

Divine Love in the Medieval Cosmos

The Cosmologies of Hildegard of Bingen and Hermann of Carinthia

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Love

*Gives herself to all things
Most excellent in the depths,
And above the stars
Cherishing all...*

(Hildegard of Bingen, *Antiphon for Divine Love*)¹

*In every constitution of things
the most cohesive bond is the
construction of love... the one
bond of society holding every-
thing in an indissoluble knot.*

(Hermann of Carinthia, *De Essentiis*)²

Introduction

Throughout the Middle Ages love possessed an exalted status in regard to the cosmos. In a tradition stretching back to Plato and culminating in Dante's *Divine Comedy*, love was synonymous with an expression of divine power. In numerous cosmological works, love was believed to constitute the glue and structure of the universe, and was employed among the Christian Neoplatonists of the twelfth century as a virtual synonym for the Platonic World-Soul (*anima mundi*), the force which emanated from the Godhead and fused the macrocosm (the planets, fixed stars of the firmament, and Empyrean heaven) to the microcosm (the terrestrial earth and man) in cosmic harmony. Unsurprisingly then, in the cosmologies of the twelfth century philosophers Hildegard of Bingen (1098-1179) and Hermann of Carinthia (1100-1160), "divine love" plays a central role, functioning as the binding force of the universe.

Yet what exactly is meant by the term "love"? and how can its "divine" variant be situated within the context of the Middle Ages? Whilst the Latin term *caritas*, defined as "love" or "charity," on its own is ambiguous and problematic, a useful point-of-entry to answer these questions is to examine contemporary works in which love is explored from a cosmological viewpoint. The origins of late medieval cosmological interpretations of the relationship between the microcosm and macrocosm arguably lie in late-antiquity. "All this harmonious order of

things is achieved by love which rules the earth and the seas, and commands the heavens," exclaims Lady Philosophy, in the Roman statesman Boethius' (c.476-526) *Consolations of Philosophy*.³ Writing at the end of a great Neoplatonic tradition, Boethius was naturally heavily influenced by Platonic cosmology. It is indeed from Plato's own cosmological myth, the *Timaeus*, where we find the initial idea of the World-Soul: the soul of the world that Timaeus tells Socrates "is interfused everywhere from the center to the circumference of heaven," and the same World-Soul which Hildegard and Hermann identify with God's force and power that sustains the cosmos with his love for creation.⁴

Perhaps the greatest figure to make love synonymous with the cosmos was Dante Alighieri (1265-1321). In his early work, the *Vita nuova* ("The New Life"), Dante's courtly love for his childhood sweetheart Beatrice is portrayed in a cosmological setting. The goddess Love comes to Dante and says: "Anyone of subtle discernment would call Beatrice love because she so greatly resembles me."⁵ He ends the work with the hope that his soul in future will join Beatrice in the innermost sphere of heaven, 'who in glory contemplates the countenance of the One who is blessed for ever.'⁶ In the *Divine Comedy* too, love, like God, is omnipresent in the structure of

1 Fiona Bowie and Oliver Davis, ed., *Hildegard of Bingen: An Anthology*, trans. Robert Carver (London: SPCK Publishing, 1990), 119.

2 Hermann of Carinthia, *De Essentiis*, trans. Charles Burnett (Leiden: E. J. Brill, 1982), 129.

3 Anicius Manlius Severinus Boethius, *The Consolation of Philosophy*, ed. Douglas C. Langston (New York: W. W. Norton and Company, 2010), 32.

4 Plato, *The Dialogues of Plato*, trans. Benjamin Jowett (New York: Charles Scribner Sons, 1892), 530.

5 Dante Alighieri, *Vita nuova*, XXIV, 5. Accessed 20 April 2017 via the Princeton Dante Project: <http://etcweb.princeton.edu/dante/pdp/vnuova.html>.

6 *Ibid.*, XLII, 3.

Dante's cosmology.⁷ Dante, passing through the sphere of Venus discovers that even God's divine mercy and love has allocated a place in heaven for the biblical prostitute Rahab (seen in Joshua 2 and 6). By showing faith in God through her actions in aiding the Israelites, Rahab is allowed to 'grow bright with peace' in the depths on earth, and as a reward for forsaking bodily love for love of the divine, she is given the privilege of being 'lifted up before all other souls' to paradise.⁸

A later example, the poem *Orpheus and Eurydice*, written by the Scottish author Robert Henryson (c.1420 - c.1505) serves as another useful point of comparison from which to approach Hildegardian and Carinthian cosmology. In this adaptation of the traditional Greek myth, Orpheus in an endeavour to rescue Eurydice, embarks on a virtual tour of the cosmos, starting from the upper sphere of the Empyrean heaven moving through the traditional order of the planets: Saturn, Jupiter, Mars, Venus, Mercury, the Sun and the Moon. It is notable that this cosmological journey is the opposite of Dante's. Orpheus begins 'close to God (in harmony, celestially and otherwise), but moves toward the centre, and then beyond it, to hell to reunite with his love.'⁹ It is during his passage through the planetary spheres that Orpheus learns how to play the celestial music that he will

use to temporarily win back Eurydice from Hades using his lyre:

He hard a hevinly melody and sound,
 Passing all instruments musical,
 Causit be rollyn of the spheris round;
 Quhilk armony, of all this mappamound,
 Quhilk moving seiss, unyt perpetuall –
 Quihilk of this world Plato the saul can call...
 Thare leirit he tonis proportionat.¹⁰

Whilst this passage clearly alludes to the cosmological doctrine of the Harmony of Spheres (which will be explored in depth later in Hildegard and Hermann's works) what is significant is the direct reference to musical relationships constructing the Platonic World-Soul. It is musical proportions and ratios inherent in the World-Soul that cause 'the rollyn of spheris round' and 'armony' of universe. Significantly, love in this poem is given cosmological significance as Henryson proceeds to juxtapose Orpheus and his wife Eurydice: Orpheus, in being able to hear the music of the spheres, allegorically embodies the qualities of the divine intellect and the heavenly creator ('the pairte intelleyce'), whereas Eurydice, located in the Underworld, is associated with the desire, corruption and earthly appetite of humankind ('Our affectioun,/ Be fantasy oft movit up and down').¹¹ This misogynistic portrayal of love is not an isolated case in Henryson's works, for in *The Testament of Cresseid*, after a celestial tribunal of the planets, Saturn and the Moon mete out the sentence of leprosy to Cresseid for insulting them, and ultimately for being a bad lover by forsaking her romantic love of Troilus for Diomedes.¹² In both cosmological poems, Henryson shows the impact of the heavenly macrocosm on the fate of man; Henryson is explicit that it is Orpheus' knowledge of the mathematical ratios inherent in the music of the spheres that enables him to win back Eurydice, and in a similar vein it is Cresseid's forsaking of the heavens that results in the divine punishment of leprosy being subjected upon her.

These above works provide helpful examples of the Neoplatonic trend to equate love with God in a cosmological sense—a trend that Hildegard, Hermann and others would engage and develop. Outside this first type of divine love, Hildegard and Hermann necessarily reacted

7 See Dante Alighieri, *The Divine Comedy*, trans. Robin Kirkpatrick (London: Penguin, 2012). The cosmology of the *Divine Comedy* is structured on God's love. Beatrice reveals to Dante the pilgrim that heaven can be identified by 'an ordered ratio,' and it is 'this – such form – that makes the universe resemble God' (*Paradiso*, Canto 1, Lines 103-5). As opposed to order of heaven, Hell is a place characterised by corruption and shrouded in a darkness through which Dante cannot 'discern a single thing,' (*Inferno*, Canto 4, Line 12). The last circle, home to a three-headed Satan, represents the fullest corruption of the divine trinity; punished for his rebellion and rejection of God through the loss of his angelic nature, his six bat-like wings create frigid winds that freeze all movement in ice (*Inferno*, Canto 34, Line 49-50). The stillness, silence and darkness a clear contrast from the circular motion, music and light which characterises the perfection of divinity. In the final canto of the poem Dante's desire to be reunited with God in love is realised as his will is linked with God just 'as wheels that move equilibrium,/ by love that moves the sun and other stars.' (*Paradiso*, Canto 33, Lines 143-145). Lino Pertile in particular has argued the *Paradiso* should be viewed as a 'drama of desire,' the longing of Dante the pilgrim to be reunited with the love of God. See Lino Pertile "'Paradiso': A Drama of Desire,' *Word and Drama in Dante* (Dublin: Irish Academic Press, 1993), 145.

8 Dante, *Divine Comedy*, *Paradiso*, Canto 9, Lines 115-20, 362.

9 Jennifer N. Brown, "Cosmology, Sexuality, and Music in Robert Henryson's *Orpheus and Eurydice*," in *Sexuality, Sociality, and Cosmology in Medieval Literary Texts*, ed. Jennifer N. Brown and Maria Segol (Basingstoke: Palgrave Macmillan, 2013), 152.

10 Robert Henryson, "Orpheus and Eurydice," in *The Poems of Robert Henryson*, ed. Robert L. Kindrick (Michigan: Western Michigan University, 1997). See lines 220-226.

11 Ibid. See lines 428-33.

12 Robert Henryson, "The Testament of Cresseid," in *The Poems of Robert Henryson*, ed. Robert L. Kindrick. (Michigan: Western Michigan University, 1997). See lines 309-344.

to the other, much broader “scholastic” and “mystical” definitions of love in currency throughout the late Middle Ages. For scholastics such as Hermann of Carinthia, the exercise of the intellectual faculties was seen as a way to open up the love of the divine. Thomas Aquinas (1225–1274) famously defined love as knowledge: ‘for nothing is loved except if it be first known,’ he writes in his *Summa Theologiae*.¹³ Consequently, love for theologians involved the operation of the intellect, as it was through the contemplation of divine things that man could know true happiness.¹⁴

Whilst this was enough to satisfy theologians, the mystics of twelfth and thirteenth centuries—figures such as Hadewijch (c.13th century), Mechthild of Magdeburg (c.1207–c.1282/1294), Gertrude the Great (1256–c.1302), and Hildegard herself—saw the sanitised and stripped back version of love propagated by the schoolmen as lacking the passion that characterised “mystical love.” Admired by Hildegard (and possibly modelling her own treatise, *Scivias*, on his *On the Sacraments of Christian Faith*), Hugh of St. Victor (c.1096–c.1141) is an important example of a theologian who blurred the lines between mystic and theologian, and who certainly did not accept the narrow definitional parameters of love that his fellow churchmen expounded.¹⁵ The ‘heart is love’ and it ‘is wholly impossible that there be a heart wishing to live without love,’ he confidently proclaims.¹⁶ This mystical love recognised an intimate personal love shared by each Christian with God; a love so passionate that the religiosity it inflamed could even convince people to leave the safety of their homes and fight in the crusades to recover the Holy Land.¹⁷

Towards the end of the period, the *Mirror of Simple Souls* of Margaret Porette (1250–1310) exemplified the anti-clerical sentiment concerning any form of mystical union with God. Setting herself against the theologians, Porette writes in her prologue that ‘Men of theology and scholars... Will never understand this writing properly’ because they have made ‘reason their guide, which cannot climb where Love and Faith can.’¹⁸ She proceeds to beseech her reader to ‘listen humbly to a brief story of worldly love’ with the understanding ‘that it applies also to divine love.’¹⁹ For mystics from the twelfth century onwards, earthly love could be elided with a higher love of the divine, and the allegory of the relationship between the Church and Christ as one of bride and bridegroom, united in marriage, was commonly employed.²⁰

So where do Hildegard and Hermann fit within these typologies of love and other cosmological works? Although not conforming to one single topos *per se*, both authors were primarily Neoplatonic writers, and their works chiefly blend together the scholastic and mystical love typologies. For Hildegard the “work” or “activity” of the cosmos—itsself a reflection or mirror of God’s power and tangible presence in the universe—is the natural and inseparable expression of divine love.²¹ Hence, Hildegard’s own goddess, Caritas (Divine Love), states: ‘I, the fiery life of divine essence, am aflame beyond the beauty of the meadows, I gleam in the waters, and I burn in the sun, moon, and stars... I am also reason. Mine is the blast of the resounding Word.’²² Thus, I will argue that what Hildegard and Hermann call divine

13 Thomas Aquinas, *Summa Theologiae*, 1:2, Accessed 20 April via: <http://www.newadvent.org/summa/1002.htm>.

14 Colleen McDannel and Bernhard Lang, ed. *Heaven: A History* (New Haven: Yale University Press, 2001), 89.

15 As Barbara Newman has noted, Hildegard’s *Scivias* is both similar in content and its structure to Hugh of St Victor’s treatise written only a decade before in 1134. The twenty-six visions of the *Scivias* in content are similar to the thirty sections of Hugh of St. Victor’s *On the Sacraments of Christian Faith*. See Barbara J. Newman, “Introduction,” in *Scivias*, trans. Mother Cumbria Hart and Jane Bishop (New York: Paulist Press, 1990), p.23.

