civium] at the end of the passage draws attention to the fact that, for Hildegard, the faithful serve as the pure stones out of which the celestial city is constructed. See, for one of many examples, the opening of Scivias III.7: “This I do to enkindle the fiery hearts of the faithful, who are pure stones that will build the celestial Jerusalem”; or Scivias II:3 intro:

The great edifice of living souls, which is constructed in heaven from living stones adorned with the immense beauty of its children’s virtues, encircling them as a great city encircles its immense throngs of people . . . it blossom[s] with celestial virtues.131

The citizens are the stones that build the city, celebrated by the symphonia’s wondrous sound.

The brief passage introducing Scivias III:13.1 is followed by the texts to fourteen of Hildegard’s songs from the collection of musical compositions from the Symphonia armonie celestiom revelationum (SACR). The songs, listed in Table 1.1, are typically not considered to be part of the Ordo Virtutum, but nevertheless could be considered as a representation, or invocation of “the sound of the multitude,” comprised as it is of diverse musics (read diverse tonal centers and attendant gestures).132

The fourteen songs of the SACR are then followed in Scivias III:13.9 by the text of the EV, which contains excerpts of the Ordo spanning from Ov 4–86. In all, Hildegard makes eight references to the “symphonia” and the dimensions of its sound throughout the thirteenth book of Scivias III.133
Returning to the description of the symphonic sound from the opening of *Scivias* III:13 in search of more detail concerning the role of sound in her philosophical system, I would now like to look to the passage’s continuation:

They persisted strongly as they *called* those with complaints *back* to praising with joy [*in querelis revocatorum ad laudes eorumdem gaudiorum*]. As they persisted in exhorting and encouraging themselves so that they might fight back the snares of the devil and help people gain salvation. But these
virtues do overcome the snares of the devil, so that the faithful may pass over at last from sin to celestial reward through repentance. *And the sound was that of the voice of a multitude* [et sonus ille ut vox multitudinis] singing a musical performance with harmony in praise of the celestial orders [in laudibus de supernis gradibus in harmonia symphonizans].

(Hozeski translation)

I heard the praises of the joyous citizens of Heaven steadfastly preserving in the ways of truth; and laments calling people back to those praises and joys; and the exhortations of the virtues [et in exhortatione virtutum], spurring one another on to secure the salvation of the peoples ensnared by the devil. And the virtues destroyed his snares, so that the faithful at last through repentance passed out of their sins and into Heaven. *And their song, like the voice of a multitude, making music in harmony praising the ranks of heaven.*

(Bishop and Hart translation)

The voice of the multitude contains all meanings and significations enfolded into diverse varieties of music, a sounding praise of the celestial city. Unlike Augustine’s fragmented music of human origins, which distends in several directions, this music summarizes all that has come before, and is steadfastly preserved outside the chaotic flow of time (which we have seen to be a fabrication of the soul).

The music persists both in the ways of eternal truth, but also in the laments of those called back (in querelis revocatorum) to the celestial joy. I believe this formulation mirrors the intermediary role of the Virtues themselves, who are simultaneously in God and abiding in God (Scivias III.13.9: “nos virtutes in deo sumus, et in deo manemus”), but who also exist “in the minds of the faithful” (Scivias III.13.10: “quoniam ibi virtutes in mentibus fidelium”). The same point is reiterated again in Scivias III.13.10. Here Hildegard writes that the sweet, soft symphony that sounds in joy to the elect who exist in the celestial city (suavis et dulcis symphonia sonat in gaudio, miracula electorum in superna civitate existentium), also exists in the laments of those tempted by the devil (ac in querelis incurvationem illorum quos antiquus serpens perdere tentat), whom the divine Virtues have led back to the blessed society of joy.

The collective Virtues intimate a similar message at Ov 69 when they sing “We want to bring you back” [volumus te reducere] by sounding in symphony, in concert (nos in symphonia sonore). With respect to the Ordo, the term querelis meaning “complaint” or “lament” of course draws our attention to the lament sung by the souls at Ov 4, the incipit for which reads querela animarum in carne positarum (the lament/complaint of souls placed in bodies). It seems plausible to assume that the lamenting souls called back to the heavenly city in Scivias III.13 are the same souls we encounter at Ov 4, and that they too are already a part of the providential symphonic absorption.

Even though the Virtues appear throughout the drama in a linear progression of the narrative, they simultaneously remain folded within God. Imagined in
terms of a contemplative geometry, we might say that interior and exterior
topologies contain each other, resulting in a Neoplatonic figuration where elements
of procession (the hierarchy of forms from without) and the return (the individual’s
return to the source of the hierarchy) are intertwined. In short, the effect remains
in the cause, and that which proceeds from the One, at the same time remains
internal to the monad. Ousia, the unparticipated term, remains in itself during its
procession (the participating term) from the mind of God as a Theophany. An
indivisible (God-as-substance cannot be participated in) thus becomes subject to
division (insofar as the activities of God can be participated in). For Eriugena,
methexis (“participation”) is the structural-principle-become-dynamic-process that
holds together a series of reflections on and across all levels of reality. Hildegard’s
multitude is the site of a reflected and refracted unparticipated-participation. The
Virtues are projections outside of God, a becoming-diverse, becoming-many
(a multiplicity of potentials and sounds) so that they might help the lamenting
souls in any number of ways, calling them back to the One. And yet, they remain
interior to God, unmoved. “The call of the other, having always already preceded
the speech to which it has never been present a first time, announces itself in
advance as recall.”[134] The voice of the multitude, which I further interpret as
a networked multiplicity, provides a providential view of the drama’s transforma-
tions, allowing one to “hear all previously mentioned significations, marvelously
embodied in different kinds of music in praise of the citizens/city of heavenly joy,
strongly preserving in the ways of truth.”

Not only are the Virtues already contained in God even as they manifest
outwardly, but they are also always already victorious against the Devil, reinforcing
the non-discursive qualities of the Virtues and their music. Scivias III:13.9: “We
virtues are in God, and we remain in God; we are soldiers for the king of kings
and we overcome evil by good. For we began in the first action where we existed
as victorious” [nos virtutes in deo sumus, et in deo manemus; regi regum militamus,
et malum a bono separamus. Nam in primo agone apparuimus, ubi victrices
exstittimus]. It is telling that its placement in the EV precedes the text of what will
become Ov 4, the chant in which the souls placed in bodies, the pilgrims, mention
the king of kings, and how they will fight in His battle (O rex regum, in tuo prelio
pugnamus).

In summary, Hildegard ascribes three attributes to the wondrous sound that
opens the vision:

1) **multitudinous**: it is like “the voice of the multitude in praise of the heavenly
gradation/orders/ranks of symphonic harmonies.” What is intriguing here is
the capacity of sound to signify all previous meanings. As an analyst it leads
me to ask: what is the topological nature of the space that contains these
diverse orders? A question answered in Chapter 4.

2) The sound of the voices comprising the symphonia is lifted up high (III:13.9),
and thus becomes a factor in the return of the soul to the heavenly city, in
part through the role of song: “and these many voices were like the voice of
a multitude being lifted up high” [Et voces istae erant ut vox multitudinis cum
multitudo voces suas in altum extollit]. Similarly, in Scivias (I:4.23) sound is ascribed a similar set of attributes: “sound carries words on high, as the wind lifts the eagle so that it can fly. Thus, the soul utters the sound of reason in the hearing and the understanding of humanity, that its powers may be understood and its every work brought to perfection.”

3) this wondrous sound penetrates, generating a non-discursive, providential clarity, what I had previously named an image of sound before song (III:13.9): “and their sound passed through me, so that there was no slowness of difficulty in understanding” [et sonus earum ita me pertransivit quod eam absque difficultate tarditatis intellexi]. The same text is repeated again in III:13.14. The rapidity and clarity of understanding instantly connects the myriad potentials contained in the voice, which together function as a networked perception of the diversity present to the soul in creation.

The laments and complaints of souls being called back to the celestial city occurs numerous times in the thirteenth vision of Scivias III. At III.13.7: “And again the sound was that of a multitude singing in harmony in the complaints of those who had been called back to the same order” [Et iterum sonus ille, ut vox multitudinis in querelis de revocandis ad eosdem gradus in harmonia]. At III.13.9, the word “return” is used and not “recall,” but it still signifies a form of Neoplatonic return made possible through the music of the Virtues:

And then that sound of the multitude sang aloud harmoniously an exhortation of the virtues—helpers of the people—and a contradiction of the opposing skills of the devil, with the virtues overcoming faults and with people at length coming back (redeuntibus) by divine inspiration to repentance.

Through memory, by recalling or re-collecting something to presence, we actually make (and remake) that thing. “Re-collection is not passive, but rather an activity involving human will and thought; it is often defined as a form or reasoning.”

135 We can envision this process in spatial terms—insofar as memories are stored in various “places,” then to recall them is to assemble them again in a new place of presence. “Re-collection was essentially a task of composition, bringing together entities found in the various places where they are stored to be reassembled in a new place.”

136 The entire structure of the Ordo, in my reading, involves a number of recalled and restored gestures initially perceived through distension. By the end of the book I will envision this “place of recall,” this assemblage, as the reterritorialized celestial city.

At Scivias III.13.12 Hildegard reconstitutes a complete sonic body. The words of the song designate a physical body (sic et verbum corpus designat); the symphonic consonance manifests the true spirit (symphonia vero spiritum manifestat); and the celestial harmony announces the divinity (quoniam et coelestis harmonia divinitatem denuntiat). Then, in the following section (III.13.13), Hildegard posits a connection between the sonic corpus and the power of God in a manner reminiscent of Augustine. Just as Augustine uses the image of music
as a way of conceiving Providential otherness, Hildegard writes: “just as the power of God flies everywhere and surrounds all things—with nothing resisting it—so also the rationality of people holds great strength for listening to the sounds of living voices [vivis vocibus sonare].” She then moves to describe the mediative dimension of sound, elaborating upon the soteriological mechanism of the symphonia: “And the soul of people can be aroused from sluggishness to watchfulness by a musical performance [symphonia].” The references to sound reach a peak in this section, the only section of III.13 that contains two repetitions of the term vox multitudinis, followed by seven exhortations which relate how listening to the symphonic consonances will help humans in their poor and frail nature. Hildegard exhorts humanity to:

*Listen to the sound in this music of the fiery love coming forth in the words of the virginal youth [audis in symphonia sonum de igneo ardore virginalis pudoris];*

*Listen as well to the sound coming from the sharpness of the living lights shining in the heavenly city [et sonum de acumine viventium luminum in superna civitate lucentium];*

*to the sound coming from the profound sermons of the prophets [et sonum de prophetia profundorum sermonum];*

*to the sound spreading out from the wonderful words of the apostles [et sonum de dilatatione apostolatus mirabilium verborum];*

*to the sound coming from the pouring out of the blood of those who are offering themselves faithfully [et sonum de effusione sanguinis fideliter se offerentium];*

*to the sound coming from the secrets of the priestly office [et sonum de sacerdotali officio secretorum];*

*and to the sound coming from the highest greenness of those flowering in virginity [et sonum de virginali gradu in superna viridine florentium].*

Hildegard concludes by reminding us that “again, the sound was that of the voice of the multitude singing in harmony the complaints of those who had been called back [revocatorum] to the same order [of the celestial city].” The last iteration of the symphonia shows the reciprocity that arises between the Virtues and the souls called back to the heavenly city. In the sweet embrace of the Virtues, a form of enfoldment, the faithful are drawn back into blessedness (quoniam dulcis complexio est in virtutibus fideles homines ad veram beatitudinem trahentibus).

**Notes**


5 Ibid.

6 “Ov” plus a number stands for the chant number of the drama, spanning from Ov 1–87. For a complete list of chants, along with text incipits and modal designations, see Table 2.1a–c.


11 “Speculativome” echoes the broad array of specifically medieval senses of *speculatio* as the essentially reflective and imaginative operations of the intellect . . . the world, books, and mind itself were all conceived as *specula* (mirrors) through which the hermeneutic gaze could gain access to what lies beyond them.” See “Speculative Medievalisms: Precis,” in *Speculative Medievalisms: Discography*, ed. Petropunk Collective (Brooklyn: Punctum Books), ii–iii.

In Christianity, nowhere is speculative thought encountered more than in linguistic epistemology and the connection between the *Verbum* (the Word of God), the procession of the Logos, and its mirror in human language. While acknowledging the poverty of human language, philosophers believed that it nevertheless possessed a speculative power insofar as it was capable of pointing beyond itself. Furthermore, I believe that musical analysis contributes to the speculative pursuit of wisdom, one that commences with a set of apophatic axioms, but then attempts, as Thierry of Chartres writes, to “imitate what the intellect alone cannot grasp.” See Peter Dronke, “Thierry of Chartres” in *A History of Twelfth-Century Western Philosophy*, ed. Peter Dronke (Cambridge: Cambridge University Press, 1988), 361.


13 Ibid., 6.


16 The section on geometry in Thierry’s *Heptateuchon*, a volume documenting the seven liberal arts, includes a partial translation of Euclid’s *Elements* by Adelard of Bath (ca. 1080–1152). And through this translation, “Thierry perceived the possibility of making geometrical *probationes* (proofs) point beyond themselves, to adumbrate another kind of wisdom (*sapientia*),” showing geometry to be part of a speculative, Neoplatonic pursuit. See Dronke, “Thierry of Chartres,” 362.

