

**MEDIEVAL MANUSCRIPT DIAGRAMS, ARCHITECTURAL STRUCTURES, AND
THEIR RELATIONSHIPS: THE CASE OF CHARTRES CATHEDRAL**

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University of Pittsburgh, 2010

The purpose of this study is to demonstrate some of the ways in which diagrammatic structures may have informed the layout and experience of architectural space in the middle ages. The Cathedral of Chartres is a unique case because the post-1194 building and its decorative program survive relatively complete and because the preceding century saw at Chartres the emergence of a sophisticated school of thought, many of whose precepts may be shown to bear upon the design of the monument. The writings of William of Conches and John of Salisbury in particular I consider central to an intellectual debate between Chartrain Masters and their intellectual rivals the Cornificians. The library at Chartres still preserves several manuscript copies of medieval texts and commentaries pertinent to this debate. In turn, I suggest this is fundamental to reading the decorative program of the cathedral and to experiencing its spaces. Thus the monument represents a fusion of disciplines which in turn may serve as an enlightening means of understanding the middle ages in general, its art, its architecture, and its viewer.

Using the Cathedral of Chartres as an object of study, an environmental experience, and as a multi-vantage point visual dialogue, this dissertation examines the idea of medieval diagrams as templates for medieval architectural construction and conceptualization. By examining the layout of the medieval stained glass that retains its original position, I claim that the themes of the windows serve as placemarkers for diagramming. The windows are also

examined individually as separate entities with their own diagrammatic orderings that suggest that the small scale, as well as the large scale, is organized in a diagrammatic way.

Ultimately, I suggest that a diagrammatic structure underlies the layout and design of the windows, based on the ideas of Chartrain master William of Conches. I suggest that this diagrammatic structure forms the basis of a discourse between the Chartrains and their intellectual rivals, the Cornificians. Central to the argument is the disposition of the Signs of the Zodiac in the cathedral and a calendrical layout for the hagiographic windows.

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PREFACE

This dissertation is on Chartres Cathedral; however, one of the contributions that this study makes is to use the cathedral as an example in service of larger questions about manuscript diagrams. So not only is this a study that looks at architecture a new way, it is one that suggests a new method that can be employed in architectural studies as a whole.

Architectural historians usually employ manuscripts as historical data that informs their study of the building.¹ But the formal organization or spatial positioning of images in the manuscripts related to disciplines outside the realm of architecture tends to be overlooked. What this dissertation does is it seeks out, imposes or transfers common forms from manuscripts to architecture. I do this by looking at diagrams in manuscripts, particularly those of the Chartrain masters, and relating them to the plan or forms inherent in the architectural structure, Chartres Cathedral. The proximity of these types of forms in intellectual thought and in geography makes these correlations plausible. This allows not only the transference of form from manuscript to architecture, but with this, the transference of meaning.

¹ Authors like Deborah Cahn transfer foliate designs in manuscripts to capital designs in Canterbury Cathedral and of course, there is the literature on Arculf's diagrams of the Holy Sepulchre and the literature on the St. Gall Plan. Deborah Kahn, *Canterbury Cathedral and Its Romanesque Sculpture* (Austin, Texas: University of Texas Press, 1991). Adamnan's *De locis sanctis*, *Scriptores Latini Hiberniae* 3 (Dublin 1958). Adamnan of Hy, *The pilgrimage of Arculfus in the Holy Land: about the year A. D. 670*, (New York: AMS Press, 1971). Walter Horn and Ernest Born, *The Plan of St. Gall: A Study of the Architecture and Economy of and Life in a Paradigmatic Carolingian Monastery* (Berkeley: University of California Press, 1979).

Diagrams or the medieval *figurae* or *formae* are the distillation of an idea or process to its succinct capturing in an image. This does not mean that this capturing of a process cannot be activated to a temporal interpretation or that it can be apprehended in any other way than progressively. It is precisely this stationary image which turns in the mind and which suggests temporal interpretations. This process is introduced to the scholarly literature by Michael Evans.² Here, I suggest that this approach is not only prevalent in diagrams, but I am arguing that it is also fundamental to medieval visual culture as a whole. The application of this process from diagrams to the figural arts and architecture is the larger contribution of this dissertation to medieval visual studies.