16 Hugh of St. Victor, *Selected Spiritual Writings*. Accessed online at: https://archive.org/stream/hughofsaintvicto012978mbp/hughofsaintvicto012978mbp_djvu.txt.

17 Jonathan Riley-Smith notably has argued that only ‘love of God’ can explain the motivation of pilgrims during the crusading movement. In a cost-benefit analysis of the rewards of crusading, for most it was an act of charity that motivated crusaders as opposed to tangible, financial reward. See Jonathan Riley-Smith, “The State of Mind of Crusaders to the East, 1095–1300,” *The Oxford Illustrated History of the Crusades*,

ed. Jonathan Riley-Smith (Oxford: Oxford University Press, 1995), 67–90.

18 Margaret Porette, *The Mirror of Simple Souls*, trans. Jack C. Marler and Judith Grant (Notre Dame: University of Notre Dame Press, 1999), 9.

19 *Ibid*, 10.

20 However, when mystical love was taken to its utmost conclusion, this passionate love of God could easily become transformed into something more recognisable an entirely different type of love, ‘sexual love’ (which will not be discussed here). Perhaps the prime example of this is the *Song of Songs*, the fifth book of Wisdom. Opening with the exclamation: ‘Let him kiss me with the kisses of his mouth, because your breasts are better than wine,’ the text represents an unabashed celebration of sexual love and eroticism, albeit in a highly allegorical form. See Mary Dove, ed. *The Ordinary Gloss to the Songs of Songs* (Turnhout: Brepols, 1997), 82.

21 Barbara Newman, *Sister of Wisdom* (Berkeley: University of California Press, 1987), 70. By the term ‘inseparable,’ Hildegard views the ‘divine love’ of God as indistinguishable from the Holy Spirit (which is the third part of the indivisible Trinity) or World-Soul, which performs the “work” of God.

22 Hildegard of Bingen, *Book of Divine Works: With Letters and Songs*, ed. Matthew Fox (Santa Fe: Bear and Company, 1987). See *Vision 1:2*, 8.

love equates to the “work” or “activity” of the World-Soul in the universe. Indeed, despite originating from dissimilar backgrounds and contexts (Hermann being a classically-trained philosopher and Hildegard an “unlearned” abbess) the extracts quoted at the start of this essay demonstrate how similar the roles of divine love in the Hildegardian and Carinthian cosmological models were. Whilst Hildegard saw divine love more as an expression of the Holy Spirit, both she and Hermann clearly characterised it using the language of the Neoplatonic World-Soul, the force (‘above the stars’ and ‘in the depths’) binding together the Platonic Same and Different – the incorruptible celestial realm to the corruptible terrestrial earth. As Hildegard writes in her aptly named, *Antiphon for Divine Love*, love ‘gives herself to all things,’ and as such love is *everywhere* in the cosmos. Hermann too believed love was to be found in ‘every constitution,’ producing the ‘indissoluble knot’ by which the macrocosm was tied perpetually to the microcosm. Evidently then, not only is love prominent in these cosmologies, it is both a mystical and knowledge-based entity that takes centre-stage as the very structure of the universe.

Why Hildegard of Bingen and Hermann of Carinthia?

But, why study Hildegard of Bingen and Hermann of Carinthia? What valuable insights can be gained from such a comparison, particularly since both writers worked in radically different contexts from each other? As John Stuart Mill observed, a comparison is valid as long as there is a “method of agreement,” a single similarity between the phenomena under study.²³ Ultimately, for Hermann and Hildegard, this method of agreement is that both writers’ love cosmologies bare witness to the state of cosmological thought at the time: a great transition between two radically different philosophical systems, Platonism and Aristotelianism. To show this, I will compare Hildegard’s *Scivias* and *Book of Divine Works* to Hermann’s *De essentiis*; all three treatises being vast Neoplatonic compilations, which demonstrate remarkable resemblance to the “framework” of ideas exemplified by the School of Chartres. It is in these works that we will discover that Hildegard and Hermann found themselves situated at the terminus of the Platonic tradition, being part of a school of thought caught up in the beginnings of the gradual transition from a Neoplatonic to an Aristotelian world-view (*Weltanschauung*); a movement stimulated by the translation movement based in Toledo, bringing

Aristotle’s natural philosophy to the Latin West for the first time. Similar to other works of the period such as Bernard Silvestris’ *Cosmographia* (1143-1148), Hildegard and Hermann warn against a ‘simple periodization’ of the twelfth century, as philosophers who both looked ‘back to the earlier tradition of the liberal arts, but also forward to the natural philosophy of the Middle Ages.’²⁴

In terms of manuscript transmission, both Hildegard’s and Hermann’s works register at the lower end of the scale. Despite being an extremely popular work, only ten manuscripts of Hildegard’s *Scivias* are known to exist (only eight survive today), five for her *Book of Life’s Merits*, and only four for her magnum opus, the *Book of Divine Works*.²⁵ Moreover, Hildegard did not even broadcast her naturalistic works, the *Causes and Cures* and the *Physica*, probably since they ‘would not have been so immune to criticism as her great visionary writings.’²⁶ However, that we are in possession of only a few extant copies of her work does not mean Hildegard’s works did not reach a wide audience. Quite the opposite, intellectuals asked for copies of her visionary writings and, considering her status within the institutional Church as a woman, she commanded remarkable influence among the literate, male elite. A case in point is her first work entitled *Scivias*, which was recommended to Pope Eugenius III by Bernard of Clairvaux for its fiery apocalyptic visions, and was likely read out before an ecclesiastical council in 1147. As Katherine Kerby-Fulton has persuasively argued, our modern notion of publication is divorced from the meaning it possessed in the twelfth century. For Hildegard’s twelfth century counterparts “to publish” meant *to make public* (*procendendi in publicum*), as the publication of a text would often be accompanied by a public reading. If the *Scivias* was indeed read out before this council, then as a result the blessing of Pope Eugenius took on the distinct overtones of literary patronage.²⁷ Thus, it appears that of most importance to Hildegard’s audience were her visions of the Last Judgement. It was these sections of her work that were excerpted as florilegia, the most notable being a compendium of her visions of the apocalypse, the 1220

23 John Stuart Mill, “Two Methods of Comparison,” *A System of Logic* (New York: Harper and Row Publishers, 1888), 279-283.

24 Robert N. Swanson, *The Twelfth Century Renaissance* (Manchester: Manchester University Press, 1999), 174.

25 Barbara Newman, “Sibyl of the Rhine,” in *Voice of the Living Light*, ed. Barbara Newman (Berkeley: University of California Press 1998), 25.

26 Forence Eliza Glaze, “Medical Writer,” in *Voice of the Living Light*, 145.

27 Katherine Kerby-Fulton, “Hildegard of Bingen,” *Medieval Holy Woman in the Christian Traditions c.1000-c.1500*, ed. Alistair Minnis and Rosalynn Voaden (Belgium: Brepols, 2010), 351-2.

text, *The Mirror of Future Times* by Gebeno of Eberbach, of which over a hundred manuscripts exist.²⁸ In general, Hildegard's works were rarely copied, undoubtedly due to their daunting length. Therefore, it appears that Hildegard's works were transmitted to a wider audience through Eberbach; and in the eyes of her contemporaries, her scientific and cosmological merit were viewed as secondary in contrast to her writings on ecclesiastical reform.

The situation seems even bleaker for Hermann's *De essentiis*, as three extant manuscripts have been identified, only one of which is contemporary.²⁹ Yet, tracing the distribution and transmission of these manuscripts is easier. Hermann's companion Robert of Ketton may have taken a manuscript to England in the twelfth century, which served as the now lost exemplar for the later fourteenth and fifteenth century manuscripts held at the British Library and Oxford University, respectively.³⁰ Likewise, in 1948, Theodore Silverstein noticed that Bernard Silvestris' *Cosmographia* drew upon the most recent Arabic-Latin astronomy, in particular Abu Ma'shar's *Introductorium maius* as it was disseminated in Hermann's *De essentiis*, suggesting that Bernard Silvestris first read Abu Ma'shar in Hermann's treatise, a fact which indicates the diffusion of Hermann's work among Neoplatonists at Chartres.³¹ Indeed, Richard Lemay has argued the point further, stating that Hermann constituted one of Bernard's "habitual sources," an argument strengthened by the fact that Wetherbee's translation features fourteen references to Hermann of Carinthia and eight to Abu Ma'shar.^{32 33} Mark Kauntze, however, is more sceptical, believing that it is more credible to see Silvestris borrowing from alternate works such as Apuleius' *Asclepius* and the pseudo-Aristotelian text *De mundo*. Nonetheless, the affinity of these ideas does suggest that there was some borrowing of ideas from the *De essentiis* by later Chartrians, or at the very least they knew of the work.³⁴

Despite the rich historiographical tradition surrounding both philosophers, the subject of divine

love has not been systematically explored.³⁵ Indeed, even when the parameters are narrowed to divine love, the range of themes possible in these two thinkers remains expansive. Therefore, after beginning with a chapter detailing an overview of twelfth century philosophy, this essay will proceed to analyse four interconnected aspects of Hildegard's and Hermann's works, in areas I believe fresh insights can be generated: (1) cosmological structure, (2) the goddess tradition, (3) the "Harmony of the Spheres," and finally, (4) the creation of man. In the first chapter, my investigation of divine love will begin with an exploration of the Neoplatonic dualism of the "cosmic egg" of Hildegard's *Scivias* and its similarity to Hermann's cosmos constructed on the harmonious Neoplatonic proportions of the Same and Different essences. The second chapter will then discuss Hildegard's own goddess, Caritas. Following this, the third chapter explores divine love as a manifestation of the Pythagorean doctrine of the "Harmony of the Spheres," the popular idea that celestial orbits were regulated by musical harmonies. To conclude, the fourth chapter will analyse the Hildegardian and Carinthian ideas of creation as an expression of both divine love and musical harmony – a theme that unites the three previous chapters, to emphasise the degree of unity within the Neoplatonic cosmos.

The School of Chartres Framework

The world of Hildegard of Bingen and Hermann of Carinthia was one of renaissance. The century started with the rudimentary outline of the seven liberal arts and ended with Roman and canon law, Aristotle, Euclid and Ptolemy, and was in possession of a "new philosophy" and a "new science."³⁶ At the dawn of the twelfth century there were three main "intellectual centres" or nexus points at which knowledge converged and was subsequently diffused:

28 Newman, "Sibyl of the Rhine," 25.

29 Hermann of Carinthia, *De Essentiis*, 57.

30 *Ibid*, 57-66.

31 Theodore Silverstein, "Fabulous Cosmogony," *Modern Philology* 46 (1948): 96.

32 Richard Lemay, *Abu Ma'shar and Latin Aristotelianism in the Twelfth Century* (Beirut: American University Press, 1963), 282.

33 Bernard Silvestris, *Cosmographia*, trans. Winthrop Wetherbee (New York: Columbia University Press 1973), 174-177.

34 Mark Kauntze, *Authority and Imitation: A Study of the Cosmographia of Bernard Silvestris* (Leiden: E. J. Brill, 2014), 69.