17 In the fourth century, Calcidius made a partial Latin translation of Plato’s dialogue of the *Timaeus* [17a–53c] that included a detailed commentary on the work along with a number of supplementary diagrams and geometric drawings intended as visual aids. His commentary incorporates not only summaries of the *Timaeus*, a work that considers the visible universe and the proportions involved in its creation, but also draws upon Plato’s dialogue of *Parmenides* and the practice of *epoptica*, the state of mind necessary to contemplate eternal being and its further ramifications upon justice and virtue; “that primordial, exalted contemplation which surpasses philosophical cognition and is
higher than physics.” In Peter Dronke, *The Spell of Calcúdus: Platonic Concepts and Images in the Medieval West* (Tavarnuzze: Sismel-Edizione Del Galluzzo, 2008), 11. *Epoptica* serves as the necessary contemplative precondition for a continuous Platonic mean to operate. Calcúdus’ translation and commentary introduced the cosmology of the *Timaeus* to the Latin-speaking west, and to date have survived in roughly 130 known manuscript versions, allowing for varied interpretations of the dialogue; “He [Calcúdus] considered Socrates’ investigation in the *Republic* into the nature of human justice and law to be analogous with *Timaeus*’ exploration of the laws of nature in the *Timaeus*.” In Anna Somfai, “Calcúdus’ Commentary on Plato’s *Timaeus* and its Place in the Contemporary Tradition: The Concept of *Analogia* in Text and Diagrams,” *Bulletin of the Institute of Classical Studies*, Part 1, vol. 47 (Jan. 2004): 203–220. The Platonic mean as it continued to develop in Europe is perhaps best summarized as a speculative tool enabling one to contemplate what Eriugena denotes as the uncircumscribable, superessential, and obscure divinity (*superessentialis et occulta divinitas*) in its transfinite nature, meaning that the sum total of all the wholes and parts is not itself a graspable whole, in the same way that God is nothing less than the infinity of infinities, such that “he is unknown, even to himself.” In Dermot Moran, “John Scottus Eriugena,” *Stanford Encyclopedia of Philosophy* (Spring 2009): 20.


23 Ibid., 13.


33 Ibid.


36 Ibid., 70.

37 *Anima*, the protagonist of the *Ordo*, depicts the soul.
The term “recall” [re-vocare], as Hildegard uses it, will assume increasing importance in my reading of the *Ordo*. The term refers to a capacity for memory as well as a “calling-back” to the heavenly city in *Scivias*. In the medieval mind, both connotations invoke a concept of “place,” the site for the reconstruction of a memory, as well as the place of otherness, a deterritorialized heavenly city, which can be read as a reterritorialization of its earthly counterpart.


Translation Chadwick.


Ibid., 87.


Quoted in Chadwick’s translation of the *Confessions*, 242.


Ibid., 71.


Peter Sloterdijk, *Bubbles: Spheres I* (Los Angeles, CA: Semiotext(e), 2011), 12.


*Confessions* xi:3, translation by William Watts.

Translation by Hozeski.

See also *Scivias* II:6.36 where the priest’s voice is an invocation of presence; “O human, as you see, when the sacrifice has been offered at the altar and the priest begins to invoke me in those words appointed for him by the Holy Spirit, verily I say to you that I am there in My burning heat, and with full will I perfect the sacrament.” In Hildegard of Bingen, *Scivias*. Translation by Mother Columba Hart and Jane Bishop (New York: Paulist Press, 1990), 260 (emphasis added). Unless otherwise noted, further references to *Scivias* are to this work.

Ibid., 122.


The translation of this passage combines that of Hozeski with Hart and Bishop’s translation.

The reflexive series consists of references in *Ov* 36 to the “living life” [*vivens vita*], “deadly death” [*mortifera mortis*], and the “seeing eye” [*vidente oculo*].

We know that Hugh’s writings are “drenched in Augustine” and that his community followed Augustine’s rule. Bonaventure even described Hugh as “the new Augustine.” Illich further notes that Hugh’s other principle influence was Pseudo-Dionysius, a means of connecting the apophatic tradition with Hildegard’s writings. See Ivan
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64  


65  

Ibid., 122 (emphasis added).

66  

See also *Confessions*, xi:6; “And these your words, made for temporal succession, were reported by the external ear (*auris exterior*) to the judicious mind (*menti prudenti*) whose internal ear (*auris interior*) is disposed to hear your eternal word (*aeternum verbum*).” Saint Augustine, *Confessions*. Translation by Henry Chadwick (Oxford: Oxford University Press, 1998).

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68  

Ivan Illich, *In the Vineyard of the Text: A Commentary to Hugh’s ‘Didascalicon’*, 57.

69  

Guigo II, *Ladder of Monks* (*scala claustralium*) and *Twelve Meditations*. Translated by Edmund Colledge and James Walsh (Cistercian Publications, 1979), 80.

70  

Ibid., 79.

71  

Ivan Illich, *In the Vineyard of the Text: A Commentary to Hugh’s ‘Didascalicon’*, 47.

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Ibid., 59.

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David Albertson, *Mathematical Theologies: Nicholas of Cusa and the Legacy of Thierry of Chartres*, 64.

76  

Ibid., 67.

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Ibid., 44.

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Ibid., 17.

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82  

Ibid., par. 37.

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Ibid., par. 1.

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In a private correspondence with the author, Straus aligned his notion of the “envelope of a situation” to Dora Hanninen and Christopher Hasty’s research on segmentation. Generally, segmentation refers to the division of a musical work or performance into structural components. See Christopher Hasty, “Segmentation and Process in Post-Tonal Music,” 54. However, there is often a spectrum of intentions behind a theorist’s segmentation technique. Hasty writes “There are often highly ambiguous passages with many segmentations of equal strength and passages which make no gesture of closure” (72). Implied in the statement that he cannot pretend his analytic technique “in all cases” produces an unequivocal structure is the assumption that in most cases it does. Therefore, I find it exceedingly noteworthy when a theorist is decidedly not
attempting this kind of singular framing, as is the case with Hanninen, Straus, and Lewin insofar as such a view presents with a networked philosophy of theoretical hearing.


Ibid., 260.

Joseph Straus, “Total Voice Leading,” par. 3.

Ibid., par. 35.

Ibid., par. 37.

Ibid., par. 41.


Intersubjectivity refers to the “mutual co-arising and engagement of interdependent subjects, or ‘intersubjects’ which creates their respective experience.” See Christian de Quincy “The Promise of Integralism,” *Journal of Consciousness Studies*, 7, No. 11–12 (2000): 177–208. In everyday language and interaction, intersubjectivity occurs when I am able to sense that you can see and understand what I’m saying, and vice versa. In this context, there is an access to, and affirmation of each other’s thoughts resulting in an emergent gestalt that transforms expected outcomes.


When this logic is extended to the Creator, we reach a form of apophasis given that the intellect is unable to represent with an image the infinity of the Creator’s attributes; “Thus everything subsists causally in Divine Intellect and in effect in human knowledge. Not, as we have often said, that the Essence of all is one thing in the Word and something else in man, but that the mind views one and the same Essence one way in eternal causes and another in their effects. In the former, It surpasses every intellect; in the latter, from what is observed about it, It is merely understood as having being. In both cases, however, no created intellect may know what it is. For if It could be known, It would not wholly express its Creator’s image in itself” (*Periphyseon*, 254).

*Summa Theologiae*, “On Sacraments” 3a pars, quest. 62, art. 3 ad 3.

Plotinus understood the hierarchical gradation of being as an “overflowing” of the One and its perfection whereby each hypostasis will produce something lower than itself; “The One is perfect because it seeks for nothing, and possesses nothing, and has need of nothing; and being perfect, it overflows, and thus its superabundance produces an Other. . . . Whenever anything reaches its own perfection, we see that it cannot endure to remain in itself, but generates and produces some other thing.” In Arthur Lovejoy, *The Great Chain of Being: The Study of the History of an Idea* (Cambridge, MA: Harvard University Press, 1964), 62.


A metaphysical medieval assemblage

108 Ibid., 102.
111 Ibid., 306.
112 *The Medieval Craft of Memory*, 57.
113 Readers will note that the cloud (*nubes*) is part of the first textual image of the play (*qui sunt hi, qui ut nubes*).
115 Ibid.
116 Ibid., 51.
118 Ibid.
121 Ibid., 19.
122 Ibid., 69.
123 Ibid., 12.
124 Margot Fassler “Allegorical Architecture in *Scivias*: Hildegard’s Setting for the *Ordo Virtutum,*” 319.
125 Ibid., 327.
126 Ibid., 333.
127 Ibid.
128 If we tabulate the architectural references from the *Ordo*, they tend to relate more to abstract biblical structures (the wedding chamber from the Song of Songs, or the Heavenly Jerusalem from Revelations for example) and not specifically to *Scivias III*. See *Ov* 21, “we dwell (*habitamus*) in the heights”; *Ov* 24 and the royal wedding chamber (*regali talamo*); *Ov* 30 mentions Gehenna; *Ov* 31 being led to the homeland (*ad patriam*); *Ov* 36 heaven’s gate is opened (*clausuram celi aperis*); *Ov* 37 again, the wedding chamber (*regali thalamo*); *Ov* 38 the symphonies of the citizens of the heavenly city (*symphoniis supernorum civium*); *Ov* 42 Virtues refer to *contemptus mundi* as dwelling in heaven, victoriously (*victoriose in celo habitas*); *Ov* 43 the golden gate that is fixed in heaven (*aurea porta in celo fixa sum*); *Ov* 48 refers to building the heavenly Jerusalem (*edificatione celestis Ierusalem*) but not the edifice of salvation specifically (as we saw, *Scivias* I: 6.4 constructs a tower from Charity); *Ov* 55 mentions a pillar that remains firm and with a foundation in God (*columpna que molliri non potest, quia fundamentum meum in deo est*); *Ov* 57 the daughters of Jerusalem (*filie syon*); *Ov* 59 Anima refers to the home of the Virtues (*vestra mansio*); *Ov* 71 again references the daughter of Jerusalem (*filia syon*); *Ov* 75 refers to the conquering of the Devil in the heavens (*o victoria que istum in celo superasti*); *Ov* 82 refers to all who dwell in heaven (*omnes qui habitant in celis*); *Ov* 86 gives the image of the Virtues sailing back to the heavenly Jerusalem with the pilgrims (*et nos eos hoc modo perducamus in celestem Ierusalem*).
130 Ibid.
131 Additional connections arise between Hildegard’s stones in the wall of the celestial city and the Bishop Marbode of Rennes (1035–1123), who authored an authoritative
treatise on stones, *De Lapidibus*, which follows Augustine in locating the origin of precious stones in the prelapsarian stream of Paradise.

For example, the antiphon *O splendidissima gemma*, the first song whose text appears in *Scivias* III:13.1, itself undergoes eight oscillations of nodal center between E and D, a gesture common to the musical language of Part I (see Chapters 2 and 3 for more analytic details of the latter). Furthermore, many of the transformations of centricity between the songs mimic the gestures internal to Part II of the *Ordo*. For example, the passage from *O successores* (D4 final) to *O vos imitatores* c5 final), on to *O pulchre facies* (E4 final) undergoes a drastic register shift similar to the macro-gestures found in Part II of the drama between *Ov* 45 (E4 final), *Ov* 46 (c5 final), and *Ov* 47 (D4 final), what in Chapter 4 I will describe as a “second-order oscillation.”


Ibid.

Translation by Hozeski.

Ibid.
2 Analytic introduction

Impossible ontographies

This chapter pivots between models of transformation in Hildegard’s visions and transformations present in the music of the *Ordo Virtutum*. Clouds (*nubes*) for Hildegard are often emblematic of a change in the human mind in its encounter with the divine, a change understood as a “mutation” of the perceptual faculties, allowing an individual access to the transcendent Other, thus creating a bridge between material being and its origin. (Musically this bridge emerges in Part II of the drama, *Ov* 22–57, between the introductions of the individual Virtues and the antiphonal responses of the collective group.) Access to the divine, however, is only ever imperfect. Thus, the cloud is not only the “clear wisdom of the human mind” (*Scivias* III:1.2), but also part of a mediative epistemology that obscures as it illumines: “A cloud of secret mystery took the word by secret miracle. The cloud hid the word from human eyes” (*Scivias* I:3.7).

As discussed in Chapter 1, speculative insight operates in tandem with the mysteries it attempts to unpack but which remain partially cast in shadow. Thus, the clarity of mind indicated by the cloud also involves a degree of obfuscation (a more familiar, if not modern reading, e.g., a “clouded mind”), ensuring the secrecy of transcendent truths. Both of the above excerpts call to mind an additional passage, verse five of Hildegard’s hymn for Saint Ursula, *Cum vox sanguinis,* a chant whose text concerns the revelation and simultaneous clouding of the word in the Old Law: “Next came the sacrifice of the calf / that the old law revealed / a sacrifice of praise / clothed in many colors. / The law hid God’s face from Moses in a cloud [*que faciem Dei Moysi obnubilabat*] / showing him God’s back.”

Verse six continues the thread, highlighting the paradoxical nature of divine illumination in humans through the description of the priest as a vessel for communicating the Word: “This refers to the priests / who reveal God by their language [*qui per linguas suas Deum ostendunt*] / and cannot perfectly see him [*et perfecte eum videre non possunt*].” In essence, the language of the priest shows, or communicates the divine without him being able to necessarily see that which the words reveal through him.

The transformation of perceptual faculties undergone in the pursuit of speculative insight involves forms of knowledge which are both apophatic in
nature (insofar as they exceed the limits of human comprehension) and indwelling (insofar as they access immanent capacities of the soul). As with the priest whose words and voice become a divine vessel, so an individual looks deep into their soul and, in that depth, encounters the super-essential Other: “An indwelling unity . . . a peace of two beings perfectly at one, because the one (Christ, Eve) has grown within and out of the other.” Transformation is always present, therefore, as an immanent and intensive formal type. One of the goals of this book is to analyze the immanent musical processes of transformation in the Ordo Virtutum and show how they balance the differentials of deformation and emergence, distension and Providence. The suffering, fallen soul, initially unable to withstand her spiritual path, through the exhortations and consolations of the Virtues becomes able to access an indwelling transcendence which, in turn, allows her to overcome the snares of the Devil.

The theoretical technology used to image the musical transformations likewise places the musician in a speculative role, similar to that of the medieval philosopher who, through the lens of the Calcidian categories, attempts to see (with a silent seeing) along the folds that run between the timeless archetype and that which follows from it; the pale vestige of a manifest, material copy. Correspondingly, the theorist strains to hear the silent connections of diverse nodal arrays (mirabili modo diversum genus musicorum) as a singular-multiple, Hildegard’s symphonia, the sound of which is like the voice of the multitude. The sound of the symphonia is conceived as a place where text, neume, gesture, mode, and section all overlap to such a degree that the very idea of “narrative” now concerns the sensitivities involved in the perception of the musical material and its becomings as much as it concerns a close reading of the text. That is to say, there are both linear and providential narratives of transformation embedded within the music of the Ordo itself. The symphonia discussed at the end of the previous chapter is thus both city and symphony, that which gathers together and contains the laments of the pilgrim (querela animarum) alongside the sound of a “supernal greenness of those flowering in virginity,” and the acute, glistening sounds of the providential living light that shines in the heavenly city (Scivias III:13.13).

At the opening of Book III of Scivias (III:1), the book that contains the “edifice of salvation,” the text-only version of the Ordo (the EV) and the non-discursive symphonia, Hildegard lays out a tableau describing a seemingly impossible configuration of elements. The tableau consists of a circular throne, nested atop the clouds which sit, in turn, upon a great block of stone, not pictured in the illumination, which extends up to a great height. We come to find that the stone is conjoined to the “roots” [radices] of a great mountain, which reaches down (a great, yet indeterminate distance) to a wide base, upon which, in turn, is mounted the edifice of salvation (III:2). From out of the One seated on the circle-throne emerges another a great circle (magnus circulus) of an infinite extension, “whose width I could not take in”: “which extended everywhere”: “and has no end,” signifying that God’s power encircles and includes all things. Hildegard then talks of a great star (stellam magnum) that comes forth from out of the one
seated on the throne, accompanied by a “multitude of shining sparks” [*plurimam cindentium scintillarum multitudinem*], again recalling Hildegard’s *symphonia* from *Scivias III:13*. These sparks, however, turned away from the One on the throne, and were turned to cinder and carried away by a whirlwind into the abyss that lies in the North. The star and its multiplicity, with its cinders and cyclones, however, are pictured in a separate illumination as the density of components in the vision mounts. Recalling the tension that exists between real, withdrawn objects and their sensual, transient qualities (discussed toward the end of Chapter 1), any time we encounter passages in Hildegard’s visions that are incongruous and impossible to wholly conceive (as with a circle of infinite extension, without foreseeable limits, conjoined at the root of mountain of indefinite size) we are likewise dealing with the metaphysical tension between a real, providential, in-folded object, and its manifest, unfolded qualities. Even when an illumination is present as a correlate to a passage in *Scivias*, it at best serves as an index, insofar as it cannot contain nearly the same density of component elements as its textual counterparts. Apophasis and negation always accompany attempts to see or hear providentially. For example, the circle without end extends off of the limits of the page, making it (necessarily) incomplete, and the block of stone conjoined with the mountain is likewise not present, and the great star surrounded by its multitude is given a separate illumination. The tension between an object and its description (in textual, visual, or musical form) mimics the tension between providential reality and its perceptible unfoldings.

I argue that the *Ordo Virtutum* likewise presents an array of speculative musical geometries which overlap, intersect, and transform in novel and emergent ways. In listening to the *Ordo*, we experience a tension between that which lies beyond singular summation (its theoretical and formal unity) and its series of unfolded, linear effects. Just as Hildegard in her writings and illuminations strives to capture the traces of that which lies beyond knowing, so too the musical analysis will initially multiply and complicate the sonorous materials, generating a diversity of sensual planes, out of which we will then attempt to trace a networked logic as a means of hearing the sound of Hildegard’s *symphonia* all at once.

After establishing these elements in vision III:1, III:2 opens with a performative turn—Hildegard now places herself inside the unthinkable geometry: “Then I saw within the circumference of the circle” [*deinde vidi inter ambitum circuli*], where she marvels before receiving further instructions from the One seated upon the throne. This passage enacts a shift of perspective from that of a passive observer outside the event, to one placed in the midst of the action.

In many ways, musical analysis might also be considered a view from within an unthinkable, hyper-objective, geometry. Analysis requires us to hear inside the music and not only trace the contours of the melodies, hear their segmentations, but also to connect these with the ever-accumulating segments of those that precede and follow, both within and between chants, across the form of the whole. The *Ordo* can be considered a “hyperobject” (a unique brand of Graham Harman’s Object-Oriented Ontology) both because it constitutes an object that is “massively
distributed in space and time,” one that cannot be totalized in a non-discursive manner, but also owing to the diagrammatic features of the analytic method itself, which explores the transfinite nature of its own interiors, its own depths and networked facticity as much as the surfaces of the music with which it interacts, but which remain partially withdrawn from the reaches of its logic. The theoretical logic used pertains to that of a network technology and how it, in turn, might mirror the theological paradigm of a folded, intersubjective, Neoplatonic mediation of the Ordo’s text and context as discussed in Chapter 1. The musical analyses in this book attempt to map the impossible territory of the celestial Jerusalem and the discrepancies that necessarily exist between its pure, transcendent organizing principles, and the motley forms they assume under our attempted reconstructions.

**Qui sunt hi qui ut nubes**

The first words of the Ordo Virtutum present the image of a cloud as sung by the Patriarchs and Prophets. In depicting their encounter with the Virtues, they sing, “qui sunt hi qui ut nubes” [who are these who are like clouds?]. The interpretation of this passage remains variegated. As Peter Dronke has established (and most scholars reiterated), the text presents an overt reference to Isaiah: 60, a passage describing the number of converts and their swiftness in motion to Christ.

A similar reading is reflected in the text of Hildegard’s chant, O Ierusalenm;5 “Therefore your walls gleam with living stones which, through a supreme effort of goodwill flew like clouds in the sky” [deinde muri tui / fulminant vivis lapidibus, / qui per summum studium bone voluntatis / quasi nubes in celo volaverunt]. But as we have already seen, there are additional traits to be unfolded from the cloud-image that Isaiah: 60 alone does not encompass. Recalling the above discussion, vision III:1 opens with the description of a block of stone “immeasurably broad and high,” standing for the Fear of God (timor dei), above which is found a white cloud. Above this cloud, in turn, rests a throne that is round in shape, on which the One sits. Two sections later (III:1.2), Hildegard elaborates further, saying that the cloud is the “clear wisdom of the human mind,” which, together with the round throne above it (signifying the strong faith of the Christian people), stands for the recognition of faith. “In it [faith] God is faithfully recognized; for wherever the fear of the lord takes root human wisdom will also appear.” Perhaps it is possible, then, to merge this reading of the cloud with that of Dronke’s interpretation and posit that if the wisdom of the human mind combines with faith, then the attributes of a “swiftness in motion to Christ,” and the flowing ease of a “supreme effort of goodwill” result. Such an interpretation is given further credence by Scivias III:2.9:

> And the knowledge shines as brightly as daylight, because through it people know and judge their actions, and the human mind is carefully considering itself as radiant. For this beautiful knowledge appears in people like a white cloud, and passes through human minds as swiftly as the cloud moves through the air.
The recognition of a perfected faith thus combines human wisdom (cloud) and fear (block of stone) in a balance of insight and humility.

Taking three elements from the tableaux—the block of stone, the cloud, and the throne—we note that the cloud sits in the middle, acting as a mediator in the hierarchy between the throne and the block of stone. And, as will be observed in Plotinus and other Neoplatonic philosophies, the Virtues likewise act as mediators, reflecting “traces” of the archetypal Good into the lower forms. Elsewhere in Scivias, Hildegard expands upon this idea. For example, Scivias II:7 depicts clouds as representative of a hierarchy relative to a rank of mental fortitude needed to fight the devil:

One of these battles was continuing near the clouds. This means that while they are fighting strongly against the devil, some of these people do not think about earthly things but about heavenly things—just as a cloud floats above the earth.

A tripartite continuum results: the highest stage of development, near the clouds, depicts those who show complete detachment from the passions; the middle stage, located between the clouds and the earth, is peopled by those who “restrain themselves with moderation”; and at the lowest stage, closest to the earth, we find souls who have not yet given up the things of the world. Of course, the need for a spiritual altitude becomes apparent toward the end of Part I of the Ordo, as Anima ignores the exhortations of the Virtues, follows the Devil, and chooses a worldly path.

Hildegard expands further upon the range and number of elements involved in the tableaux of Scivias III:1 in the following vision (III:2). Here she states that the block of stone is conjoined at its roots (conjunctum radici) with a great mountain (montem magnum). It is curious to note that the joining of the “Fear of God” (block of stone) and “Faith” (mountain) occurs at the roots, recalling the opening text of the Ordo, where the Patriarchs and Prophets proclaim themselves to be roots in Ov 3 (nos sumus radices), the shadow of the living eye (viventis oculi). About the block of stone, Hildegard writes that it reaches up to a great height, and conversely of the mountain, that it extends down to a wide base. On top of the mountain of Faith stands a four-sided building, the “edifice of salvation,” a structure likened several times to a city, mirroring the biblical description of a square-shaped heavenly Jerusalem from Revelations (21:13–16). But at the same time, as we have seen, from the One seated on the throne emerges a great circle of an infinite extension, a figuration that relates to the medieval conception of a circular city, the axis mundi or the loca sancta of a geometric scheme that places Jerusalem at the center of the cosmos, a trend found both in ninth-century Carolingian drawings as well as in the twelfth-century crusade maps. The fact that Hildegard incorporates both circular and rectangular geometries in her vision leads one to ask if she herself is attempting a “squaring of the circle,” common to maps of the eleventh and twelfth centuries where Jerusalem is pictured as
a circular city with a “T” or tau cross-shape structure at its center, revealing a concentric cosmos embraced by Christ. At this point, the taxonomy of features is complete: stone, mountain, edifice, cloud, city/edifice, stars/cinders, throne, the One sitting on the throne, and the great circle (exceeding all measure) which extends from out of the One on the throne.

The wisdom of the human mind as represented by the cloud, however, is not simply an end unto itself, but rather the means by which to further grasp the set of divine attributes unavailable to our all-too-human perceptions. The cloud is an emblem for transformation and activation of those hidden faculties and serves as the ideal image to convey a sense of the musical transformations undergone within the Ordo Virtutum. The first trait of the mystical cloud as transformative process is the fact that it cannot be perceived directly by the senses. It needs to be mediated. In Scivias III:8.25 we encounter a number of passages concerning the individual virtue, Grace of God, a figure who emits a perfection that cannot be witnessed with our bare human perceptual capacities, a notion reflected in numerous passages. Hildegard writes, “Another resplendent virtue was manifested, namely the Grace of God. . . . It has a manly face so ardently bright that you cannot look on it clearly like a human one.” A little further into the passage is written: “But a pure radiance so surrounds it that you cannot look at it . . . its arms and hands and feet are concealed from your sight.” This virtue is a figure surrounded on all sides by eyes (strikingly similar to Hildegard’s depiction of the figure Fear of God in Scivias I:1.2) and represents a pure seeing that cannot itself be seen, recalling Dronke’s commentary on a type of wisdom (sapientia) that seeks, “with the help of mythical and metaphorical statement, what the intellect alone cannot fully grasp.”