35 I am indebted to scholars such as Charles Burnett, Peter Dronke and Barbara Newman who have explored Hildegard's and Hermann cosmology. However, the topics of cosmology, music and creation are generally treated atomistically. Thus, this dissertation aims to show how these topics were harmonised together in Hildegard and Hermann's world-view. For publications by the above see: Charles Burnett and Peter Dronke, *Hildegard of Bingen: The Context of her Thought and Art*, ed. C. Burnett and P. Dronke (London: The Warburg Institute, 1998); Barbara Newman, *Sister of Wisdom: St Hildegard of Bingen's Theology of the Feminine* (Berkeley: University of California Press, 1987) and Barbara Newman, *Voice of the Living Light: Hildegard of Bingen and Her World* (Berkeley: University of California Press, 1998).

36 Charles Homer Haskins, *The Renaissance of the Twelfth Century* (Cleveland: World Publishing Company, 1957), 6-7.

monastic schools, princely courts and cathedral schools.³⁷ The School of Chartres exemplifies the last kind, and is connected with the Neoplatonism of Hermann, and to a lesser extent, Hildegard.

Importantly, at Chartres was the realisation that ‘advances, discoveries and recoveries in all fields of learning were part of a single whole.’³⁸ The twelfth century witnessed a “re-discovery of nature,” as contemporaries realised they were ‘themselves caught up within the framework of nature, [and] were themselves bits of the cosmos.’³⁹ Consequently, there were no “just scientific discoveries” as theology and philosophy were indistinguishable from one another, everything possessing a deeper symbolic connection to the divine. We see this in the words of Hildegard’s contemporary, Hugh of St. Victor, who writes in his *Didascalion* that ‘every nature tells of God; every nature teaches man; every nature reproduces its essential form, and nothing in the universe is infecund.’⁴⁰ Within Hugh of St. Victor’s thought we can perceive the growing trend to view nature in terms of “physico-theology,” the idea of observing natural phenomena as an expression of the theophany of God. Throughout this period, scholars were ‘building up proofs and gathering illustrations of the existence of God from the world of nature observable on earth.’⁴¹ Early on, the School of Chartres placed importance on natural philosophy, privileging the utility of the mathematical quadrivium for understanding the cosmos.⁴² Chartrians such as Thierry of Chartres built hierarchal systems and recognised the quadrivium’s “four-roads”: arithmetic, geometry, music, and astronomy as the “steps” trodden in an ordered progression to the divine.⁴³

The supreme architectural expression of the Neoplatonic worldview is the Cathedral of Our Lady of Chartres, the first High Gothic church in all of France and a structure built ‘to express the very human desire to surge toward the skies.’⁴⁴ Figure 1 shows the right tympanum

of the Royal Portal, in which Christ as the *Sedes Sapientiae* (‘seat of wisdom’) is placed at the centre of the portal, with the *voissoirs* surrounding the Logos constituting a recreation of the cosmos in miniature, embodying how wisdom is passed to man from God through the liberal arts.⁴⁵



Figure 1. Chartres. Royal Portal, Right tympanum.
Photo: Nick Thompson, Flicker.

Clockwise from the lower left to the lower right are female goddess-like personifications of each liberal art, beneath which their key patrons are recreated in stone: Priscian for Grammar, Aristotle for Dialectic, Cicero for Rhetoric, Euclid for Geometry, Boethius for Arithmetic, Ptolemy for Astronomy and Pythagoras for Music.⁴⁶

If we turn our attention to Figure 2 we see Pythagoras situated at the base of the inner archivolt and staring attentively at his vellum, a quill in his right hand and a penknife in his left to hold the vellum still and scrape away any mistakes. Clearly, Pythagoras ‘concentrates on getting it right, and is ready to correct his errors.’⁴⁷ He is studiously engaged in thought and judgement – the process of “ontopoiesis” – which underlies the Chartrian belief that it is the *process of thought* that opens up the divine.⁴⁸ It is Bernard of Chartres’ famous statement that the moderns (*moderni*) of the Middle Ages were like “dwarves perched upon the shoulders of giants” recreated in stone, as Music/

37 Ibid, 32.

38 Peter Ellard, “Sacred Cosmos” (PhD. Diss., Fordham University, 1999), 27.

39 Marie-Dominique Chenu, *Nature, Man, and Society in the Twelfth Century* (Chicago: University of Chicago Press, 1957), 5.

40 Hugh of St. Victor, “Didascalion,” in *Medieval Literary Theory and Criticism c.1100-c.1375*, ed. Alistair J. Minnis and A. Brian Scott (Oxford: Clarendon Press, 1991), 82.

41 Clarence Glacken, *Traces on the Rhodian Shore* (Berkeley: University of California Press, 1967), 177.

42 Haskins, *The Renaissance of the Twelfth Century*, 98.

43 Henry Chadwick, *Boethius: The Consolations of Music, Logic, Theology, and Philosophy* (Oxford: Clarendon Press, 1990), 72.

44 Patricia Trutty-Coohill, “Pythagoras in the Sacred Cosmos of

Chartres Cathedral,” *Phenomenology of Space and Time*, ed. Ann-Teresa Tymieniecka (New York: Springer Press, 2014), 39.

45 Ibid, 46.

46 Ibid, 46.

47 Ibid, 7.

48 Ibid, 52. “Ontopoiesis,” meaning the self-creative activity of consciousness: a concept borrowed from the study of phenomenology.

Harmony is literally being supported on the hunched shoulders of Pythagoras.⁴⁹ Like their human philosophers working at Chartres, ‘the arts can see further because they stand on the shoulders of real human giants.’⁵⁰



Figure 2. Pythagoras. Chartres. Royal Portal, Right Archivolt.
Photo: Nick Thompson. Flicker.

In a world in which theologians wrote under the omnipresent threat of censure, Thierry of Chartres’ decision to broadcast the Neoplatonic cosmos into the “public sphere” represents a bold statement of the Chartrian agenda.⁵¹ For spatial reasons, this essay cannot engage

49 The only known evidence for Bernard’s statement is John of Salisbury. See John of Salisbury, *Metalogicon*, trans. Daniel McGarry (Gloucester: Peter Smith, 1971), 167.

50 Trutty-Coohill, “Pythagoras in the Sacred Cosmos,” 53.

51 The term “public sphere” is taken from the pioneering work of Jürgen Habermas who distinguished between the “private” or domestic sphere (*Intimsphäre*) and that of the world of letters and social institutions that comprised the public sphere. See Jürgen Habermas, *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*, trans. Thomas Burger (Cambridge: MIT Press, 1989), in particular

with the debates over the School of Chartres, which also have been discussed in greater length by other historians.⁵² Nevertheless, it must be said that whilst it is a moot point as to whether Chartres was an international nexus for Platonism, what we can be fairly certain of is that something resembling a “network” in its basic structure did exist. Winthrop Wetherbee, the exponent of what R. W. Southern has dubbed the “New Chartrian Hypothesis,” has argued that the ideas underpinning the “School of Chartres” are best seen as a ‘convenient label for a body of ideas.’⁵³ This is plausible, as whilst the institutional particularities of Chartres remain ambiguous, its general characteristics can at least be identified. Borrowing upon the terminology of Max Weber, the core ideas constituting the Chartrian School are best seen as a “framework” or mutable “ideal type,” which included:

- (1) The humanistic and scientific investigation of nature to understand the universe.
- (2) An understanding of humanity’s place in creation expressed in Neoplatonic ideas of the World-Soul.
- (3) The belief that all knowledge gained through the quadrivium and trivium could be consolidated and synthesised as an extension to the divine.

Clearly, Hermann of Carinthia fits this ideal type. In his preface to Ptolemy’s *Planisphere*, he praises Thierry of Chartres (c.1100-1150) as his ‘teacher’ suggesting Hermann likely studied at Chartres.⁵⁴ More significantly, his 1143 cosmological treatise *De essentiis* exemplifies the Chartrian methodology of “imitatio” *par excellence*, attempting the grandiose task of synthesising the knowledge of the ancients with Arabic science. As Robert Swanson has noted,

pages 27-31.

- 52 The most vocal critic is Robert W. Southern who has argued that the importance of Chartres has been grossly over-exaggerated in comparison to other scholastic centres, namely Paris. ‘The idea of a large-scale or a distinctive contribution by the school of Chartres is based on a combination of errors, and must be abandoned,’ he writes. Robert W. Southern, “Chartrian Humanism: A Romantic Misconception,” *Scholastic Humanism and the Unification of Europe*. Vol. 1: Foundations (Oxford: Blackwell, 1995), 58-101.
- 53 Winthrop Wetherbee, *Platonism and Poetry in the Twelfth Century* (Princeton: Princeton University Press, 2015), xii.
- 54 “Preface to Ptolemy’s *Planisphere*,” in Hermann of Carinthia, *De Essentiis*. See Appendix II, 349. Hermann refers to Thierry as “Preceptor Theodorice”. As Burnett notes: ‘this is evidently more than a title of respect... it does suggest that he was educated amongst the group of intellectuals associated with Thierry,’ 4.

Hermann of Carinthia is the ‘prime example’ and witness to this new system of thought, a bridge between the “old” Platonic world and the beginning of a world soon-to-be dominated by “The Philosopher,” Aristotle. In particular, Hermann’s occupation as an Arabic translator in the Ebro valley gave him unrivalled access to the “underground tradition” of Aristotle.⁵⁵ Consequently, Hermann believed himself to be the “cutting edge” of scientific re-discovery and consolidation, writing in the preface to the *De essentiis* that its purpose is to make known ‘the depths of the treasures of the Arabs.’⁵⁶ In fact, Hermann introduced Ptolemy at least seventeen years before the first known translation, alongside “new” thinkers, including Abū Ma’shar, al-Kindi, Hermes Trismegistus and al-Battāni.⁵⁷ A general survey of the authorities cited by Hermann indicates this influence (see Figure 3), as he references Abū Ma’shar (thirteen citations) by name more than any other author, except Ptolemy (sixteen citations). In the *De essentiis*, an Arabic authority accompanies each Latin authority, correlating to Hermann’s Chartrian desire to produce a cosmology of consolidation, reconciling Plato and Aristotle.

Hildegard’s *Scivias* (short for *Scito Vias Domini* or “Know the Ways of the Lord,” c.1151/2) and her *Liber divinorum operum* (“Book of Divine Works,” c.1161) too are impressive Neoplatonic compendiums of a similar, but also different kind of calibre. Both her egg cosmology in the *Scivias* and her love cosmology in the *Book of Divine Works* borrow heavily on Neoplatonic themes, but are blended with Christian doctrine. Similarly, Hildegard’s figures of Caritas and Sapientia borrow on the goddess mythology, a tradition repeatedly evoked throughout the Middle Ages.⁵⁸ Whilst claiming to be unlearned, Hildegard was a significant contributor to renaissance of the twelfth century and her numerous letters show that she was linked to the “cult of friendship” of this period.⁵⁹ Unless more evidence presents itself, historians can only speculate as to how

Authority	No. Citations
Abu Ma’shar	13
Al-Battāni	5
Apollonius Thebanus	3
Apulieus	1
Aratus	1
Archimedes	1
Aristotle	8
Astalius	2
Augustine	1
Boethius	5
Cicero	3
Dorotheus	1
Eratosthenes	1
Euclid	4
Galen	1
Hermes Trismegistus	13
Hipparchus	1
Martianus Capella	1
Māshā’allāh	2
Nichomachus	1
Plato	11
Pliny	1
Ptolemy	16
Pythagoras	1
Rutilius Palladius	1
Socrates	1
Solinus	1
Theodosius	2
Theophrastus	1
Varro	2
Vitruvius	1

Figure 3. A table of my own construction showing the authorities directly cited by Hermann of Carinthia in the text of *De essentiis*.

55 Swanson, Twelfth Century Renaissance, p.107. Charles Burnett suggests in the *De Essentiis* that Hermann’s knowledge of Aristotle originated through a series of intermediaries such as al-Kindi, Qusta ibn Lūqā and al-Fārābī (see 33-35). A total of eight direct citations are attributed to Aristotle in the text of *De Essentiis*, suggesting some familiarity with his works.