Transformation of the senses

The cloud is the ever-changing radiance of the Grace of God, a virtue who not only possesses a protean form, but who also represents access to the providential realm outside the temporal series, insofar as God’s Grace both “precedes and follows” (Scivias III:8.25). “Now at the summit of the shadowed pillar I saw another beautiful figure [Grace]. . . . I could not look at it . . . that radiance around it was full of eyes, and was all alive, changing its form like a cloud and becoming now wider and now narrower,” (III:8.7) showing her adaptability to the varied circumstances in which the weeping hearts of the faithful find themselves. Grace grants access to a form of speculative insight through the mutation/transformation of the human senses:

So I admonish and exhort humanity and grant it pearls of goodness. When a person’s mind is touched by me [Grace], I am his beginning. That is to say, when a person understands my admonition with his sense of hearing, and his senses consent to my touching his mind, I initiate good in him . . . he will feel a change in his mind.
It is telling that Hildegard appeals to hearing in relation to the transformative role played by the voice discussed in the Introduction. The quotation, worth citing in full, links transformation to a reflexive process that augments the human faculties beyond their traditional limits:

When I admonish a person, so that he begins to lament and weep for his sins, then if his will consents to my admonition—for he will feel the change in his mind [mutationem animi sui], and according to his mind’s desire he will raise his eyes to see and his ears to hear and his mouth to speak and his hands to touch and his feet to walk—his mind will raise itself to conquer his senses, so that they will learn things their habits could not teach them.

(III:8.8)

Not only does the transformation of the perceptual faculties begin with the sense of hearing, in which the Grace of God touches the mind of the human, but the mutations are wrought by “the fire of the breath of the Holy Spirit” [calore doni inspirationis spiritus sancti]. The in-drawn breath of the third-person of the Trinity serves as the onset of the gesture that will transform the senses through a reflexive process of mirroring (raising the eyes to see, ears to hear, mouth to speak, etc.). From breath, to sound, to transformation—this is the path by which the pilgrim attains speculative insight, thereby transcending the senses. Grace marks the beginning of the self-reflexive series which, in the Ordo Part II, leads to the dimensional unfolding of musical space and the construction of the celestial city. Mirroring and reflection will likewise be a key element in the Ordo’s musical form.

Hildegard’s letter 103r (1175) to Guibert of Gembloux reinforces a speculative approach to the mutation of the senses, hearing in particular. She begins by invoking a mirror: “O servant of God, you gaze into the mirror of faith in order to know God, and through the formation of man in whom God established and sealed His miracles, you have become a son of God.” She continues, expanding upon the role of the mirror as both container and reflective continuum for the rational soul, one that allows the body to extend and connect with heavenly things:

For, just as a mirror, which reflects all things, is set in its own container, so too the rational soul is placed in the fragile container of the body. In this way, the body is governed in its earthly life by the soul, and the soul contemplates heavenly things through faith.

The letter goes on to quote Corinthians 15:47–49, namely that humankind is, simultaneously, heavenly and earthly, and links this to the discussion of two forms of desire: “human desire,” which was tainted by the poison of the serpent, and “true desire” reflected in philosophical thought which seeks the glory of God. Of import to the Ordo’s narrative program, Hildegard comments upon how Peter and other saints were made more perfect (“how wondrous that these
same [wretched] vessels are sometimes adorned with the stars of His miracles”), and more useful than they would have been, “had they not fallen.” The process of the soul being recalled to the heavenly city and its pilgrimage of return further perfect the soul’s virtues.

Finally, the letter shifts to a discussion of the cloud-like nature of her visions, the multiplicity of things they touch, and the extent of their reach: “In these visions my spirit rises, as God wills, to the heights of heaven and into the shifting winds, and it ranges among various peoples, even those very far away.” At this point, Hildegard uses a turn of phrase which is almost identical to the language of *Scivias* III:8.8: “Since I see in such a fashion, my perception of things depends on the shifting of the clouds and other elements of creation,” and then focuses on the mutated senses, including hearing: “Still, I do not hear these things with bodily ears, nor do I perceive them with the cogitations of my heart or the evidence of my five senses.” Again, reminiscent of the early chants of the *Ordo* (Ov 1–3) and the role played therein by clouds, reflections, and divine shadows, Hildegard writes, “The light that I see is not local and confined. It is far brighter than a lucent cloud through which the sun shines. . . . This light I have named ‘the shadow of the Living Light.’” The acquisition of divine knowledge depicted in this vision mirrors the providential clarity of Hildegard’s *symphonia* and its relation to the “vox multitudinis” in that it is utterly non-discursive and immediate, an intuitive amalgam accessed all-at-once:

> And my seeing, hearing, and knowing are simultaneous, so that I learn and know at the same instant . . . the words I see and hear in the vision are not like the words of human speech, but are like a blazing flame and a cloud that moves through the clean air. I can by no means grasp the form of this light, and more than I can stare fully into the sun.

The cloud is an emblem of mutation *qua* transformation. Admittedly, it is a difficult symbol, one which refuses logocentric commitments. And, as the emphasis shifts now to the musical mutations and transformations, that difficulty remains. For example, in looking to the modal transformations operative in and across the *Ordo*, we come to find that deformations function both as distensions and providential signifiers related, in turn, to the deconstruction and reconstruction of mode, both forms of “translation” that serve as passage to, and construction of the celestial Jerusalem.

**Translation and transformation**

Hearing, understanding, and performing large-scale form in any musical repertoire is one of the more challenging tasks we face as musicians. In medieval repertoires the formal challenges that present themselves from the point of view of sonic criteria (or surface segmentation) can be especially difficult insofar as musical structure is often treated as ancillary to poetic, textual, or liturgical form; e.g., the antiphon as response to psalm recitation, the binary textual structure of the
responsory, metrical formulas of hymns, and the couplets involved in the composition of the sequence, to name but a few. But the Ordo, with its originally composed text, does not serve an obvious liturgical function and, as such, distances itself from the forms listed above. While the present analysis will in no way shy from discussions and interpretations of text, it will nevertheless place its focus on musical structure, and the deformations, translations, and transformations undergone from the point of view of a listener’s perception of the drama and its emergent form.

To this end, my theoretical exploration of possible forms for the Ordo involves an analytic intervention of sorts, one that incorporates relatively recent theoretical models (falling under the classification “generalized interval system” or GIS, and “transformational theory”), but also asks how these might interface with more historical modes of melodic segmentation in an attempt to extend and expand our perceptions of materials at the phrase-level to include emergent and cumulative global structures. By forging a metalanguage that connects the local contextual criteria for segmentation with issues of “associative organization,” that is, by situating the local within a larger temporal disposition, I arrive at a means of hearing the Ordo as the unfolding of a network structure.

It might surprise readers to learn that if we take the time to analytically unpack the subtleties of Hildegard’s E-modes we have, in many ways, already understood the lion’s share of the Ordo’s formal configuration. This is true because of the way in which the array of structural pitches (read “nodes”) deployed throughout the play relate back to an E-centricity (and its commixture with D) through a process of reflection, translation, and transformation. Thus, in addition to the suppression-inclusion relation that exists between Parts I and II (that is, the suppression of specific pitch-classes and registral profiles in Part I, followed by their inclusion into the musical fabric of Part II), the E-chants heard early on in the piece also contain implicate, or in-folded form of what will be unfolded over the course of the whole, that is, the explicate form, specifically the TTS third-species “major” tetrachord (“tone, tone, semi-tone”) built off of C and G, and its relation to the narrative.

Those familiar with Hildegard’s music will note that the E-modes found in Part I of the drama’s form (Ov 1–21) differ markedly from those found in Hildegard’s Symphonia armonie celestium revelationum (hereafter SACR) with regard to the following parameters: 1) leaps between primary-tones E4–b4; 2) numerous phrase-beginnings and endings on the pitch b4, a primary node of Hildegard’s normative E-compositions; and 3) wide melodic ranges, with apices typically exceeding g5. After showing statistical differences between the E-modes of the Ordo and those of the SACR through tabular comparison in Chapter 3, the analysis will proceed to account for the appearance of nearly every instance of the pitch-class B in Part I of the drama and reveal its function either as a passing-note, or as a trichordal member in relation to a temporary nucleation site. The features described above, in turn, combine with an additional set of parameters operative throughout Part I, including a limitation of cadential node (and the modulatory intervals associated with them), as well as the presence of a registral ceiling, both of which curtail the
expected (read “normative”) unfoldings commonly encountered in Hildegard’s modes outside of the Ordo Virtutum.

The deformed modal parameters sustained for the duration of Part I result in a musical profile that accompanies the affective tone of the text; namely the confusion, wavering, and eventual fall of the soul Anima at Ov 16, along with the Virtues’ response to this event. However, while most scholars discuss only the lamentations of this portion of the drama, I would additionally argue that a set of TTS tetrachordal figurations and its pentachordal extensions (TTS+1, or “tone, tone, semi-tone, plus one scale-step”) serve a providential purpose, one that foretells Victory over the Devil in Part III, as well as the progression of the soul towards the celestial Jerusalem. The nesting of the TTS figures within the STT gestures of the E-compositions reveals an immanent quality to Hildegard’s musical language, an immanence that functions as a kernel for Augustine’s “redeemed speech” in relation to transformation of the Deuterus modal type. One of the claims of this book, then, is that a fully registered (spatially extended) E-mode is gradually constructed across the whole of the drama, the result of a process intimately linked to the parallel construction of the celestial Jerusalem, one of the key narrative threads of the drama.

**Historical approaches to nodal segmentation**

One of the important outcomes of this research is the realization that an adequate understanding of Hildegard’s compositions necessitates an examination of nodal outlines, that is, the array of non-final structural pitches found in the modal collection (specifically, pitches that themselves stand in intervallic relation to the final) and serve as secondary nucleation sites. In light of this claim, a brief survey of n/mode through the lens of GIS and transformational approaches will prove useful.

Both GIS and transformational technologies encourage pluralistic perspectives on the musics they investigate. Furthermore, insofar as these technologies modify the intuition and the apperception of their object, my application of a transformational machinery to Hildegard’s music in the present study, in turn, offers new ways of interpreting and hearing the unfolding of mode through an interlocked network of nodal passageways. The application of this kind of analytic technology is not without precedent. One way of historically approaching nodal outlines within a given context is through the lens of modal “commixture.” A modern interpretation of modus commixa can be found in Edward Nowacki’s discussion on the melodies of the old Roman Mass in which he calls for the use of conjunct and overlapping trichords as analytic units of segmentation. Despite the fact that Nowacki’s research focuses on an earlier repertoire, his conclusions resonate with my reading of Hildegard’s musical language. He asserts, “in selecting certain trichords for emphasis, the modes overlap one another to a remarkable degree, often sharing one or two of their structural trichords with other modes.” Based on these overlaps Nowaki further concludes, “the theory of structure that I have proposed presents modes as labile, establishing their sure footing only at key
points in the structure, and often only at the very end. In the interior they project trichordal structures that are equally apt in several modes.” Specifically, he stresses the interrelationship of E-mode melodies with D-mode traits, noting the common use of D-F and F-a thirds that settle upon E only at the chant’s terminal gesture. As I will show, the extension of D-mode features within E-mode chants is crucial to an analytic understanding of the *Ordo Virtutum.*

As Nowaki makes clear, however, shifting cadential and structural nodes are by no means unique to Hildegard, but correspond to a widespread theoretical and organizational modularity prevalent throughout the twelfth century. As is evidenced by the tabular arrangements of tonaries and chant books—a system of substitution and replacement based on calendric rotation, alignment of finals, model antiphons and cadence type—modular precepts already governed the performative context in which chant existed. Moreover, numerous theoretical treatises (including those of Guido d’Arezzo, Hucbald, the *Musica* and *Scholica Enchiriadis*, Aribo Scholasticus and Hermannus Contractus, to name a few) belie further degrees of modularity based on the serial replication of tetrachords, hexachords and intervallic species. Furthermore, the segmentation of chant melodies based on trichords, tetrachords, hexachords and intervallic species has been widely researched and marks the first step in assessing the modal modularity of the *Ordo.*

Jennifer Bain presents both a theoretical and historical contextualization of features previously thought unique to Hildegard’s oeuvre, features that can now be seen as existing in an established practice of the “late chant style.” Specifically, Bain’s research sheds light on the conundrum of melodic segmentation through a thoughtful commentary on internal migrations of cadential node in Hildegard’s music. Of particular interest for the present study are references to nodes derived from the theoretical species of fourths, fifths, and octaves in the treatises and music of Hermannus Contractus. Unlike the authors of many theoretical treatises removed from the practice of performance, Bain argues that Hermannus’s nodes are given shape “at the level of the gesture and the phrase.” I cannot stress enough how important Bain’s conclusions are to the perception (and segmentation) of melodic materials, given that so many analyses of Hildegard’s compositions never get past the labeling of a final (the equivalent in tonal music might be the “analysis” of a symphonic movement by stating the key of the composition).

Bain then extends the cadential nodes of final, fifth, and octave to include the possibility of reciting tones when they differ (as in modes 2, 3, 4 and 6) from Hermannus’s primary tones. As she suggests, intimations of a labile mobility are also to be found in Hermannus Contractus’s treatise, *Musica.* Referring to species of fourth and fifth, Hermannus writes that the patterns are mobile and appear on pairs of pitches. The topic of intervallic species and their “mobility” resonates at its core with the analysis of “generalized intervals” and the transformations to which they give rise. In an early section of the treatise concerning the inflection of fourths, for example, Hermannus alludes to the importance of the surrounding melodic context in the framing of mode, explaining that any species of fourth could occur on any pitch as long as the proper context is established through relevant psalm tones (*saeculorum amen*) and concluding cadential figures.
Briefly mentioned above, the *Lucidarium* (a treatise on plainsong, ca. 1317) of Marchetto of Padua (and Jan Herlinger’s informative commentary on the topic) presents a noteworthy development of Hermannus’s theory. In his discussion on the formation of modes, specifically the role of the species of *diatessaron* and *diapente*, Marchetto mentions the possibility of *commixta*, or to use Herlinger’s translation, “mingled” intervallic outlines. After progression through various combinations of commixture, Marchetto concludes that “any mode can be mingled with any other.”

Marchetto gives five examples of co-mixed phrases, all of which incorporate a mode-1 D-a fifth, subsequently followed by a mode-6 F-a nodal outline; a mode-4 E node; a mode-3 E-G-c outline; and a mode-7 G-d outline. In isolation, these nodal outlines would often constitute the primary tones of a single mode, but as Marchetto points out, when placed in a wider context this is not always the case; the combination of outlines give rise to hybrid-modules, or phrases that connect nodes of two different modes. Although a conservative approach might conclude that Marchetto is simply trying to explain modes that have too wide or too narrow a range, or that have inappropriate species, when taken into consideration, along with Nowacki’s analysis, I believe Marchettus’s theoretical practice could lead to a more open view of mode, one involving co-mixed modules that are fed-back into the process-formation of individual phrases and/or larger wholes. In response to the second point, it is precisely the accentuation or prolongation of “inappropriate” intervallic species that defines these hybrid phrase models in the first place. The question, at least for me, then becomes: how can we highlight the hybrid nature of the musical surface with our analytic technology, as well as see/hear its relevance not only on local scales, but also in terms of its potential for global extension?

Another relevant interpretation of Hermannus’s treatise is found in Richard Crocker’s work. Crocker, like Bain, stresses the modular implications of chant from the standpoint of the performer. Of critical importance to him is the use of a “scalar module of manageable size” to segment chant melodies based on “tonal structures that must be sung and held in the ear.” The *daseian* scale of the *Musica Enchiriadis*, a structure of more than two octaves of disjunct, first-species tetrachords (which cycle at the fifth), Crocker notes, presents too large a span to serve as such a module, leading him to the more practical application of hexachordal segments. Crocker’s viewpoint is indicative of what might best be described as an algorithmic approach to the analysis of chant. With this model, we could say that a singer holds an algorithm in their mind, in this case, for example, the simple rule set of tetrachordal species (TST, TTS, STT) rather than the entire *daseian* scale, which spans multiple octaves. Evaluated from this angle, the derivation of a hexachord from a tetrachord is itself arguably a type of three-part algorithmic procedure: Step 1: “starting with the TST tetrachord built off of D4 (D, E, F, G), add one pitch a step (generic interval) below the lowest note of the tetrachord” (\(TST_{(\downarrow)} \rightarrow C4\)); Step 2: “starting from the same TST tetrachord add one pitch a step above the highest note of the tetrachord” (\(TST_{(+\downarrow)} \rightarrow a4\)); Step 3: sing the resulting pitch collection (C, D, E, F, G, a), the “natural” hexachord.
This formula could be replicated or translated to the other tetrachordal constructions (TST, STT, etc.), or any of their affinities, resulting in the set of socialitas: “the relationship of tones a fifth apart, or in other words, of tones similarly placed in two tetrachords.”22 Precisely that which Aribo refers to as the chordae in his treatise De musica (ca. 1068–1078).23 The four species of diapente could likewise be generated in a similar fashion: by adding a tone at either the upper or lower end of the diatessaron outlines, replicating the theories codified by Hermann of Reichenau.24 The mobility of these algorithmic modules reinforces their generic qualities, forging another link between medieval and Lewinian procedures. By means of a single, simple algorithm then, a singer is able construct rich and complex nodal networks over the course of a chant (or cycle of chants) one phrase-segment at a time, without having to hold a precipitated global structure in her mind as a theoretical entity.

There are scholars, however, who believe that hexachodal analysis presents the only way to analytically interpret Hildegard’s musical language. Sheila Forrester, for example (2001), is representative of a trend that attempts to force all melodic materials into the seven hexachords that constitute the musica recta gamut.25 Stefano Mengozzi refers to such a position as the “strong interpretation” of Guido’s Hexachord. In contrast, Mengozzi’s own research argues for a “weaker” interpretation of the hexachord, one that allows for alternative techniques of segmentation, what he calls a form of “virtual” space revealed in the coexistence of multiple systems at play within a modular musical language, at one point even describing what he calls the “peculiar nature of the musical space of the Musica Enchiriadis.”26 Mengozzi’s use of the term “virtual” is an important analytical precursor to my use of the term in relation not only to the overlapped nodal space of the Ordo, but also to an analytic approach that uncovers, highlights, and to a certain extent “invents” these theoretical spaces with its methodology. The Ordo exhibits similar overlappings of musical spaces resulting from the intersection of trichordal, tetrachordal, hexachordal, and modal formations, creating a hybrid melodic topography. Following Mengozzi, one of the key decisions for this book has been to introduce changes in segmentation only when it accompanies a perceived nodal shift in the chant, contrary to a “strong” hexachordal interpretation. Furthermore, I favor no particular method of segmentation, but rely, as does Bain, upon nodes that are given shape “at the level of the gesture and the phrase.” If a mode is anything, it is a mode of becoming of a network continuum through the accretion of nodes as temporary nucleation sites, as well as a mode of organization that does not preempt/preexist the experience thereof.

Transformational expressions are often viewed as “performative” in nature. For example, in addition to his ideas concerning generalization, Lewin’s interests lie in the performative extension of a gesture internal to a hypothetical space. Although GMIT (Generalized Musical Intervals and Transformations) begins with the elaboration of a Generalized Interval System (GIS), Lewin argues: “Instead of starting with a GIS and deriving certain characteristic transformations therefrom, it is possible to start with a family of characteristic transformations on a musical space and derive a GIS structure therefrom.”27 The former view exhibits a Cartesian
space, a *res extensa*, where an observer passively considers phenomena (the interval between s and t, that is, the i-arrow) from the outside. In contradistinction, with the latter view, the observer is actively involved in the situation, “like a singer, player, or composer, thinking: ‘I am at s; what characteristic transformation do I perform in order to arrive at t?’”

In Lewin’s ontology, *hypothetical deduction is a performance both of and within the space of the diagram*. Rather than thinking of atomic points under external observation, we can shift our attention to the transposition of gestalts involving a transposition-operation-on-a-space. Rather than theorizing from “out there” in Cartesian space, Lewin’s transformational attitude is that of someone “inside the music, as idealized dancer and/or singer. No external observer (analyst, listener) is needed.” Reflecting on the diagrammatic ontology laid out in this book, I might amend Lewin’s statement to read: the transformational attitude is that of someone inside a model of the music. No external observer is needed. The trajectories unfold internal to the site (read ontology, set, assemblage, model, etc.).

Table 2.1a Ordo Part I (pitches in parentheses indicate nodes)

<table>
<thead>
<tr>
<th>Ov no.</th>
<th>Character</th>
<th>Mode + node</th>
<th>Incipit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 478b</td>
<td>Patriarche et Prophete</td>
<td>D (A, C, F, G)</td>
<td>Qui sunt hi</td>
</tr>
<tr>
<td>2</td>
<td>Virtutes</td>
<td>D (A, F, a)</td>
<td>O antiqui sancti</td>
</tr>
<tr>
<td>3</td>
<td>Patriarche et Prophete</td>
<td>D/E (G/a)</td>
<td>Nos sumus radices</td>
</tr>
<tr>
<td>4</td>
<td>Querela animarum in carne postitarum</td>
<td>E/D (F, G-c, a)</td>
<td>O nos peregrine sumus</td>
</tr>
<tr>
<td>5</td>
<td>Felix Anima</td>
<td>D (F-c, a)</td>
<td>O dulcis divinitas</td>
</tr>
<tr>
<td>6 479a</td>
<td>Virtutes</td>
<td>E (C-G, G-c)</td>
<td>O felix anima</td>
</tr>
<tr>
<td>7</td>
<td>Felix Anima</td>
<td>D/E (A-D, G)</td>
<td>O libenter veniam</td>
</tr>
<tr>
<td>8</td>
<td>Virtutes</td>
<td>E (D, C-G-c)</td>
<td>Nos debemus</td>
</tr>
<tr>
<td>9</td>
<td>Sed gravata Anima conqueritur</td>
<td>D (A, F, G)</td>
<td>O gravis labor</td>
</tr>
<tr>
<td>10</td>
<td>Virtutes</td>
<td>E (C-G-c, a)</td>
<td>O anima</td>
</tr>
<tr>
<td>11</td>
<td>Anima</td>
<td>E (B, G-a-c)</td>
<td>Succurrite michi</td>
</tr>
<tr>
<td>12</td>
<td>Scientia Dei ad Animam illam</td>
<td>E (C, D, a)</td>
<td>Vide quid illud sit</td>
</tr>
<tr>
<td>13</td>
<td>Infelix Anima</td>
<td>E (D, G, a)</td>
<td>O nescio quid faciam</td>
</tr>
<tr>
<td>14 479b</td>
<td>Virtutes</td>
<td>E (C-G-c, a)</td>
<td>O infelix conscientia</td>
</tr>
<tr>
<td>15</td>
<td>Scientia Dei</td>
<td>E (D-G-b-d)</td>
<td>Tu nescis</td>
</tr>
<tr>
<td>16</td>
<td>Anima</td>
<td>E (E/F-b, D-a)</td>
<td>Deus creavit mundum</td>
</tr>
<tr>
<td>17</td>
<td>Diabolus</td>
<td>X</td>
<td>Fatue, fatue</td>
</tr>
<tr>
<td>18</td>
<td>Virtutes</td>
<td>E (D-G-c, a)</td>
<td>O plangens vox</td>
</tr>
<tr>
<td>19</td>
<td>Diabolus</td>
<td>X</td>
<td>Que est hec potestas</td>
</tr>
<tr>
<td>20</td>
<td>Humilitas</td>
<td>D/G (G-d, a)</td>
<td>Ego cum meis sodalibus bene scio</td>
</tr>
<tr>
<td>21 479a</td>
<td>Virtutes</td>
<td>D (F, G-c, a)</td>
<td>Nos autem omnes</td>
</tr>
</tbody>
</table>