56 Hermann of Carinthia, *De Essentiis*, 6.

57 Ibid, 29. The earliest known translation of Ptolemy from the Arabic was Gerard of Cremona made in 1175 at Toledo.

58 Martianus Capella’s figure of Philology in his *Marriage of Philology and Mercury* began this tradition. It was built upon by Boethius with his *Lady Philosophy*, and, most notably, popularised by Bernard Silvestris’ and Alan of Lille’s personification of nature as *Natura*.

59 Swanson, Twelfth-Century Renaissance, 197.

learned she really was. Yet, in a period in which visionaries were judiciously scrutinised by the Church for their validity, it is likely that Hildegard downplayed her learning as a deliberate technique to avoid crossing the fine line between being heralded as mystic or being branded as a heretic. Hildegard notably begins the *Scivias* with a disclaimer to add veracity to her claims, a declaration entitled: ‘These are True Visions Flowing from God.’ Throughout the work she also alternates between speaking about God in the third

person and to speaking *through* him in the first person.⁶⁰ She is adamant that her source of knowledge is the “Living Light,” or God, who in a letter to Bernard of Clairvaux, she writes chose to reveal to her ‘the inner meaning of the exposition of the Psalter and the Gospel.’^{61 62} These techniques would certainly have aided her in constructing her image as a mystic with a unique channel to God.

Clearly, Hildegard was not the first female visionary or writer of theology; the works of others – names such as Perpetua, Egeria, Baudonivia, Dhuoda and Hrotsvitha – too were remarkable, but had fallen into silence during the twelfth century and were unknown to her.⁶³ To place Hildegard in context, she is often compared with fellow abbess, Herrad of Landsberg, who began composing her treatise *Hortus deliciarum* (“The Garden of Delights”) four years before the point of Hildegard’s death in 1175. Indeed, the similarities are palpable. Both works featuring lavish imagery alongside text primarily dedicated for the didactic purpose of teaching fellow women; both were salvation histories; finally, both presented scathing critiques of the institutional Church. As is evident from Figure 4, Herrad’s illustration depicting the Seven Liberal Arts indicates that both women experienced a traditional “Chartrian” education in the liberal arts.⁶⁴ Yet despite these apparent similarities, there is little that marks the *Hortus deliciarum* as a “women’s book,” being devoid of the goddess imagery, sexual metaphors and rhetorical strategies to circumvent scholastic methodologies prominent in Hildegard corpus of works.⁶⁵ Ironically, Herrad displays more similarities to Hermann than Hildegard, citing her authorities meticulously in the manner of a scholastic theologian. By

contrast, Hildegard stood outside of this elite, masculine Latin culture. The twelfth century had seen the positions of women ever-increasingly defined, with the gender double standards from the growing cult of the Virgin Mary narrowing female power and influence away from masculine spheres into concentrated female ones.

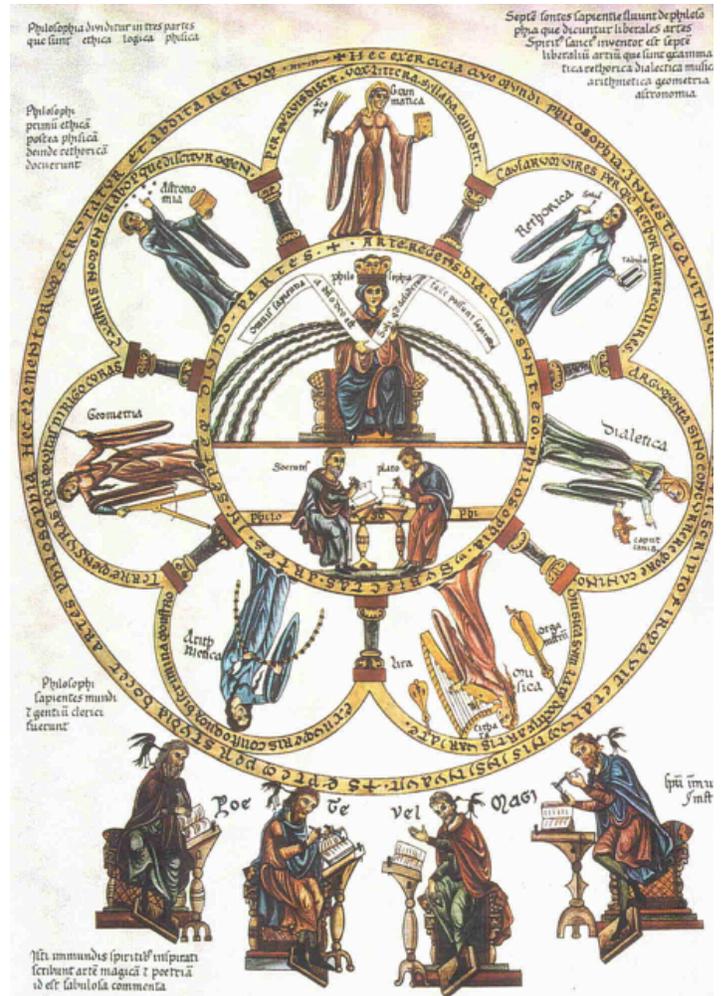


Figure 4. *The Seven Liberal Arts*. Herrad of Landsberg, *Hortus Deliciarum*.

Source: Wikipedia Commons.

60 Hildegard of Bingen, Scivias, trans. Mother Colombia Hart and Jane Bishop (New Jersey: Paulist Press, 1990), 60. This acts as a disclaimer to counter the misogyny inherent in the institutionalised Church that women should not advise on theological matters, a strictly masculine sphere of interpretation.

61 Ibid, 59.

62 Hildegard of Bingen, “Letter to Bernard of Clairvaux,” in Hildegard of Bingen: Selected Writings, trans. Mark Atherton (London: Penguin Books, 2001), 3.

63 Hildegard of Bingen, Scivias, 9.

64 In the illustration Philosophy personified as a woman is located in the inner circle. Below Socrates and Plato studiously engaged in copying down her truths. From Philosophy flow seven rivers, connected to each goddess personifying a specific liberal art around the inner circle. Philosophy is clearly the fountain of all knowledge: a point made evident by the four figures at the bottom that are copying down falsehoods whispered to them in their ears by evil spirits.

65 Fiona J. Griffiths, *The Garden of Delights: Reform and Renaissance Women in the Twelfth Century* (Philadelphia: University of Pennsylvania Press, 2007), 7-8.

Paradoxically, since ‘all other women contrasted unfavourably with Mary,’ the growing status of the Virgin was tied to the increasing compartmentalisation of the status of women into the domestic roles prescribed by the institutional Church.

Although women remained powerful in these private, closed off spheres such as the home and the monastery, in the minds of both men and women alike, the growing standard of comparison for the female sex was a model of unobtainable purity, one based on the exemplar of the

divine chastity and piety of Mary.⁶⁶ As an intellectual, Herrad was able to work within Scholasticism on its own terms, but this was the exception, not the general rule for women, and is likely due her adaptation of the scholastic method and vocabulary. Hildegard certainly knew of these gender roles as she and her writings were shaped by the prevailing conditions of the time. But even though gender roles were becoming increasingly fixed, working within them, and utilising their boundaries could be a powerful tool. The *Scivias* and *Book of Divine Works* are witnesses to a skilful strategy on Hildegard's part, a strategy that exploited the contradiction at the heart of Christianity that God exalted the meek and powerless. As Hans Liebeschütz suggested as early as 1930 in his pioneering monograph on Hildegard, her writings fit into the dual genre of allegory and that 'of the unlettered holy man, whom God makes wise with a wisdom which is not his own.'⁶⁷ This was a tradition Hildegard would have been familiar with through the *Vitae* of the earliest monks and desert Fathers.⁶⁸ Women, especially holy women, were included in this "unlettered" category, and could command influence because of their perceived difference by men who assumed women, on account of their liminality from the male ecclesiastical hierarchy possessed a unique channel to the divine.⁶⁹ Therefore, Hildegard did not reference her authorities like Hermann or Herrad precisely because of the fact that dispelling her masculine claims to learning fed into the female mystic tradition. This tradition was not a new one, having roots in holy men of the desert, but the growing cult of the Virgin Mary it intersected with gave female spirituality a new vitality in this period. As such, it is no coincidence that there is a preponderance of divinely elected women at this time, Hildegard included, who were seen as conduits between heaven and earth, man and God. These privileged few women were recognised by the Church as being given the responsibility directly by God for hearing, or more aptly in Hildegard's case, seeing his message through the medium of visions, in order to spread God's word throughout Christendom.

(1) Cosmological Structure as an Expression of Divine Love

In the third vision of Hildegard of Bingen's *Scivias* we are introduced to the Hildegardian cosmos (see Figure 5).



Figure 5. *The Cosmic Egg Universe. Scivias, Book One, Vision Three.*
Source: Wikimedia Commons.

Of particular importance is the structure of the universe, the firmament being 'in the shape of an egg, small at the top, large in the middle and narrowed at the bottom,' surrounded by a 'bright fire' in which the sun and the three other planets are contained.⁷⁰ At its centre, the earth and its elements are situated, enveloped by flower shaped stars and the three remaining planets, the whole universe kept in harmony by four winds, issuing forth from the four corners of the cosmos.

In the Chartrian tradition, Hildegard invites the

66 Ann Storey, "A Theophany of the Feminine: Hildegard of Bingen, Elisabeth of Schönau, and Herrad of Landsberg," *Woman's Art Journal* 19 (1998): 16.

67 Charles Burnett and Peter Dronke, *Hildegard of Bingen: The Context of her Thought and Art* (London: The Warburg Institute, 1998), 2.

68 *Ibid.*, 2.

69 Griffiths, *The Garden of Delights*, 6.

70 Hildegard of Bingen, *Scivias*, 3:1, 93.

reader to crack open the shell “covering” (*integument*) the cosmic egg, to unpick its symbolism. Allegorically, she exclaims the shape represents ‘Omnipotent God, incomprehensible in his majesty.’⁷¹ As Kent Kraft has convincingly shown, the underlying shape of the cosmos is that of a mandorla, the almond-shaped enclosure, which iconographically symbolises the magnificence of Christ.⁷² Significantly, the mandorla is also the geometric shape produced from two intersecting circles. Thus, I suggest the egg shape of Hildegard’s cosmos is the physical depiction of divine love, a cosmic imagining of the Father and Son as intersecting circles emanating forth the World-Soul or Holy Spirit, an image of the Trinity subsequently encountered in the final canto of Paradise in the *Divine Comedy*.⁷³ As the World-Soul was responsible for the perpetual emanation of life throughout the cosmos, it is no coincidence that the egg shape also mirrors eschatological history. Hildegard writes that humanity was ‘at first rude and rough’ but became ‘enlarged through the Old and New Testaments,’ correlating to the widening shape of the egg.⁷⁴ The narrow endpoint of the egg anagogically heralds the Last Judgement and End of Days, a period ‘beset with many tribulations.’⁷⁵

Hildegard’s Christianisation of the egg’s shape was clearly novel. However, some parallels can be drawn with the image of the Orphic egg in Antiquity, from which Phanes or Eros, the first-born of the gods (Protogonos) was created. Aristophanes in *Birds* (Lines 693-702) wrote of the universe:

At the beginning there was only Chaos, Night, dark Erebus, and deep Tartarus. Earth, the air and heaven had no existence. Firstly, blackwinged Night laid a germless egg in the bosom of the infinite depths of Erebus, and from this... sprang the graceful Eros with his glittering wings, swift as the whirlwinds of the tempest.⁷⁶

The epithet “germless” or “sterile” Aristophanes applies to the egg can alternatively mean ‘born or wafted on the

71 Ibid, 3:2, 94.

72 K. Kraft, *The Eye Sees More than the Heart Knows: The Visionary Cosmos of Hildegard of Bingen* (PhD. Diss., University of Wisconsin, 1977), 256-57.

73 ‘There appeared to me/ three circling spheres, three-coloured, one in span./ And one, it seemed was mirrored by the next/ twin rainbows, arc to arc. The third seemed fire,/ And breathed to first and second equally.’ See Dante, “Paradiso,” in *Divine Comedy*. Canto 33, lines 116-120, 481.