*(Riesencodex, Hessische Landesbibliothek, Wiesbaden, fols. 478v–481v)*
<table>
<thead>
<tr>
<th>Ov no.</th>
<th>Character</th>
<th>Mode + node</th>
<th>Incipit</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td><em>Humilitas</em></td>
<td>D (A, F, G/a)</td>
<td>Ego humilitas (same range as 1)</td>
</tr>
<tr>
<td>23</td>
<td><em>Virtutes</em></td>
<td>E/D (F, G)</td>
<td>O gloriosa regina</td>
</tr>
<tr>
<td>24</td>
<td><em>Humilitas</em></td>
<td>E (D-F, G-c)</td>
<td>Ideo dilectissime filie</td>
</tr>
<tr>
<td>25</td>
<td><em>Karitas</em></td>
<td>D (A, C, F, a)</td>
<td>Ego karitas</td>
</tr>
<tr>
<td>26</td>
<td><em>Virtutes</em></td>
<td>E (A-D, G-c)</td>
<td>O dilectissime flos</td>
</tr>
<tr>
<td>27</td>
<td><em>Timor Dei</em></td>
<td>E (B, G-c)</td>
<td>Ego timor dei</td>
</tr>
<tr>
<td>28</td>
<td><em>Virtutes</em></td>
<td>D (A, F, G/a)</td>
<td>O timor</td>
</tr>
<tr>
<td>29</td>
<td><em>Diabolus</em></td>
<td>X</td>
<td>Euge, euge</td>
</tr>
<tr>
<td>30</td>
<td><em>Virtutes</em></td>
<td>G (E, F, G-c)</td>
<td>Tu autem exterritus</td>
</tr>
<tr>
<td>31</td>
<td><em>Obedientia</em></td>
<td>E (D-F, G, a-c)</td>
<td>Ego lucida</td>
</tr>
<tr>
<td>32</td>
<td><em>Virtutes</em></td>
<td>E (C-G-c)</td>
<td>O dulcissima vocatrix</td>
</tr>
<tr>
<td>33</td>
<td><em>Fides</em></td>
<td>E (D-G-c, d)</td>
<td>Ego fides</td>
</tr>
<tr>
<td>34</td>
<td><em>Virtutes</em></td>
<td>b (E, e)</td>
<td>O serena speculata</td>
</tr>
<tr>
<td>35</td>
<td><em>Spes</em></td>
<td>D (C, F, G/a)</td>
<td>Ego sum dulcis</td>
</tr>
<tr>
<td>36</td>
<td><em>Virtutes</em></td>
<td>D (F, a)</td>
<td>O vivens vita</td>
</tr>
<tr>
<td>37</td>
<td><em>Castitas</em></td>
<td>E (D-G-c, d)</td>
<td>O virginitas</td>
</tr>
<tr>
<td>38</td>
<td><em>Virtutes</em></td>
<td>a (b-d, e, f)</td>
<td>Flos campi</td>
</tr>
<tr>
<td>39</td>
<td><em>Innocentia</em></td>
<td>E (D-G-c)</td>
<td>Fugite oves</td>
</tr>
<tr>
<td>40</td>
<td><em>Virtutes</em></td>
<td>D/E (F, a)</td>
<td>Has te succurente</td>
</tr>
<tr>
<td>41</td>
<td><em>Contemptus Mundi</em></td>
<td>E (D-G-c)</td>
<td>Ego contemptus mundi</td>
</tr>
<tr>
<td>42</td>
<td><em>Virtutes</em></td>
<td>E (D-G-c)</td>
<td>O gloriosa domina</td>
</tr>
<tr>
<td>43</td>
<td><em>Amor Celestis</em></td>
<td>D (A, B, F)</td>
<td>Ego aurea porta</td>
</tr>
<tr>
<td>44</td>
<td><em>Virtutes</em></td>
<td>D (A, a)</td>
<td>O filia regis</td>
</tr>
<tr>
<td>45</td>
<td><em>Disciplina</em></td>
<td>E (C-G, b)</td>
<td>Ego sum amatrix simplicium</td>
</tr>
<tr>
<td>46</td>
<td><em>Virtutes</em></td>
<td>c (G, f, g)</td>
<td>O tu angelica</td>
</tr>
<tr>
<td>47</td>
<td><em>Verecundia</em></td>
<td>D (A, C, F, G/a)</td>
<td>Ego obtenebro</td>
</tr>
<tr>
<td>48</td>
<td><em>Virtutes</em></td>
<td>E/G (C-G-c)</td>
<td>Tu es in edificatione</td>
</tr>
<tr>
<td>49</td>
<td><em>Misericordia</em></td>
<td>c (G, e, g)</td>
<td>O quam amara</td>
</tr>
<tr>
<td>50</td>
<td><em>Virtutes</em></td>
<td>c (G, e, g)</td>
<td>O laudabilis mater</td>
</tr>
<tr>
<td>51</td>
<td><em>Victoria</em></td>
<td>c (G, e, f)</td>
<td>Ego victoria</td>
</tr>
<tr>
<td>52</td>
<td><em>Virtutes</em></td>
<td>E (C-G-c)</td>
<td>O dulcissima bellatrix</td>
</tr>
<tr>
<td>53</td>
<td><em>Discretio</em></td>
<td>c (a, e, f)</td>
<td>Ego discretio</td>
</tr>
<tr>
<td>54</td>
<td><em>Virtutes</em></td>
<td>c (G, e, f, g)</td>
<td>O pulcherrima mater</td>
</tr>
<tr>
<td>55</td>
<td><em>Pacientia</em></td>
<td>b (d, e)</td>
<td>Ego sum columnna</td>
</tr>
<tr>
<td>56</td>
<td><em>Virtutes</em></td>
<td>E/G (F, c, d)</td>
<td>O firma</td>
</tr>
<tr>
<td>57</td>
<td><em>Humilitas</em></td>
<td>D (A, a)</td>
<td>O filie israelah</td>
</tr>
</tbody>
</table>
Networks are dynamic. They mark the beginning of a process of becoming. In her early research on Hildegard, Marianne Richert Pfau presented an analytic model for chant based on the speculative process philosophy of A.N. Whitehead, a model that provides a germane analogue to Hildegard’s music. Pfau’s writing examines Hildegard’s compositions as dynamic wholes, a framework that treatises and scant historical evidence alone cannot provide. Although written well before
Leech-Wilkinson’s book *The Modern Invention of Medieval Music,* Pfau’s research serves as a remarkable exemplar of his ideals, substituting as it does twentieth-century philosophical inquiry as a means to fill-out a theoretical view that cannot be answered solely by recourse to historical fact. What follows is principally intended as an exploration into the philosophic basis for considering Hildegard’s music as an ensemble of accumulating relations, extending across multiple levels of scale. Those familiar with Pfau’s work will note my difference in emphasis, most apparent in the focus upon the contemporary qualities of emergence. My involvement with Whitehead revolves around an open question: what musical properties are involved in an expanding hierarchy? That is, as we proceed to look at different levels of scale, what new properties emerge, or re-emerge in novel guises? In order to answer these questions, I look to a network technology, which gives rise to dissipative structures as we move between levels of scale—dynamical regimes that reorganize the chaotic energy of previous phases by means of emergent, virtual complexities. Such a reorganization will be relevant especially in the analysis of Part II of the drama (Chapter 4), which enacts the musical link between the fallen soul and the supernal city.

Pfau believes that analysts often get caught up in the taxonomic elements of Hildegard’s music, specifically, with the labeling of fixed motives or variations thereof, resulting in a static view of materials that is “oblivious to overall coherence.” My understanding of Pfau’s criticism is that, in their concern for labeling surface segmentations and modal finals, analysts tend to ignore long-range phenomena in the repertoires that they examine. Pfau’s research, on the other hand, is analytically invested in more inclusive, macro notions of form involving Whitehead’s process perspective, one that looks at the event rather than static elements: “the emphasis on the event replaces more traditional notions of static being, unchanging substance, or atomic elements.” According to Whitehead, process perspective introduces a sense of flux and extension into our traditional view of the object by highlighting the continuum of relationships that give it form, duration, and being; qualities equally applicable to the successful investigation of musical materials. My own interpretation of the event focuses on the alteration of a given situation through the reconfiguration of its structure. This line of thought is borrowed from philosopher Alain Badiou (b. 1937) who, like Whitehead, sees an ontological flux at the heart of things, a multiplicity. The fluid potential for framing entities within this multiplicity ensures that a situation can always be reconfigured. And this reconfiguration, as well that which develops from it, constitutes the event: “The event is a structuring of a situation that heretofore has never existed.” The way a musical mode might be parsed into smaller component parts, and the way these parts (or “units”) might be differently configured, and heard to oscillate between each other, can radically change the way we hear the music of the *Ordo.* Furthermore, the logic of these unit-operations adheres on scales both smaller and larger than the individual chant or section. In fact, the logic of reconfiguration on the phrase-level early on in the drama will often inform tectonic shifts and ruptures in the form in Parts II and III of the play, thereby reinforcing a series of networked interrelations.
Process philosophy further presupposes nested characteristics as part of a dynamic becoming. According to Whitehead, events are themselves temporally extended “concrescences” of other events and are, as such, more accurately described as “event-formations.” These formations exhibit fluid boundaries, leading Whitehead to question the “unique emplacement” of instants (the idea that objects exist in, and occupy a non-participatory space), again shifting emphasis onto an axis of becoming. Objecting to the discrete boundaries of unique emplacement, Whitehead writes, “the edges of nature are always ragged,” implying that events bleed into each other and overlap. How does this view couple with Harman’s object-oriented ontology detailed in the previous chapter? It points to the argument that we have to open intentionality (the direction of attention toward something) to levels above and below human interaction, and in so doing realize the limitations, the apophatic strictures, of our investigations. Intentionality is selective. That is to say, when I am writing this paragraph, I am not also touring the great pyramids of Giza. Intentionality couples specific subjects and objects in selective moments of presence, while shutting out other possible interactions. This appears to favor specific human moments of selection and focus at the expense of all others. But as Harman points out, philosophies are deployed in the midst of a menagerie of objects, and not at a position located outside of them. Objects fill the world, to the point that every layer and strata of reality involves a form of intentionality to which we are blind, to which we do not have access. In fact, every piece of music is filled to the brim with a myriad of objects. Therefore, while for Harman the edges of objects remain real borders (seemingly at odds with Whitehead), “objects” are also nevertheless, “wrapped in objects sealed in objects frozen in objects extending above, below, and within the theater of human consciousness.”

Or, to extend the language from Chapter 1, objects are folded into other objects in what we might term a series of concrescences. As we will soon see, in the musical language of chant, network edges (the lines of transformation, the raw material of Event formations) involve nodal overlaps and folds, resulting in hybrid musical events, and can also be seen as forms of concrescence. And while I am obviously limited to my own selective intentional considerations, I hope to show in what follows how the number of musical objects for analytic consideration might be multiplied by changing, often shrinking, the frames of reference of analytic segmentation. In so doing, new relationalities and new couplings will emerge paradoxically on scales both smaller and larger than the individual chant, as such.

A simple, but powerful example of Pfau’s theory of process can be found in Guido d’Arezzo’s Micrologus (ca. 1026) and his discussion of the types of possible connections between phrases. Guido suggests that phrases function as one layer of structure, out of which larger gestures are subsequently composed, a clear example of concrescence. The five types of motion he proposes are: praepositus, in which a second phrase is in a higher range than the first; suppositus, in which the second phrase occupies a lower range than the first; appositus, in which the last pitch of the first phrase becomes the first pitch of the second phrase; interpositus, a type of motion whereby the second phrase exhibits a narrower
range than the first; and *commixtus*, a commixture of the other four types of motion. The *Micrologus* reveals a theoretical practice of connecting phrases into nested gestures that exist above the phrase level—gestures whose emergence requires ever longer durations and ever more space, a concrescence extending from the inflection of a neume to the motive, to phrase, to chant, to section, etc., (each with their own possible segmentations) precipitating any number of new objects for intentional consideration.

Sarah Fuller’s commentary on mode and the “background pitch spectrum” in Hucbald’s worldview likewise intimates an extended and emergent universe beyond the standard fifteen *phthongi* to include “twenty-one or more” pitches through the inclusion of instrumental ranges as an extension of the modal spectrum, achieved through replication of the “same sounds from the lower register.” Fuller’s example serves as a reminder that *medieval musical space* is not a pre-given totality, but rather extended and continued through varied *modular* (replicative and mirrored) forms of occupation. Similarly, art historian Erwin Panofsky refers to medieval pictorial space as an *aggregate space* in opposition to a modern “systematic space.” For Panofsky, pictorial space, comparable to a kind of algorithmic space, lacks a domineering unity and is composed of “cells of space . . . capable of an unlimited extension,” yet non-totalized. I sense a similar expanding universe in monophonic chant. The comparable cells of space are the nodal modules outlined throughout the *Ordo* which give rise to a loosely coupled system that, over time precipitates an aggregate space. A simple dyad, trichord, tetrachord or hexachord, or nodal outline in isolation, perhaps, seems innocuous. However, in combination, the steps of progression through several concatenated outlines may achieve a remarkable and unforeseen convergence in their evolution.

**Intervallic containment and commixture**

We might also examine nodal outlines through an intervallic lens. For medieval theorists, intervals belong to, or contain other intervals. A useful summary is found in Gaston Allaire’s research on hexachordal mutation where we find a chart derived from Odo of Cluny’s alternate segmentation of the octave into harmonic divisions (comprised of a fifth followed by fourth typically in authentic modes) and arithmetic divisions (consisting of a fourth followed by a fifth in plagal contexts), showing how every interval of the fourth belongs to two fifths. For example, a D-G *diatessaron* belongs to both a C-G *diapente* as well as a D-A *diapente*. Example 2.1 reproduces Allaire’s interval of the fourth as interlocked with two fifths with both D-G and E-a fourths to show similarity with the musical language of the *Ordo* Part I, but these relations hold with any pitch-class. A practical example of this reciprocal division of the octave can be found in a few of Hildegard’s D-modes from the *Ordo*. For example, many of the D-chants in the *Ordo* exhibit the D-a-d melodic thumbprint, but at Ov 76 the melody traces a D-G-d outline.
Likewise, every fifth belongs to two fourths. As Example 2.1b reveals, a D-a diapente belongs to both a D-G diatessaron and an E-a diatessaron (the same relation is then reproduced with an E-b diapente).

How does this affect mode? These intervallic pairs involve possible nodal migrations that might influence our perception and analysis of chant. To this end, Allaire’s theory of interlocking interval chains fits remarkably well with more recent theoretical paradigms of networked interval transformations, after David Lewin and Steven Rings, among others. We could easily rework Allaire’s graphs as generalized interval transformations, see Figure 2.2a+b. With this nomenclature, numbers indicate ascending or descending scale steps, a form of “generic interval.” Therefore, a (-1) would represent a descending scale step, and a (+1) an ascending scale step; a (+2) would be an ascending generic third (or, two scale steps), and a (-3) a descending generic fourth (i.e., three scale steps), etc. The intervals are generic insofar as they involve number but not quality of interval, and in this way, can show a similarity of interval patterning between different finals. Just as interval transformations can account for voice-leading not explained by functional theories of tonality, with monophonic chant, generalized interval transforms can reveal relationships between intervallic species not explained by theories of modal finals. That is, a transformational nomenclature helps to reveal networked relationships between intervallic species, primary nodes, and cadential nodes, nested within and around a modal final (thus bringing to bear the conceptual possibilities of networks upon an understanding of medieval mode).
Another strategy for hearing the (+/-1) interval transformations in Figure 2.2 is to consider how an individual non-final pitch, through repeated ornamentation and/or melodic contour could become a structural pitch. If we are in a chant with an E final, for example, D will typically be heard as a form of melodic lower-neighbor note to the final. However, if this D were repeatedly accented and given its own lower neighbor, C, it may well assume a structural role in a listener’s perception, thereby shifting the surface centricity down a scale step (-1). This is the case with Part I of the Ordo, where the D/E oscillations not only occur between sections (all of the chants have either D or E finals), but likewise manifest in the phrase structure internal to the individual chants.