74 Hildegard of Bingen, *Scivias*, 3:2, 94.

75 Ibid, 3:2, 94.

76 Aristophanes, *Birds*. Lines 693-702. Accessed via Perseus, see bibliography for details

wind’ or ‘wind egg.’⁷⁷ Aristotle writes in *De Anima* that “wind eggs” are those produced by the female hen without male impregnation, and are connected to the idea that the soul, either ‘is itself air or being a similar substance is blown about by the winds and is drawn into the bird at birth.’⁷⁸ It should not be forgotten that Hildegard’s cosmic egg is regulated by four winds, and in Latin, the noun ‘soul’ (*anima*) alternatively means breathe. Lexically, the Greek *psyche* historically possessed similar connotations. Similarly, the alternate name for Eros or Phanes is Metis, denoting “wisdom” or “council”. Therefore, if we transpose these meanings onto Hildegard’s vision, the image of the cosmic egg symbolising divine wisdom, which continuously moves the soul or breathe of life into all creation through the four cardinal winds seems plausibly connected to a string of ancient symbolism. So too is Hildegard’s connection with the egg to the Last Judgement substantiated. The three-fold idea that matter existed originally in a confused mass, was then subsequently separated, shaped and given form, and finally returns to its primordial confusion with the end of time is corroborated by original Greek commentaries on the egg. Concerning the above Orphic image of the cosmic egg, Orpheus’ pupil, Musaios, wrote that: ‘Everything comes to be out of One and is resolved into One.’⁷⁹ Though it is tempting to say there is a direct connection, without further evidence this must remain a purely speculative hypothesis, as it is unclear if Hildegard knew of these ancient symbolisms. Furthermore, this set of ideas in their most general form – that of a cosmogony in which matter is created and returns to its original form – is mirrored by a number of religious philosophies. Nonetheless, it is safe to say that we can see borrowing of the ancient Orphic egg shape, but one subject to Christianization by Hildegard to bring it in line with Christian creation theology.

In 1917, Charles Singer posited that the egg shape was inspired by Hildegard’s misunderstanding of *Mappaemundi* charts that presented the surface of the earth as an oval.⁸⁰ However, due to her learning, it is unlikely that Hildegard would have made such a mistake. To fully understand Hildegard’s egg-shaped cosmos, a helpful question to ask is: who was the first to use the egg as a symbol of creation? Whilst unusual, her cosmos is not as idiosyncratic as it initially seems; as already mentioned, the idea of the egg as the shape of the vault of heaven had been common since Aristotle in the fourth century

77 William Keith Chambers Guthrie, *Orpheus and Greek Religion* (Princeton: Princeton University Press, 1952), 94.

78 Ibid, 94.

79 Ibid, 74-75.

80 Charles Singer, “The Visions of Hildegard of Bingen,” *Yale Journal of Biology and Medicine* 78 (2005): 65.

B.C.⁸¹ The prominence of the egg in some form in Vedic, Egyptian, Phoenician, Indian, Chinese, and particularly Greek cosmology in the aforementioned Orphic Egg, is suggestive of a high degree of cultural transference, borrowing and subsequent reshaping of specific elements of the myth across the Antique world.⁸² Even within one specific tradition, there could be several different versions of the myth; for example, the Orphic accounts of Aristophanes, Hieronymus, Hellanicus and the *Rhapsodies* each accepted or rejected different elements of the myth.⁸³ What is clear is that the cosmic egg came to the Middle Ages through figures such as the Roman philosopher Varro (B.C.116-B.C.27) and Cassiodorus (c.485-c.585) who had likened heaven to an eggshell, the yolk being the earth and the albumen the air.⁸⁴ Most notably, Martianus Capella's (c.365-440) *Marriage of Mercury and Philology* popularised this image in the psyche of the early-Middle Ages. In Capella's mythic poem, Philology is given a goblet to drink whose contents had:

The appearance of an egg inside, but its outside shone [glinted with red], being anointed with saffron, within that, it seemed transparent with void and a white humour, and then something more solid at the centre.⁸⁵

Here, the goblet represents the elemental cosmos in liquid form, the 'red' representing the fiery shell, the 'pellucid void' air, the 'whitish moisture' water and the 'saffron yellow' yolk, the earth. Thus, for Philology this is the 'goblet of immortality,' as when she drinks this "cosmic egg" 'her limbs are strengthened with new vigour... the power of earth leaves her, and there comes to her the immortality of heaven...'⁸⁶ For Philology, 'it is her first taste of the celestial world, and in absorbing the 'universe' she at the same time absorbs the divine life-giving power with it,' wrote Regimus of Auxerre (c.841-908) in his

commentary on this passage.⁸⁷ Unmistakably then, Regimus understood this animating force to be the Platonic World-Soul, a connection Peter Abelard (c.1079-1142) too made when he envisioned the cosmos as an egg in his *Expositio in Hexameron*, albeit in a Christianised version. Abelard had identified the World-Soul with the Holy Spirit, a force that nurtured and gave life to the world 'like a bird warming its egg, from whose different elements life came into being.'⁸⁸

Despite there being a rich "cosmic egg" tradition, Hildegard's cosmology is unique, for whereas other twelfth century cosmologists presented the world-egg purely schematically, 'Hildegard presents a turbulent drama of cosmic processes inside.'⁸⁹ It becomes a dynamic balancing act, containing a volatile mixture of destructive elemental forces: dark fire, whirlwinds, jagged stones, thunder and lightening – all threatening the stability of the cosmos. Amidst this chaos, the only stability seems to be the zone of watery air, which gives forth a 'pleasant and softly falling rain.'⁹⁰ However, the egg does not, like Abelard's, hatch into a fully formed universe. Instead, 'it is the universe in flux, exposed to the never-ending interplay of divine and demonic forces.'⁹¹ As Figure 5 shows, the bright celestial fire of the firmament is surrounded by 'a shadowy zone under it.'⁹² Much like the opposing elements bound together in pact of friendly trust in Hermann's description of the Neoplatonic Same and Different or the Manichean idea of dualism, these opposing light and dark forces are constantly at play. Neither is this an isolated example, for in the *Causes and Cures*, Hildegard's cosmogony is one in which 'the material of the world came out of [God's] will still unformed and like a dark mass.'⁹³ As such, these two texts demonstrate clear parallels to the figure of Hyle/Silva (primordial matter) in Bernard Silvestris' *Cosmographia*. This Neoplatonic influence in Hildegard's cosmos is unsurprising since Hildegard had access to Plato's *Timaeus*

81 Rudolph Simek, *Heaven and Earth in the Middle Ages*, trans. Angela Hall (Woodbridge: Boydell Press, 1992), 20.

82 For the most comprehensive explanation of the subject see the previously cited Guthrie, *Orpheus and Greek Religion* (Princeton: Princeton University Press, 1952), 90-92.

83 Eugenio R. Martínez Luján, "The Cosmic Egg," in *Tracing Orpheus: Studies of Orphic Fragments*, ed. Miguel Herrero de Jáuregui et al (Berlin: Walter de Gruyter, 2011), 86.

84 Peter Dronke, *Fabula: Explorations Into the Uses of Myth in Medieval Platonism* (Leiden: E. J. Brill, 1985), 80.

85 Martianus Capella, *The Marriage of Philology and Mercury*, trans. William Harris Stahl and Evan L. Burge (New York: Columbia University Press, 1977), 48.

86 *Ibid.*, 48.

87 Dronke, *Fabula*, 82, in *Commentum in Martianum Capellam*, ed. C. E. Lutz (Leiden: 1962), 177. Interestingly, this action of swallowing the world is paralleled in the Orphic accounts on a much greater level as Zeus being 'created' becomes the 'creator' by swallowing Phanes, and takes in all of creation: 'Thus then engulfing the might of Erikepaios, the First-born, he held the body of all things in the hollow of his own belly; and he mingled with his own limbs the power and strength of the god.' See Guthrie, *Orpheus and Greek Religion*, 81.

88 Constant Mews, "Religious Thinker," *Voice of the Living Light*, 59.

89 Dronke, *Fabula*, 67.

90 Hildegard of Bingen, *Scivias*, 3:1, 93.

91 Dronke, *Fabula*, 97.

92 *Ibid.*, 3:1, 94.

93 Hildegard of Bingen, "Causes and Cures," in *Hildegard of Bingen: Selected Writings*, 93.

in Calcidius' incomplete translation.⁹⁴ Yet, this work was subordinate to theology. Similar to Abelard's cosmos, Hildegard's own is subject to Christianisation, becoming an ambiguous blend of Christian and Neoplatonic creation myths. On her explanation of the second whirlwinds, Hildegard states that this symbolises the 'rage of the Devil... who sends out the worst dishonour and the most evil utterances' which diffuse throughout the world, corrupting people.⁹⁵ The dark fire is explained in similar terms, Hildegard writing that 'you cannot look at it' because it represents Satan's 'most evil and most vile snares vomiting forth blackest murder.'⁹⁶ These extracts show that her cosmos is more "organic" as opposed, to what we will see is, the "mechanical" *machina mundi* (machine of the world) style universe Hermann supports.⁹⁷ As a mirror of the human organism, in the Hildegardian cosmos "evil" and man's original sin abound in equal amounts with the divine, a dualism that Hildegard attempts to harmonise. Therefore, although Hildegard's cosmology on the surface appears idiosyncratic, under the surface, when each layer of *integument* enveloping her cosmic egg is "uncovered," her cosmos manifests itself as intricately interwoven with theological and Neoplatonic symbolism. In fact, when compared to Hermann of Carinthia's palpable parallels in Neoplatonic influence present themselves, in particular the idea of a World-Soul which binds the chaotic mixing elements – the Neoplatonic Same and Different in harmony.

Hermann's *De essentiis* (*On the essences*), as indicated by the title, concerns a cosmology produced from the union of un-mixing celestial "essence" (the Same, the material of the seven planetary spheres and the eighth sphere of the fixed stars) with corruptible, mixing "substance" (the Different, the material comprising the four parts of the sublunary world). Both originate from what he calls "primordial seeds" or the four elements: fire, air, water and earth.⁹⁸ The fact that both the macrocosm and microcosm are composed of the same four elements in an ordered hierarchical degeneration from the divine indicates the symmetrical unity in the structure of the universe. As Hermann explains, the Creator-Demiurge 'divided the

whole mass of seeds into a higher and a lower part, calling them 'Substance' and 'Essence'... so that the generation of things might result from the mixture.'⁹⁹ In this cosmology, the masculine 'active' essence is joined to the feminine 'passive' substance in order to link them by 'the tightest bonds' in a 'pact of friendly trust.'¹⁰⁰ For Hermann the opposing genders of essence and substance allow for a bond of love to be established, and harmony to be created from opposition.

Here, Hermann seems to have been influenced by Boethius, whom he cites most out of his Latin authorities, and is the sole writer to be attributed the honorific title 'our family' (*familiaris noster*).¹⁰¹ As Boethius had previously wrote in his *Consolations of Philosophy*, if the chains binding the cosmos were to slacken, 'all that is now joined in mutual love, would wage continual war, and strive to tear apart the world which is now sustained in friendly concord by beautiful motion.'¹⁰² Indeed, Hermann describes the bond of love in terms of an everlasting marriage: 'He married single mixtures from each sex, by a lawful bond.'¹⁰³ The word "marriage" carries inseparable connotations of a perpetual and unbreakable union, and in a Christian context, evokes the marriage of Christ to the Church. It is here that we can see the difference between Hermann's "mechanical" cosmology and the "organic" universe of Hildegard. Hermann privileged the role of mathematics in his universe, viewing the "marriage" between essence and substance as one of mean proportion: 'in the lowest part of Essence [He placed] what was contrary to the highest part of Substance.'¹⁰⁴ Such a relationship Hermann goes on to say 'is called in Euclid 'equal proportion' – the most tight bond of all things.'¹⁰⁵ This image is also replicated in the *Cosmographia* in the marriage of Silva to the World-Soul, Endelechia, but the supreme authority for both is Plato. Hermann knew Plato's *Timaeus* intimately, hence the citing of Euclid and stress on proportion emphasize his Platonic belief that the World-Soul is fashioned through

94 Peter Dronke, "The Allegorical World-Picture of Hildegard of Bingen," in *Hildegard of Bingen: The Context of her Thought and Art*, ed. Charles Burnett and Peter Dronke (London: The Warburg Institute, 1998), 10.