A transformational analysis of Ov 3

Having presented a few of the historical approaches to commixed intervallic species and their transformations, I would now like to examine the opening of the drama, specifically, looking to how the micro-formal transformations operate within the larger modal framework of Part I. But first a brief summary will help situate the reader.

In terms of programmatic structure, the Ordo opens with an exchange between the Patriarchs and Prophets and the Virtues, a dialogue that features a number of what can best be designated “divine perfections”: the Word (Verbum) becoming clear/clarified in the human form; the image of the human as a member of God’s mystical body (pulcri corporis); the set of reflected perfections, or inversional symmetry between branches (rami) and roots (radices); the implied balance of light (fulgemus) and shadow of a living light filtered through the living eye (fructus viventis oculi, et nos umbra in illo fuimus). The text then transitions to the laments/complaints of embodied souls in Ov 4 (querela animarum in carne positarum) followed by Anima’s first lines in Ov 5. At this early stage in the drama, Anima appears to be perfectly aligned with a virtuous path. She sings: “O sweet divinity and o delightful life, in which I shall wear the brightest of garments”; and soon thereafter, “O gladly will I come to you, so that you can offer me a kiss of your heart,” again showing no signs of distress. But the bright garment, the virtuous vestment of chant 5, becomes increasingly burdensome for Anima, and by Ov 9 she laments: “O what hard labor, and O what a heavy weight that I carry in the garment of this life, because it is so hard to fight against my body.” Despite the Virtues’ exhortations, Anima reiterates her inability to wear to the end the garment in which she’s been clothed, and finally in Ov 16 sings: “God created the world, I do no harm to him but I wish to enjoy it,” effectively completing her fall, as well as marking her removal from the dramatic narrative until Part III (Ov 59).

Moving to a discussion of the music, Ov 1–2 are fairly typical Protus compositions for Hildegard, enacting reflections between an A-D diatessaron outline which is then inverted to sound a D-a diapente; the music then expands registrally to reach the octave (d5) species. Taken together the melodic expansion from final to fifth to octave presents listeners with what Audrey E. Davidson has aptly described as one
of Hildegard’s melodic “thumbprints.” The musical reflections here serve as a vehicle to convey the textual perfections, notably the Word becoming clear in the human form, and the image of the human as a member of God’s mystical body.

But it is really with Ov 3 that things get interesting, insofar as it is the first chant of the cycle to exhibit an internal oscillation between D and E nodes. This analysis will also afford me the opportunity to differentiate my approach from those of other musicologists. Fassler, for example, notes that she hears an opposition between D and E modal centers at the opening of the drama, operative at the level of the chant. That is, Ov 1–2 as in D (Protus), Ov 3–4 as in E (Deutereus), and Ov 5 back in Protus. My interest in the D/E oscillation, however, lies in the aspects of modus commixta that manifest between the phrase segments of individual chants, whereas Fassler ascribes a fixed character to both D and E as separate entities. Of course, Fassler is not alone. Typically, scholars have labeled Ov 3 as an E-mode chant, see for example, Pfau and Morent (2005), as well as Corrigan (2013). These authors all point to an opposition, to a musical and textual polarity between the drama’s D and E finals in the opening of the drama. Concerning the D material, Fassler writes that it is “a musical allegory for the hope that drives the drama.” She continues by arguing that Hildegard then “establish[es] the other musical polarity operating in the play, and that is the lamenting music composed in E.” Labeling Ov 3 as Deuterus appears to be perfectly logical if one only looks to the final cadence. But what about the material contained within the internal phrases? What about the music that lies between cadential formulae? This is where the surrounding context becomes crucial to our understanding of the music.

Given the unambiguous cadence on D at the end of Ov 2 (with the text “pulcri corporis”), I find it almost impossible not to hear the opening of Ov 3 in relation to D, especially if one is listening with their ears and not only their eyes. The opening trichord, outlining the pitches F and D, sounds much more like a prolongation of the previous D final, than as a definitive movement to E, see Figure 2.3. My ears perceive the first phrase of chant 3 as being in D, but as concluding on mi (E), the third degree of the natural hexachord, and the second scale degree of mode 1. In fact, it takes a couple of phrases for the mind’s ear to switch tonal foci to E, at which point, the chant concludes.

Figure 2.3 Ov 3: Phrase 1, implication of a shift from D to E (internal migration)

Again, I realize that in most cases modal classification is not determined from opening melodic material, but rather from cadential formulae. Given this common taxonomical method, I understand the rationale of labeling chant 3 as an E-mode.
However, *Ov* 3 is not an isolated chant of a codex, tonary, or other collection. On the contrary, it is part of a specific, intentionally ordered collection of chants that we know stands in relation locally, to *Ov* 2 and 4, and globally to *Ov* 1–21 (the first large section of the *Ordo*). Indeed, this is a factor of tonal coherence mentioned by Audrey Davidson in her writings on the drama—namely, the contextual interlocking of tonal structures *between* larger tracts of music.\(^{45}\) Within the *Ordo*, these tonal relationships are fixed and therefore lead to new sets of questions concerning how modal structures relate, overlap, and fold within a global design.

Certainly, in isolation the melodic gesture that opens *Ov* 3 on the word “Nos” could generally be described as an ornamentation of E. But the wider melodic context does not allow such a simple solution. Rather, I hear this first phrase of *Ov* 3 as a trichordal prolongation of D that stops on E, after which point the E is taken up and amplified in the second half of the phrase, see Figure 2.4. The chant is perhaps best described as a movement to E that retains many of the qualities of D, presenting listeners with a type of commixture. The structure behind this shift is a set of interlocking trichords; F descending to D, followed by E ascending to G, continuing by step up to a4. Out of her twelve chants with D finals in the *SACR*, only one, *O ignee spiritus*, contains an ascending leap from E–G, making this seemingly minute gesture the seed of a perceptual shift into E. *The oscillation between D and E does not exist as a binary relation between D and E chants, but rather as a commixed set of trichords within a single chant.* The oscillation is internal to individual chants.

![Figure 2.4 *Ov* 3: Trichordal shifts between D and E nodes](image)
Ov 3 transformational expression:

\[ [D(\pm 1) F(\pm 1)] \rightarrow [E G(\pm 1)] \rightarrow [E_a] // [E(\pm 1) a] \rightarrow [D \pm a(\pm 1)] \rightarrow [E G] \]

Even if one decides that this is definitively an E piece, it is of a very rare type for Hildegard given that it starts on the pitch F. Out of Hildegard’s thirty-three E chants contained in the Riesencodex and Dendermonde manuscripts of the SACR, only one begins away from the final. The antiphon O virga ecclesia, like Ov 3, begins on an F and cadences on an E—the only other example in the entirety of her corpus. I would furthermore add that if the opening phrase of O virga ecclesia were sung after a cadential formula on D, it too would sound very much like the continuation of a D mode, showing how important surrounding melodic context is as a framing device for musical materials.

One might argue that I am wallowing unnecessarily in taxonomic minutiae (not so long ago, a critic wrote that my discussion of this very passage was “making mountains out of molehills”). Obviously, I disagree, and firmly believe that the D/E nodal transformations, replicated on and across multiple levels of scale, have serious implications for the performance and interpretation of this music. In fact, the most compelling evidence for this argument comes from a recording of the chant by the Sequentia ensemble under the direction of Benjamin Bagby. Under-scoring a destabilized approach to mode, Sequentia’s 1982 release of the drama sustains a D-drone (actually a D-a drone begun in Ov 1) beneath the first phrase of Ov 3, until the voice cadences on E4 at the termination of the text “radices,” at which point the accompaniment dissolves. The musical director seems to have felt a need to mediate the same shift in centricity (the same “molehill”) discussed above.

The first phrase of Ov 3 makes as much sense in relation to D as it does with an E. What is more, I wouldn’t think it unreasonable if Bagby had decided to sustain a D drone throughout the entire chant—looking at the last phrase in Figure 2.4, for example, one can hear that it outlines a species of fifth, D-a, for the majority of its duration and not E, which is reached only at the very end. Furthermore, since Ov 1 and 2 are sung by the Patriarchs and Prophets of the church and the Virtues, whereas Ov 4 is sung by “souls placed in bodies,” Ov 3 marks a point of mediation between divine and earthly embodiments/incarnations. A careful consideration of musical materials could therefore help convey this mediation in performance.

Then there is the issue of tying the intervallic transformations, in turn, to a series of shifting modes. Many chant scholars have identified specific melodic formulae that align with particular modes, some of which are found in multiple modes. Does this tell us that there are multiple modes in individual chants? First, I would say the label isn’t nearly as important to me as the aural awareness of the gestural commixtures relative to tonal context. When dealing with shifts of “scale-degree qualia,” we are dealing with an individual’s perception. For example, if a D→E nodal shift takes place, when and where, precisely, does the pitch-class F shift from scale-degree 3 in D (as part of a TST construction) to become scale-degree 2 in E (as part of a STT tetrachord)? In my opinion, such a point cannot
be precisely determined. Nevertheless, analysis opens the possibility of hearing such a shift, and when scholars label this chant as simply being an E-mode (as with Fassler, Corrigan, Pfau and Morent), that possible hearing is, to a large degree, closed.

At this point, I could envision an interlocutor responding, “What exactly would multiple or mixed modes mean, since we know that mode had a really specific function within the liturgy?” On the one hand, perhaps this shouldn’t matter, because the Ordo Virtutum is a music drama and not a standard liturgical item, so mixed modes shouldn’t create any difficulties. On the other hand, why would anyone assign mode to any of it, if no psalms or canticles are going to be chanted throughout? However, to ask “why assign mode to any of it?” is to deliberately conflate musical language, in general, with mode as operative in a specific liturgical context. Hildegard is not writing twelve-tone music, nor is she working with chromatic mediants of the late classical style. Her musical language consists of a what I would term a “modal” vocabulary. Furthermore, the reason for positing mixed modes outside of liturgical boundaries is to reveal the large-scale form of a cycle that exhibits nested, tetrachordal formulae, especially the appearance nodal centers indicative of TTS interval arrays (C, F, and G) themselves nested within tonal regions defined by either TST or STT tetrachordal structures (D, E, a, and b).

As a performer, what manner of musical decisions might this information lead to? Could there be a shifting drone that follows the commixed nodes, or perhaps a drone that simultaneously sounds D and E beneath Ov 3 as a means of mediating the tonal shift in centricity? Could one sound a D/E drone beneath the entirety of Part I for that matter, thereby reinforcing the “meandering” quality observed by Davidson?46 The questions remain open, but my point is that there are valid theoretical arguments for such experiments (which reinforce global structures in the music) even if they may at first seem somewhat unconventional. By using analysis to go beyond the programmatic description of the music, some very real interpretive possibilities emerge. The value of analysis, therefore, lies in the possibilities it presents toward any number of rigorous and inventive hearings, all of which open a theoretical possibility space.

As is stated many times throughout the book, the first twenty-one chants all oscillate between D and E centricities. And, after ten or so instances of a G-d perfect-fifth outlines within the context of the E-chants of Part I, we ask ourselves: “what is the first mode to appear that is not D or E in Part II?” Well, it is the Tetrardus mode on G (Ov 30), a sound that has been carefully prepared, foreshadowed, and placed in the ear through the nested nodal outlines, what I will show in the following section to be a type-three network. What is the cadential node immediately preceding Ov 30? It is D, and D-G diatessaron outlines and leaps are ubiquitous throughout Part I (in both D and E contexts). What is the cadential node immediately following Ov 30? It is E, and of course the E-G outline and leaps are part of the melodic fabric of E itself. And so, rather than hearing an abrupt shift from D to G to E in the stretch of music spanning from
Ov 28–31, I hear an unfolding on a larger scale of melodic materials that have been present throughout. G does not all of a sudden simply appear as a new center. Rather, it is an extension of a series of gestures that have been carefully cultivated.

Network diagrams

The brief analysis of Ov 3 can be further expanded through the inclusion of its melodic gestures into a network structure, what I have designated as a Type-1 network for the Ordo’s E-modes of Part I (see Figure 2.5 for details). The networks that follow reveal how the various pitch-classes tend to canalize and interact both within and between chants. The diagrams are therefore capable of representing multiple levels of scale and of showing how those scales might fold together in processes of concrescence.