95 Hildegard of Bingen, *Scivias*, 3:9, 96.

96 *Ibid.*, 3:10, 96.

97 Dennis Doyle, "Vision Two of Hildegard's Book of Divine Works: A Medieval Map of a Cosmic Journey," *Pacifica* 20 (2007): 153.

98 Hermann of Carinthia, *De Essentiis*, 91-93.

99 *Ibid.*, 113.

100 *Ibid.*, 113.

101 *Ibid.*, 158. Five citations are attributed to Boethius (see Figure 3).

102 Boethius, *Consolations of Philosophy*, 32.

103 Hermann of Carinthia, *De Essentiis*, 113.

104 *Ibid.*, 115.

105 *Ibid.*, 115.

mathematical ratio.^{106 107} As chapter three will explore, Hermann saw these Pythagorean mathematical ratios that bound the universe as the paramount expression of love.

(2) Caritas: Goddess of Divine Love

The *Book of Divine Works* opens with Hildegard's vision of Divine Love, the goddess-figure Caritas. However, this was not the first time Hildegard had represented love in a female guise. Rather, Caritas was modelled on the earlier figure of Celestial Love in the *Scivias*.

In Figure 6, Celestial Love appears with four other virtues: Discipline, Modesty, Mercy and Victory, all personified as women.



Figure 6. *The Five Virtues in Five Towers. Scivias. Book Three, Vision Three.*
From left to right: Celestial Love, Discipline, Modesty, Mercy and Victory.
Source: Wikimedia Commons.

As the first of the five virtues, Celestial Love has primacy over the others. Hildegard glosses this vision with the explanation that divine love should always be the guiding principle in the lives of Christians, who 'should always hold to the perfect heavenly love' in order to 'shake off the evil actions of sin-stained humanity.'¹⁰⁸ For mankind to become strong in the Catholic faith requires the cultivation of these five virtues; as Hildegard writes, beginning with Celestial Love and culminating in Victory, the person becomes a 'strong

soldier perfected in mind by imitating My Son.'¹⁰⁹ Just as the Chartrian philosophers who saw the cultivation of the liberal arts as the steps trodden to ascend to the divine, Hildegard, who was raised in the Benedictine monastic habit, regarded the virtues as an aid this ascension. Dennis Doyle, for example, has drawn attention to the *Rule of Saint Benedict* as the seminal text for the development of Hildegard's ideas of wholeness, regulation and harmony in her cosmos, especially the image of Jacob's Ladder.¹¹⁰ Alluding to the Genesis story of Jacob (Gen 28:12), St. Benedict writes that 'if we wish to reach the greatest height of humility... we must erect the ladder which appeared to Jacob in his dream.'¹¹¹ The idea of a heavenly ladder to God is prominent in Hildegard's works and is especially linked to the figure of Caritas in the *Book of Divine Works*, given Hildegard's belief that only through virtue can mankind trace the path of the "Living Light" radiated from heaven and be reconciled with the love of God.

Thus, it is unsurprising that Caritas was chosen as the subject of the first vision of the *Book of Divine Works*. As Figure 7 shows, Divine Love is represented as a robed, four-winged and feminine-looking figure radiating golden light, with a bearded elderly man perched upon her head, whilst she holds a haloed lamb and tramples upon a hideous monster.¹¹²

106 As suggested, the *Cosmographia* likely borrowed on the *De essentiis*, an argument reinforced by Silvestris' description of the cosmic marriage between Endelechia and Silva: 'And since what is subtly refined does not willingly accord with what is dull and heavy, a more adaptable mean proportion interceded to effect their connection, and fastened body to soul as if glued, or bound in marriage.' (see Bernard Silvestris, *Cosmographia*, 74).

107 Hermann's primary authority here is certainly Plato. In the *Timaeus*, Plato writes: the fairest bond is that which most completely fuses... proportion is best adapted to effect such a union.' (See Jowlett, *Dialogues of Plato*, 526).

108 Hildegard of Bingen, *Scivias*, 3:3, 347.

109 *Ibid*, 350.

110 D. Doyle, "Vision Two of Hildegard of Bingen's *Book of Divine Works*," 145.

111 Saint Benedict, *The Holy Rule of Saint Benedict*, trans. Reverend Boniface Verheyen (Christian Classics Ethereal Library, 1949). Accessed 20 April 2017 at <http://www.ccel.org/ccel/benedict/rule.html>.

112 Hildegard of Bingen, *Book of Divine Works*, 1:1, 8.



Figure 7. Caritas. *Book of Divine Works. Book One, Vision One.*
Source: Wikimedia Commons.

This vision perfectly encapsulates Hildegard's love cosmology, and as recorded in her *Vita*, unlike her standard visions, this one was so powerful that receiving it 'made all her organs tremble' and brought on a rare bout of ecstasy, suggesting its importance.¹¹³ Allegorically, Hildegard explains that the bearded figure signifies the 'loving-kindness of the Godhead' and the lamb 'gentleness.'¹¹⁴ Yet, it is scarcely possible not to read them as emblems of the Father and Son respectively, meaning that the fiery central figure can only be the Holy Spirit.¹¹⁵ Indeed, Figure 7 reveals the Trinity as deliberately layered vertically from the

bottom upward: the Son/Logos sits in the arms of Caritas/Holy Spirit, who is surmounted by the Godhead. Just like Celestial Love in the *Scivias*, Caritas evokes the imagery of Jacob's Ladder, that imitation of the virtues of Christ will lead to Divine Love (Caritas) and finally to God Himself. Indeed, this Trinity depicts the 'endless circulation of the energy of love' in the cosmos.¹¹⁶

The Neoplatonic idea of a universe born from divine wisdom and regulated by divine love reaches its literal genesis in the second vision of the *Book of Divine Works*, as the cosmos is literally produced from Caritas' breast: 'Then a wheel of marvellous appearance became visible right in the centre of the breast of the afore-mentioned figure' (See Figure 8).¹¹⁷ Significantly, this "revised" cosmos is no longer an elemental "egg cosmos," and instead of violent whirlwinds, the 'major winds... along with their auxiliary winds, are seen to be more restrained and slow.'¹¹⁸ Emphasizing this balance, the most significant alteration Hildegard makes to her cosmology is that the firmament is circular as opposed to an egg shape, a change she defends as demonstrating the 'correct measurement of the world-elements: the circle with no end or beginning is the ideal 'metaphor of God's might, which has neither beginning nor end.'¹¹⁹

Whilst Hildegard identifies Caritas with the Holy Spirit, it is nearly impossible not to also equate her with the Neoplatonic goddess tradition. Barbara Newman has drawn attention to the goddess as a signpost of Platonism as 'whenever such personae appear, we will find the Platonising cosmology that captivated twelfth century thinkers.'¹²⁰ This is certainly true in Hildegard's case, as her goddess Caritas clearly identifies herself with the World-Soul, stating: 'I kindled every spark of life, and I emit nothing that is deadly.'¹²¹ As Figure 8 shows, her arms stretch out to gently cradle the entire cosmos, conveying her protective role in nurturing life and maintaining harmony.

113 Gottfried of St. Disibod and Dieter of Echternach, *Vita Sanctae Hildegardis*, ed. J. P. Migne, 197, in Newman, *Sister of Wisdom*, 71.

114 Hildegard of Bingen, *Book of Divine Works*, 1:2, 12.

115 Newman, *Sister of Wisdom*, 71.

116 *Ibid*, 45.

117 Hildegard of Bingen, *Book of Divine Works*, 2:1, 22.

118 *Ibid*, 42.

119 *Ibid*, 4:11, 86.

120 Newman, *Sister of Wisdom*, 70.

121 Hildegard of Bingen, *Book of Divine Works*, 1:2, 8.



Figure 8. *The Macrocosm and Microcosm. Book of Divine Works. Book One, Vision Two.*
Source: Wikimedia Commons.

In essence, Caritas performs three things. First, she gives “life” to the universe; second, she is “reason”; and third, she carries out the “work” of God.¹²² It is these three characteristics that liken her to both Bernard Silvestris’ goddesses Noys and Endelechia, and Alan of Lille’s Genius. Yet surprisingly, Hildegard never refers to Caritas as *the* World-Soul, either because she did not know the term, or she knew that the Cistercians had condemned Peter Abelard for aligning the World-Soul too closely with that of the Holy Spirit.¹²³ Considering that Hildegard Christianised her

¹²² Newman, *Sister of Wisdom*, 70.

¹²³ *Ibid.*, p.68. William of Conches too had faced strong opposition for stating that ‘the World-Soul is a natural energy... this natural energy is the Holy Spirit, that is, a divine and generous harmony.’ See Charles Jourdain, *Excursions historiques et*

cosmology, it is more likely that she blended Neoplatonism with the biblical tradition of personifying wisdom in female form. Proverbs 8, Ecclesiasticus 24, and the Wisdom of Solomon all stress the role of Sophia or Wisdom as the female consort of God and ‘goddess-like’ collaborator in the process of creation, thus giving Hildegard plenty of biblical material to work from.¹²⁴

(3) Musical Harmonies and Divine Love

A standout feature of the cosmologies of Hermann of Carinthia and Hildegard and Bingen is their inherently musical nature. In particular, the “Harmony of the Spheres” (*musica mundana*), the Pythagorean belief that planetary orbits were attuned to musical ratios, was popular in the twelfth century, and borrowed by both Hermann and Hildegard as an expression of heavenly harmony.¹²⁵ In the *De essentiis*, the idea of musical ratio is first encountered in Hermann’s discussion of the mediators, the seven planets which “mediate” the binding of the celestial realm (the Same) to the sublunary realm (the Different), the area of his cosmology he believed to be the most original.¹²⁶ As Hermann states, ‘the universe would by no argument seem to me to be complete, unless there was that which alone is the binding force of all composition.’¹²⁷ Hermann imagined the purpose of the mediators as the “glue” of the cosmos, as being of ‘twin nature... it is neither the same as, nor completely different from, either of the extremes,’ allowing the planetary mediators to function as the ‘conciliating cause’ and causing the incorruptible macrocosmic essence to ‘drag around’ the corruptible microcosmic substance.¹²⁸

Of particular significance is the numerological significance in regard to the musical ratios linked to the structure of the cosmos. The configuration of the seven

philosophiques à travers le moyen âge (Paris, 1888), 36-37.

¹²⁴ *Ibid.*, 43. In fact, Ecclesiasticus 6-9 parallels Hildegard’s description of Caritas (cited in the introduction, footnote 16): ‘I made that in the heavens there should rise light that never faileth... I dwelt in the highest places... and have penetrated into the bottom of the deep.’

¹²⁵ Boethius’s *De institutione musica* (Principles on Music) written c.510 was an important text for transmitting the Pythagorean categories of music to the Middle Ages. These categories were threefold: *musica mundana* (celestial music), *musica humana* (music of the human body) and *musica instrumentalis* (instrumental music).

¹²⁶ Hermann writes: Aristotle, whilst ‘concerned with the whole, in the end finished off the extremes without weaving in the mediators. Likewise, Plato understood the significance of mediators yet ‘seems to have turned his strength less to [their] understanding.’ See Hermann of Carinthia, *De Essentiis*, 151.

¹²⁷ *Ibid.*, 151.

¹²⁸ *Ibid.*, 129.

planets between the two extremes is one of elegant musical proportion because they equal the number nine. Though not insignificant that the square root of nine equals three, the number of the Trinity, the importance of nine Hermann writes is that ‘Cicero plainly understood this number to be virtually the bond of all things... all things are connected for you by nine orbs... a connection of the most strong bond which first shows itself filled with every musical proportion.’¹²⁹ As Charles Burnett has shown in an unpublished essay, this is just one element of Hermann’s ‘explicitly musical universe.’¹³⁰ As previously stated, essence is divided into eight parts whereas substance has four divisions producing an 8:4 ratio, which Hermann believes produces the ‘most cohesive bond’ of all, love.¹³¹ This binding ratio of love is also a musical ratio: 8:4 being 2:1 or an octave, and 12:8 (twelve representing the number of the zodiac) being 3:2 or a fifth.¹³² In apocryphal accounts, it was Pythagoras who first made the discovery that the pitch of a musical note was linked to mathematical ratio. For Pythagoras, everything in the universe could be reduced to arithmetical proportions, as such ‘Music *was* number, and the cosmos *was* music’ making mathematics and music essential to philosophy.¹³³ In Plato’s *Republic*, the story of Er perfectly encapsulates the Pythagorean belief that the axis of number extends in two directions - towards the stars and through the body and soul of man – connecting the macrocosm and microcosm through music.¹³⁴ Whilst Hermann was only familiar with Plato’s *Timaieus*, his belief in the intricate connectivity of the universe through music is palpable. Hermann writes:

If, therefore – as musicians claim – every vigorous movement gives forth a sound... the sounds responding to the distance of the intervals, the single changes varying with harmony modulation according

to the ascent and descent of the planets. This is the one bond of holding everything in an indissoluble knot... a strength of love exists between the kinds of music belonging to the Different, so that when one thing vibrates, the other follows it promptly, being brought into the same vibrations.¹³⁵

Evidently, Hermann imagines the movement of the planets as a cosmic symphony, their ‘vigorous movements’ producing *musica mundana* or the music of the spheres. The phrase ‘indissoluble knot’ indicates the absolute cohesiveness of the bonds of love, which tie the universe together, an image that evokes the marriage of musical ratio to that of essence and substance. The concept of “sympathetic vibration,” ‘the harmonic phenomenon whereby a formerly passive string or vibratory body responds to external vibrations to which it has a harmonic likeness,’ best explains this passage.¹³⁶ Indeed, because any measurable thing or ‘circumscribable substance’ in Hermann’s words is ‘determinable by some space or number,’ everything can be expressed as a mathematical/musical ratio.¹³⁷ Just as plucking the strings of a lyre (*musica instrumentalis*) can arouse sympathetic vibrations in the human instrument (*musica humana*), the music of the spheres can engender a response in the sublunary world ‘because both are (we might say) tuned to the same harmonies, so ‘when one thing vibrates’ the others are ‘brought into the same vibrations.’¹³⁸

Stanislav Tuskar has challenged reading music into Hermann’s cosmology, arguing that ‘Hermann was not prepared to make the term “music” a synonym for an overall vision of the world founded on ideas of harmony and proportion.’¹³⁹ As evidence he points to the fact that instead of employing the specific terms for the “Harmony of the Spheres” (*musica mundana*, *musica coelestis* or *musica naturalis*) Hermann instead uses the word “musica,” which denotes music in the narrow sense (*musica instrumentalis*). I believe this viewpoint is misinformed for four reasons. Firstly, Tuskar’s argument is based on the sole term “musica,” a word used only once in the entire *De essentiis*, and therefore not representative for the entire work.¹⁴⁰ Secondly, as evidenced by the above lyre metaphor of the

129 Ibid, 129.

130 My thanks to Professor Charles Burnett who gave me a copy of this essay. See Charles Burnett, “Latin and Arabic Ideas of Sympathetic Vibration as the Causes of Effects between Heaven and Earth”, (Unpublished), 2.

131 De Essentiis, 129.

132 Burnett, “Sympathetic Vibration”, 4.

133 Jamie James, *The Music of the Spheres* (London: Little Brown and Company, 1959), 31.

134 Plato, *The Republic*, trans. Chris J. Emlyn-Jones (Cambridge: Harvard University Press, 2014). The soldier Er recounts how the structure of the cosmos is that of a steel spindle ‘the chain of heaven’ that ‘holds together the circle of the universe.’ All the while, the planets and fixed stars rotate together in ‘one harmony’ by the sounds produced by sympathetic vibrations of *musica mundana* and *musica instrumentalis*, originating from the singing of three sirens, Lachesis (past), Clotho (present) and Atropos (future). See Book X, 471-75.

135 Hermann of Carinthia, *De Essentiis*, 149.

136 Burnett, “Sympathetic Vibration”, 1.

137 Hermann of Carinthia, *De Essentiis*, 159.

138 Ibid, 40.

139 Stanislav Tuskar, “Musico-Theoretical Fragments by Two Medieval Scholars: Herman Dalmantinac and Petar Pavao Vergerike, Sr,” *International Review of the Aesthetics and Sociology of Music* 13 (1982): 97.

140 Hermann of Carinthia, *De Essentiis*, 128.

universe, Hermann clearly perceived the World-Soul as produced from musical ratio. Thirdly, given the purpose of the *De essentiis* as an “imitation” and synthesis, Hermann needs only to cite Pythagoras and Trismegistus to evoke a credible chain of authorities from Plato to Boethius.¹⁴¹ Indeed, Burnett has pointed to several Arabic influences for this doctrine, a factor that may also account for his lack of references to the Latin tradition since Hermann was more concerned with using “new” Arabic thinkers.¹⁴² Lastly, and most significantly, Hermann’s discussion of musical proportion acts as the crescendo and last words of the first book (out of two). Structurally, as the “midpoint” of the whole text, it is the ideal place to discuss the musical proportion of the mediators, which are themselves the “midpoints” of the cosmos. Therefore, befitting Hermann’s desire for proportion, the ratio that pervades his cosmology is mirrored in the very treatise in which he presents this cosmology to the world - a truly powerful statement of macrocosmic-microcosmic harmony, and one that would not have been missed by medieval contemporaries who looked for and privileged the art of numerology in the universe as an indicator of interconnectivity with the divine.

Similarly, in Hildegard’s cosmology, we find the Pythagorean idea of the music of the spheres, as Hildegard notes that the ‘revolving of the firmament emits marvellous sounds, which we nevertheless cannot hear because of its great height and expanse.’¹⁴³ Indeed, for Hildegard, the idea of “sympathetic vibration” too is significant in expressing divine love. One of the most important positions in the abbey was chantress. In Benedictine monasteries, the chantress not only directed the choir but also composed music for the psalms, and both lyrics and music of hymns for special feast days.¹⁴⁴ In fact, the technical sophistication

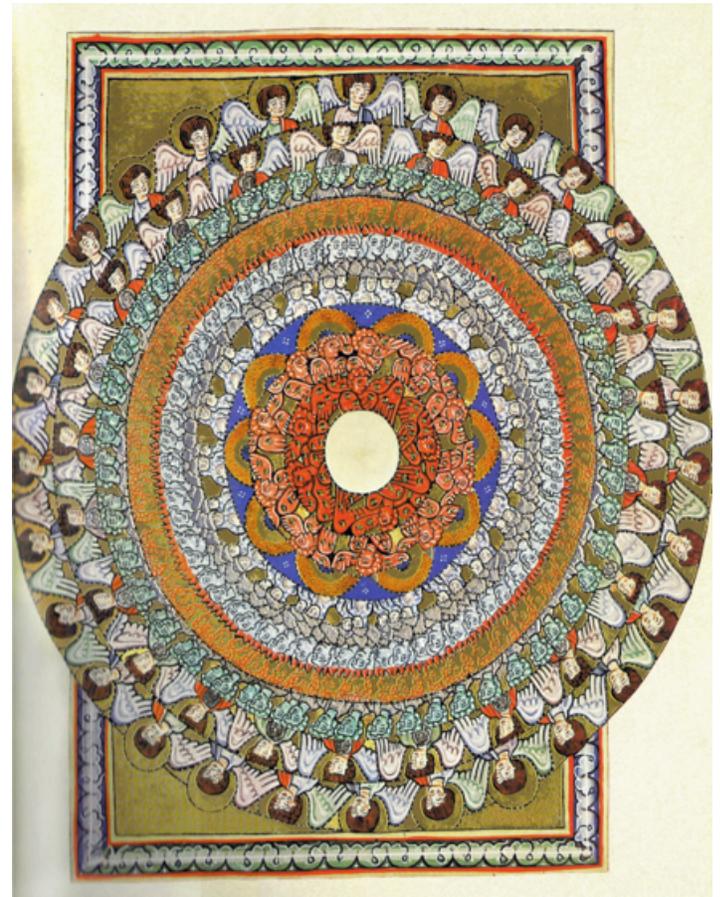


Figure 9. *The Choir of Angels. Scivias. Book One, Vision Five.*
Source: Wikimedia Commons.

of Hildegard’s *Symphonia armonie celestium revelationum* (*Symphony of the Harmony of Celestial Revelations*) and her morality play, the *Ordo virtutum* (*Play of the Virtues*), suggests that Hildegard herself may have been apprenticed to a chantress at some point. In particular, the first draft of the *Ordo virtutum*, encompassing the final chapter of the *Scivias*, features as the visionary work’s literary and musical finale. Hildegard opens the vision with the image of a ‘lucent sky’ from which the melodious sounds of ‘different kinds of music’ reverberate with ‘the praises of the joyous citizens of Heaven, steadfastly preserving in the ways of Truth...’¹⁴⁵ Here, the ‘different kinds of music’ suggest the three Boethian categories of music, which are used to extoll the citizens of Heaven, who, following the virtues have raised themselves up to God. The imagery evoked here undoubtedly would have called to mind Hildegard’s earlier vision, the ‘Choir of Angels.’

As Figure 9 shows, hierarchies of angels are arranged in a circle, with rings of fire and colours similar to

141 Parallels can also be seen with the later Neoplatonist, Alan of Lille. His goddess Natura wears a diadem upon her head in which the Harmony of the Spheres is literally played out. In the diadem is set a ‘group of twelve gems’ representing the zodiac, under which, the planets, ‘a set of seven gems, forever maintaining a circular motion’ dance with their ‘own sweet harmony.’ See Alan of Lille, *The Plaint of Nature*, trans. J. J. Sheridan, Pontifical Institute of Medieval Studies (Toronto, 1980), 81-82.

142 Burnett notes the similarity between Hermann and the *Enneads* of Plotinus (204/4-270 C.E.) ‘...just as in one tense string: for if the string is plucked at the lower end, it has a vibration at the upper.’ Clearly, the language and imagery Hermann uses to describe sympathetic vibration closely mirrors that of Plotinus, suggesting a connection, and perhaps even direct citation. (see *Ennead IV.4.41*, P. Henry, ed., *Plotini Opera*, II, Paris, 1959, 139-41, in *De Essentiis*, 41-42.

143 Hildegard of Bingen, “Causes and Cures”, 105.

144 Thérèse B. McGuire, “Monastic Artists and Educators in the

Middle Ages,” *Women’s Art Journal* 9 (1988): 5.

145 Hildegard of Bingen, *Scivias*, 3:13, 525.

Hildegard's cosmic egg, 'singing with marvellous voices all kinds of music about the wonders that God works in blessed souls.'¹⁴⁶ In typical Hildegardian artistic style, the circle of angels extend out of the frame, emphasizing how their music rings from heaven to earth, linking the macrocosm to the microcosm, and celestial creatures to corruptible man. Unmistakably then, Hildegard saw music as an expression of the divine, a way to lift humanity up and glorify God.