Although the above figure is a spatial network, meaning it does not show the temporal unfolding of an oriented network or a Lewinian event grid, I have given it a square orientation to help visualize the D-F and E-G trichordal oscillations (the corners) which characterize the core identity of the network. The a4 and c5 located in the interior connect the D and E centers to their upper register unfoldings. This network represents the primary gestural schema for Ov 3, 4, 7, 12, and 13. A few further details worthy of mention: the G4-c5 connection in the upper right corner bypasses b4 in this network type. Even if b is present, it serves as a passing-note. The G-a connection represents an ever-present toggling in Hildegard’s E-modes, between these two pitches, often making it difficult to discern which is the true node (often the ascents to c5 highlight G, while the descents from c bring out an a-c trichordal sound). Lastly, the E-c5 connection is fairly weak compared with the Type-2 E-NETwork, where it becomes a defining feature. But I have included a line connecting the two nodes, since E is the final and many of the phrases and phrase endings that incorporate c5 work their way back down to the lower registration where E is always a central/cadential node.
The second network type, Figure 2.6, represents the dominant schema for Ov 6, 8, 10, and 14. This modal type does not involve the constant D/E oscillation, but rather presents its principle nodes both a third below and a third above the E final, resulting in a symmetric arrangement. The triangular network shape is used to help visualize this symmetry. Once again, the diagram shows the tendencies of nodal interaction on scales both smaller and larger than the individual chant, ultimately showing how C and G modal finals grow out of a Type-2 E-NET in the *Ordo*.

There are frequent leaps in this network between C4 and G4, presenting a form of supplemental diapente interval given the fact the E-b is almost completely absent from the melodic terrain of Part I. The C-G (+4) sound (along with its inversion, the G-c TTS tetrachordal outline) is typically aligned with textual passages celebrating the divine, as opposed to the lamenting qualities of the E mode, which are more prevalent in the Type-I networks (although the Type-1 network can shift to the G-c TTS outlines in their interior phrases, see Ov 4 on the passages “O vivens sol,” and “O rex regum” for two examples of this phenomenon). Furthermore, the C-G fifth is occasionally expanded, thus allowing C to reach its upper octave, as heard in Ov 6, 10, and 14.

Network Type-3, the last of the E-networks heard in Part I of the drama, is really a variation of a Type-2 Network, see Figure 2.7, but one that places more emphasis on G than C.

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*Figure 2.6 Type-2 E-NETwork*

*Figure 2.7 Type-3 E-NETwork*
The E-G third lies at the root of this network, but the G is just as often reached via D4 as it is by way of E, and for this reason D stands at the third apex of the schema. In its upper extensions, we find a strong G-d diapente outline (+4), giving the G4 node its own upper fifth. Just as C often reached its upper octave in the Type-2 Network, with the Type-3 Networks, D reaches its upper octave. This, in turn, is the key to understanding the link between the Tetrardus mode as originating from within an E-network. For example, even though Ov 20 is identified by Corrigan as Tetrardus, it manifests a Type-3 E-NET structure. Likewise, Ov 30, discussed above, also invokes a Type-3 E-NET. It is interesting to note that Ov 30 is preceded by a D mode (which concludes with two D-G intervallic outlines) and followed by an E-mode (Type-1), forging connections between three modal centers which can all be summarized with one network schema.

Networked perceptions

How do networks reorient approaches to hearing? Networks are inherently nested structures. Which is to say, their parts (nodes, links, ground/context) exist on and across many levels of scale and are themselves composed of networks. Networks are composed of other networks—this is a commonly encountered situation in music, as pitch-classes are often implicated in more than one situation at a time, again recalling Stefano Mengozzi’s virtual and overlapping segmentations of medieval musical space. Take, for example, a surface segmentation that includes a pitch as a member of a chain of thirds, but then an alternate segmentation where the same pitch functions as part of a tetrachordal formation. Going further, the sum total of acoustic/timbral components belonging to a single “pitch” (attack noise, envelope shape, harmonic partials, frequency range, formant regions, etc.) itself constitutes an entirely separate network-assemblage, but one also intimately linked to the first. The context or ground might also be varied. For example, the pitch-class G exists as sol in the context of the “natural” hexachord, perhaps as 4 in mode 1, but also as do in the “hard” hexachord, perhaps manifesting as scale-degree 1 of mode 7. As we will see, it is not uncommon to find that a node is multiply directed, expressing two or more contexts simultaneously. This is the case throughout Part I of the Ordo, where the modal context incessantly fluctuates between D and E centricities, resulting in the apperception of “modulatory intervals,”47 where the scale-degree qualia of pitches are morphed in the transition from one modal center to another, occupying a kind of between-space in the mind’s ear. More abstract examples of varying grounds could easily be imagined as well; a geographical region’s intonation system might differ from that of another region, a context that would subsume all of the above relations into a new network, showing that networks are not simply a matter of either/or, but are also nested within each other. Or perhaps the music language-games associated with the practice of organum which differ vastly in comparison with the language game of the original secular melody before its being co-opted by an organal-machine.
The fact that networks are composed of, and involve other networks leads to a kaleidoscopic variability in their possible perceptions. In formal ontological terms, a network schema can be equated with a “situation” or a “set” and its structure, insofar as situations and sets do not have mutually exclusive identities, and are themselves formed out of non-unified multiplicities, what Alain Badiou has called “inconsistent multiplicities.” For Badiou, set theoretical ontology is the “formal theory of non-unified multiplicities” where “there is no fundamental difference between elements and sets, since every element is itself a set.” This is shown to be true with the power-set axiom, which states that the subsets of a given set themselves form another set when collected together. If we take the elements \( \alpha, \beta, \chi \), a number of subsets can, in turn, be generated: \{\alpha\}, \{\beta\}, \{\chi\}, \{\alpha, \beta\}, \{\alpha, \chi\}, \{\beta, \chi\}, including what is called the “maximal subset,” \{\alpha, \beta, \chi\}, as well as the null-set \{\emptyset\}. The power-set axiom shows that any set is always larger than the initial set, and for our purposes, that any network-situation is always implicated in other networks.

The networked centricities in the Ordo allow distant tonalities to be drawn close, collapsing linear progressions into folded, synoptic structures. In this way, Eriugena’s intersubjective proximity through spherical absorption explored in the introduction becomes one of the organizing principles of the Ordo Virtutum as a whole, and its expression of we might today call the “phenomenological” aspects of a spiritual pilgrimage, the soul’s navigatio through the chaos of the world, its re-ordering, and return to the One, i.e., the celestial city of Ov 86 (celestem Ierusalem). Those familiar with the narrative of the drama know that at a very early stage in the drama the unhappy soul (infelix anima) has already lost the hope she expressed at the outset. At Ov 13 she sings: “woe is me, I cannot complete this dress I have put on.” Her fall continues in Ov 16: “God created the world: I do him no injury—I only want to enjoy it.” Nevertheless, at this point the linear narrative of the fallen soul intersects with the non-linear, non-spatial and immaterial embrace of the divine.

We come to find, in fact, that the linear narrative of the pilgrim’s journey is already contained within a concentric eternity in God; at Ov 18 after the opening line of lament, the Virtues recollect all that the soul has forgotten, namely that, “A wondrous victory already rose in the wondrous desire for God, in which the pleasures of the flesh were secretly hidden” [quedam mirabilis victoria in mirabili desiderio dei surrexit, in qua delectatio carnis se latenter abscondit]. The prepositions and the mirrored text “mirabilis/mirabili” are crucial to the construction of this concentric image—a wondrous victory arises within the wondrous desire for God, in which the desires of the flesh are hidden, a textual formulation resulting in a double containment. Readers will note also the oppositional forms of desire—the desire for God and the desires (or pleasures) of the flesh. Both the textual and musical figures of Ov 18 manifest a radial mean, part of a series of images of containment throughout the text of the play. It is worth pointing out, for example, that when the collective Virtues reinforce victory’s song in Ov 52, and its echo in Ov 77, they describe how the wolf will be absorbed by a scorching fountain: “Oh gentlest warrior, in the scorching fountain that swallowed up
[absorbuit] the voracious wolf—glorious, crowned one [Victory], how gladly we’ll fight against that trickster, at your side.” Then, post victory, in Ov 84 Chastity sings, “I did bring forth a man who gathers up humankind to himself against you” [qui genus humanum ad se congregat contra te]; a motif echoed in Ov 85 when the collective Virtues ask, “who are you, God, who within your own person held this great counsel/assembly [consilium] in yourself?”

Summary: modes of becoming

My reading of mode in the chapters that follow will involve a continuum of modular units capable both of reflecting and embedding each other in their respective re-configuring of situations. These theoretical, diagrammatic structures can be heard as intersubjective formations (after Eriugena) as discussed in Chapter 1. The sample analysis undertaken of Ov 3 has shown the wealth of overlapped materials that can be drawn out of even a couple of phrases of music. In short, musical language involves a type of “forecasting” or immanence of materials. In Part I of the Ordo we will see how a “C-ness” is reflected in G-ness and folded into an E-ness. In later chapters, we will witness a multiplicity of other reflections and folds in relation to the text: how A is, at once, an affinity of D, but also through the incorporation of B-flat (resulting in a STT formation), a reflection of E (Ov 35/8); B as an affinity of E; how F and the “soft” hexachordal structure (TTS) serves as an affinity of C and G and is, surprisingly, folded into a Protus mode (Ov 5). Lastly, through a transformation of registration and a notational reinterpretation, I will even show how the pes neume functions as a diagrammatic representation of the mode-defining diapente, and how in Part III of the drama, E becomes a reflection of D, bringing the play’s initial D/E modal opposition into a final radial embrace.

Borrowing Allaire’s idea that intervals in the gamut contain other intervals, we have seen how mode-defining intervals can be transformed into intervals that define other modes. This is much more than mere word play—it leads us to new conclusions about medieval musical language and the “otherness” of mode itself; an otherness wherein mode is only ever a mode of becoming and assembling. And, this mode of becoming brings us full circle to the idea very idea of subjectivization with regards to both modal and theological intersubjectivity. Metaphysical subjects are dialogic, that is, in dialogue with an Other. What makes this interaction generative is precisely its inability to predict exact trajectories in advance. A subject is not a pre-existing entity, but rather that which emerges out of the transformation of a situation, in conversation (perhaps in confrontation) with the situation. Only after the conversation has ended are we able to name that which has emerged from it, to declare a theoretical unity as the precipitated effect of structuration.

Notes
1 Dendermonde (D) fol. 169r – 170v; Riesencodex (R) fol. 477vb–478ra.
5 D fol. 164v; R fol. 476vb–477rb
6 Keith D. Lilley, City and Cosmos (London: Reaktion Books, 2009), 31. The squared circle likewise contains Timean implications (and its Calcidian glosses and diagrams, in addition to the commentaries of Alan of Lille and Bernardus Silvestris), insofar as the world-soul was created by overlapping strips creating an x-figuration, which were in turn fastened, end to end, in order to form two circles.
8 In what she labels “Table 1,” Fassler shows that the virtue Grace of God does not appear individually in the Ordo Virtutum (2008, 327–328). And while this is, of course, factually correct, it could well be argued that the cloud-image found at the very opening the play (qui sunt hi, qui ut nubes), is in fact the presence of gratia dei. It makes sense given the mirrored procession in Ov 2 (and its relation, in turn, to the proliferation of reflexive textual constructions at Ov 33–37), the shadow of the living eye in Ov 3, and Grace of God’s functioning through hearing and the voice (“when a person understands my admonition with his sense of hearing . . . I initiate good in him”), all in relation to the vocal medium of the Ordo itself.
10 I will argue that Ov 18 similarly expresses dual forms of desire; human and heavenly desire.
11 Of course, even neumatic notation itself derives from grammatical markings, and so interrelations between text, written gram, and musical sound run deep (see, for example, Cardine’s Gregorian Semiology).
13 Steven Rings, Tonality and Transformation, 4.
16 Ibid., 125.
17 Leonard Ellinwood, Musica Hermanni Contracti, Eastman School of Music Studies No. 2 (Rochester: Eastman School of Music, University of Rochester, 1936), 59.
18 Ibid., 49.
20 I would like to thank Edward Nowacki, who in a discussion relating his labile theory of mode to Hildegard’s chants, mentioned the Lucidarium as a possible development of modal overlaps (private correspondence).
24 Ibid., 166.
Analytic introduction


26 Stefano Mengozzi, “Virtual Segments: The Hexachordal System in the Late Middle Ages,” *The Journal of Musicology*, vol. 23 (2006): 426–467. Mengozzi also makes the argument; “A closer look at the documentary evidence and reception history of the hexachordal system points to a broad range of positions on the problem of medieval and Renaissance diatonicism. The ‘strong’ interpretation of Guido’s hexachord has not been unanimously endorsed in modern historiography, just as the six Guidonian syllables were not universally adopted as a pedagogical tool. To evaluate the merit of these alternative positions [such as the importance of the species of octave], ergo to explore the possibility of a ‘weaker’ interpretation of the hexachord, seems a worthy goal that promises to solve the cognitive crisis I have described.” In *The Renaissance Reform of Medieval Music Theory: Guido of Arezzo Between Myth and History* (Cambridge: Cambridge University Press, 2010), 11.


28 Ibid.

29 More formally, “T_s is the unique transposition operation on this space that maps s into t.” David Lewin, *Generalized Musical Intervals and Transformations*, 157.


33 Ibid., 86. As a point of clarification, however, following Graham Harman, I believe an “event” is, in fact, a form of object.


37 Ibid., 23.


40 Ibid., 54.


42 See *Ov* 2, 5, 35, 36, 44, 57, 69, 71, 75, 82, and 84 for some clear examples of the D-a-d thumbprint in Protus.


44 Ibid., 342–343.


46 Ibid., 17.


49 Translation, Audrey Davidson.