Returning to the final vision of the *Scivias*, Hildegard writes that 'the song of rejoicing softens hard hearts, and draws forth from them, the tears of compunction, and invokes the Holy Spirit.'¹⁴⁷ Just as the Pythagoreans saw all types of music as connected, Hildegard sees human music as capable of instilling virtue and "softening hard hearts," linking *musica instrumentalis* to the music of body, *musica humana*. Hildegard extends this connection further, stating that 'words symbolise the body, and jubilant music indicates the spirit; and the celestial harmony shows the Divinity, and the words of the Humanity of the Son of God.'¹⁴⁸ Thus, all three forms of music are united as an upward pathway to the divine, *musica instrumentalis* sympathetically stimulates *musica humana*, which in turn leads up to *musica mundana*, celestial harmony. The idea 'that the heart of a person is tuned to music was one of Hildegard's theories, and when music no longer affected the soul, it portended the presence of evil.'¹⁴⁹ Since music was the language of heaven, the Devil is the only character not permitted to sing, his garbled words signifying a corruption of even speech itself, the lowest form of *musica instrumentalis*. As previously explored in chapter two, in Hildegard's eyes, the cultivation of Jacob's Ladder of virtues from Celestial Love to Victory makes man a 'strong soldier' raised up to God. Consequently, it is in the final chapter of the *Scivias* that Hildegard's "soldiers" (the Virtues) aided by music, wage war against Satan, overpowering him with eleven songs sung in 'harmony and concord,' physically "lifting up" souls from Hell to Heaven.¹⁵⁰ In fact, the defeat of the Devil is marked by the harmonious music of trumpets, timbrels, harps and the clashing 'cymbals of joy' which signify not only the victory of the Virtues but the orchestral crescendo to the *Scivias*.¹⁵¹

Yet, the strongest evidence for Hildegard's view on music remains her 1178 *Letter to the Mainz Prelates*, in

146 Ibid, 1:6, 139.

147 Ibid, 534.

148 Ibid, 533.

149 McGuire, "Monastic Artists and Educators in the Middle Ages," 5.

150 Hildegard of Bingen, *Scivias*, 532.

151 Ibid, 534-535.

which she condemned the decision of the Mainz clergymen for excommunicating her abbey. This letter 'offers striking proof of the central importance singing had for monastic communities in the Middle Ages and for the Rupertsberg nuns, in particular.'¹⁵² Importantly, the hours of the Divine Office in Benedictine monasticism were accompanied by singing. Therefore, for Hildegard, music defined her daily motions and her own songs were the 'stunning summation of the matins service and the crowing jewel of the entire liturgical day.'¹⁵³ However, under interdict, the usual Church rituals such as monthly communion and singing the Divine Office were suspended. As such, Hildegard's letter is significant because 'she objected to the silencing of chant even more vehemently than she did the loss of sacrament.'¹⁵⁴ 'We have till now ceased to celebrate the divine office in song, reading it only in a low voice,' she writes.¹⁵⁵ Her tone is laced with dejection, as her sisters, once vivified by music, are now 'oppressed by a huge sadness.'¹⁵⁶ Symbolically, Hildegard uses the same quote from Psalms used to end the *Scivias*: 'Praise him in the call of the trumpet, praise him on psaltery and lute, praise him on tambour in dancing, praise him on strings and on organ... praise him on cymbals of jubilation.'¹⁵⁷

For Hildegard, music functions as an aid for understanding the psalms, and by extension is a way of understanding God. To emphasize this connection, she ends the letter by linking the practice of music with prelapsarian man to stress its importance both before and after original sin was introduced. Before Adam fell from grace his voice 'was the sound of every harmony and sweetness of the whole art of music.'¹⁵⁸ Yet, after The Fall, the devil heard man signing through divine inspiration, and became 'so terrified' and he 'has not ceased to trouble or destroy the affirmation and beauty and sweetness of divine praise' in order to prevent man from 'remembering the sweetness of the songs in the heavenly land.'¹⁵⁹ Hence, linking this *Letter* with the *Scivias*, the singing of man (*musica instrumentalis*) is connected with the divine, lifting man up from his earthly station to a heavenly one. Here, sympathetic vibration is most overtly alluded to in all her works, as Hildegard reminds the Mainz prelates

152 Margot Fassler, "Composer and Dramatist," in *Voice of the Living Light*, 149.

153 Ibid, 153.

154 Newman, "Sibyl of the Rhine", *Voice of the Living Light*, 27.

155 Hildegard of Bingen, "Letter to the Mainz Prelates", in *Hildegard of Bingen: An Anthology*, 150.

156 Ibid, 149-150.

157 Ibid, 150.

158 Ibid, 151.

159 Ibid 151.

that the prophet David knew ‘that the soul is symphonic (*symphonalialis*) and wisely exhorted man in the psalms to play the lute, ‘which sounds lower, to the body’s control; the psaltery, which sounds higher, to the spirit’s striving; its ten chords, to the fulfilment of the Law.’¹⁶⁰ This hierarchy of different instruments emphasize the Pythagorean belief that different tones are capable of resonating with different parts of the human body and soul. In Hildegard’s view, *musica instrumentalis* activates *musica humana*, which is in turn a channel to return to the Edenic paradise of prelapsarian man. Consequently, the Mainz prelates are doing the Devil’s work for him by prohibiting singing. And so Hildegard leaves them with a dire final warning to always remember the divine role of music: ‘lest in your judgment, you are ensnared by Satan, who drew man out of the celestial harmony and delights of paradise.’¹⁶¹

(4) Creation: The Hildegardian and Carinthian Synthesis

It is in the creation of man where we can see divine love, cosmology, and celestial music harmoniously synthesized. In Hermann of Carinthia’s view, man is the mirror of the macrocosm because he is made from the same mixture of primordial seeds: substance and essence. Consequently, man is ‘in part failing, in part unchanging, universal and principal,’ and thus ‘is rightly the image of the whole universe.’¹⁶² Likewise, for Hildegard, the elemental constitution of man also reflects the cosmos as ‘each human being contains heaven and earth... and within every human being all things lie concealed.’¹⁶³ Not only is man made from the same elemental building blocks as the cosmos, his construction is connected by Hermann and Hildegard to the planetary order. Hermann writes that the Creator adorned the head ‘with seven instruments, he dedicated the two orbs of the eyes to the Sun and the Moon, the ears to Saturn and Jupiter, the nostrils to Mars and Venus, and the mouth with the tongue to Mercury.’¹⁶⁴ Similarly, in the *Book of Divine Works*, Hildegard argues that the head’s circular shape reflects the firmament, stating that the ‘right and balanced measurements of our head reflect the right and balanced measurements of the firmament.’¹⁶⁵ Indeed, Hildegard goes further to say:

The highest planet is indicated by the top of the

cranium... while the sun is found in the midst of the space between the highest planet and the moon. On each side of this spot, the other planets – the two upper ones and the two lower ones... For the features on our head are proportionately just as far apart from one another as the planets are from one another in the firmament.¹⁶⁶

Consequently, for Hermann and Hildegard, human anatomy mirrors the very universe in synaesthetic harmony. For Hermann, the sun and moon being the two great luminaries symbolise the eyes, connecting them with sight. Likewise, Hildegard writes that the ‘sun, moon and stars are the eyes; the air our sense of hearing, the winds our sense of smell, the dew our taste; the sides of the cosmos are like our arms and our sense of touch.’¹⁶⁷ In very tangible ways, therefore, both their cosmologies present man as a model of the cosmos in miniature.

It is in Hermann’s *De essentiis* that cosmological structure is united also with the final sensory quality, sound. Musical harmonies not only “glue” the universe together, but also constitute the adhesive that harmonises the marriage of the celestial soul made from essence with a corporeal body made from substance. As Hermann exclaims, inside man are the ‘constant choruses of the Muses – fitted, that is, to the related example of heavenly harmony whose leading movements, by their perpetual gliding, would temper the modes of this related music, as a model for his double condition.’¹⁶⁸ Clearly, in Hermann’s view, the heavenly music that produces the “Harmony of the Spheres” serves as a “model” for *musica humana*, the music that regulates the body. Just as celestial music keeps the universe joined in cosmic love, these same musical harmonies are inimical to man’s survival as ‘by no pact’ could man’s celestial soul be contained in a mortal shell, ‘unless by harmonious bonds in a receptacle related to the celestial form.’¹⁶⁹ As Hermann points out, if these bodily musical ratios are disturbed, ‘the soul is shut out, and, at the same time life expires,’ because the ‘rational soul’ and ‘vital soul’ of humanity are so ‘inseparably united’ that no force can keep them together other than themselves.¹⁷⁰ Evidently then, the universe was imagined as a cosmic “organic analogy” of the human body. For humanity, made in God’s image, both mirrors the elements used in the construction and structure of the cosmos itself.

160 Ibid, 151.

161 Ibid, 151.

162 Hermann of Carinthia, *De Essentiis*, 211.

163 Hildegard of Bingen, “Causes and Cures”, 95.

164 Hermann of Carinthia, *De.Essentiis*, 230.

165 Hildegard of Bingen, *Book of Divine Works*, 98.

166 Ibid, 98.

167 Hildegard of Bingen, “Causes and Cures”, 105.

168 Hermann of Carinthia, *De.Essentiis*, 231.

169 Ibid, 231-35.

170 Ibid, 233.

Conclusion

As this essay has shown, the cosmologies of Hildegard of Bingen and Hermann of Carinthia gravitate around the principle of divine love, which both authors perceive to be the “work” or “activity” of the World-Soul. Throughout the three texts that have been explored, the Neoplatonic World-Soul abounds as an expression of the love of God for his creation, the only force capable of facilitating the fusion of the macrocosm to the microcosm and sustaining life. As we have seen, these two writers can both be classified as belonging to the “framework of ideas” loosely associated with the School of Chartres. Yet, whilst both Hermann and Hildegard borrowed from a similar pool of ideas, texts, and authorities, their cosmologies differ due to their divergent purposes: Hildegard seeking to reform the institutional Church and Hermann aiming to produce a grand synthesis of Plato and Aristotle for all time. Consequently, whereas Hermann fuses “new” Arabic thought and “old” Latin Neoplatonism together, Hildegard blends Christian doctrine with Neoplatonism. Nonetheless, the end-product for both is a cosmology in which divine love is placed at the very centre.

Due to the expansive nature of this subject, additional research is required to fully understand the significance of divine love. In particular, the subject of “sympathetic vibration” warrants further study, and a complete analysis would require an exploration of Hildegard’s *Book of Life Merits* and *Causes and Cures*, both of which feature additional cosmological material. Nonetheless, this essay attempts to show how the topics of cosmological structure, the goddess tradition, music and creation should be seen as inseparable from Hildegard and Hermann’s world-views structured on divine love. As renaissance philosophers, Hildegard of Bingen and Hermann of Carinthia stood on the cusp of the shift in the twelfth century from a Neoplatonic to an Aristotelian worldview.

The idea of the “cosmos” - an organisational framework that helps explain the interrelationships between man, nature and the supernatural - has persisted throughout history in countless variations. But importantly, the cosmos is a dynamic model: one subject to revision, addition and change. This model is never static but rather a schema that undergoes perpetual evolution. In these twin senses, our modern scientific explanations of the physical world, grand unifying theories such as Albert Einstein’s theory of general relativity, are comparable to the hierarchical and organisational models developed in the Middle Ages. Like Hildegard and Hermann’s cosmologies these models represent hypotheses that increasingly appear incomplete in the wake of new evidence and discoveries. Undoubtedly, the *Scivias*, *Book of Divine Works* and *De essentiis* represent *scientific* attempts

to categorise and explain the world by exploring natural principles within a Christian mentality. But instead of the research into string theory, black holes, quantum mechanics and dark matter that offers to revolutionise modern science, the paradigm-shifting thought of the twelfth century was to come with the “new” Aristotle, Euclid, and Ptolemy that were to captivate the attention of scholars until the late fifteenth century, before in turn becoming surpassed themselves by Copernican heliocentric theory. Tragically, it was this very renaissance, which ensured that Hildegard and Hermann’s works sunk into obscurity, quickly appearing outdated and redundant in contrast to the resurgence of the enticing naturalistic vocabulary and methodological toolkit of Aristotle that allowed philosopher-theologians to point their magnifying lens at the universe in a more critical manner. Hildegard and Hermann were indeed dwarves standing on the shoulders of giants, to use Bernard of Chartres’ phrase, and were able to “see further” and develop strikingly unique theories regarding the cosmos largely because of the continuum of philosophical, scientific and religious ideas developed by their predecessors. Their significance to historians lies in that they provide an invaluable snapshot of the gradual transition from a Neoplatonic world in which the cosmos was regulated by goddesses and divine love, to the naturalistic and critical philosophy of Aristotle: a crucial juncture in the History of Science which would come to revolutionise the late Middle Ages.