The circulation implicit in the movements of visitors to medieval cathedrals makes a cathedral a living example of a simultaneously diagrammatic stasis and motion; in this study, this is discussed in relationship to the term, *entelechy*. *Entelechy* which is known to appear in the writings of Aristotle captures a completed mapping of a process with kinetic motion necessary to spur it on in a single word.³ This word is discussed as a type of *forma* in the writings of Bernard of Chartres.⁴

There are set positions in a building's organization of materials that provide a structure and static placement of thematic visual images. Here that static placement is determined by the

² Michael Evans, "The Geometry of the Mind," *Architectural Association Quarterly* 12, no. 4 (1980):32 - 55.

³ "Again "being" and "that which is" mean that some of the things which we have mentioned "are" potentially [*dunamis*], others in complete reality [*entelecheia*]. For we say both of that which sees potentially [*dunamis*] and of that which sees actually [*entelecheia*], that it is "seeing." (1017a35 – 1017b3) "And we get thus the doctrine of Anaxagoras, that all things are mixed together, so that nothing really exists. They seem, then, to be speaking of the indeterminate, and while fancying themselves to be speaking of being, they are speaking about non-being; for it is that which exists potentially [*dunamis*] and not in complete reality [*entelecheia*] that is indeterminate." (1007b26 – 29) See Aristotle, *Metaphysica*. Trans. J. A. Smith. (Oxford: Clarendon Press, 1931); reprinted in *The Works of Aristotle Translated into English*. Ed. W. D. Ross. (Oxford: Clarendon Press, 1968).

⁴ Bernard of Chartres, *The Glosae Super Platonem of Bernard of Chartres*. Ed. Paul Edward Dutton. (Toronto: Pontifical Institute of Mediaeval Studies, 1991), Book 5, 71 – 74, p. 175.

position of Chartres's stained glass windows. Reading different texts or images may activate these static orderings to find a diagram or logic behind arranging these themes according to a continuous moving point. The movement of this point can be traced to form paths of geometric lines and thus, form diagrams. Because Chartres Cathedral's thematic windows are intact and *in situ*, they provide an opportunity for interpretation of the building diagrammatically.

Chartres makes a good case study because we can reconstruct an intellectual context for diagrams and the use of diagrams. Though sustaining significant losses in World War II, the library of Chartres is recorded as containing many of the diagrams with which this study is concerned. There is masons' mark evidence within the cathedral that suggests certain diagrams recorded in manuscripts of the Chartrain master, William of Conches. There is a record of unusual positioning of visual and verbal information considered negatively in the commentaries by the orthodox Chartrains. The appearance of such examples in the visual organization of the cathedral counterpoised in relation to the diagrams of Chartrain masters found in masons' marks suggest that this building plays an important role in a dialogue between orthodoxy and heresy.

I would like to thank Alison Stones for her constant support and mentoring and my committee members: Adam Shear, Fil Hearn, Kathleen Christian, and Anne Weis for their input and comments. Thanks to the Medieval and Renaissance Studies Consortium for their influence and generation of ideas through their program of lectures. Thanks to the Center for Western European Studies for their sponsoring of my trip to Vienna, Austria to see the Arculf diagrams and to study German. Thanks to the Frick Fine Arts Librarians for their assistance. Thanks to Martin Roland, Suzanne Rischpler, Linda Hicks, Emily Lilly, Natalie Swabb, the Chartres Seminar members, David Stanley, and Carolyn Watson. Sincerest thanks go to Gilles Fresson and Dominique Aubert at Chartres Cathedral for access and assistance. Indebted thanks go to

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1.0 INTRODUCTION

In 1944 during World War II, a fire ravaged the library of Chartres Cathedral and left many manuscripts destroyed.⁵ Measures were taken in the cathedral before this calamity to prevent an equivalently massive loss when the original set of stained glass windows (often lost over the years in other cathedrals) was removed from its placement in the Cathedral of Chartres. Care was taken to return the windows to their original position.⁶ I interpret many elements in the cathedral, including the layout of the stained glass program, preserved exceptionally at Chartres, coupled with more obvious schematic forms like the labyrinth as a diagram or *figura*. I interpret this *figura* as deliberately devised by the early thirteenth-century planners as a pedagogical tool or test for the viewer.⁷ It seems to this author that the concept of a formal transference from manuscript diagrams to diagrams based on arrangement or form developed from connecting

⁵ *Catalogue général des manuscrits des bibliothèques publiques de France, Tome LIII: Manuscrits des Bibliothèques Sinistrées de 1940 à 1944*. (Paris: Bibliothèque Nationale, 1962). See p. 3.

⁶ Yves Delaporte, *Les Vitraux de la Cathédrale de Chartres: histoire et description*, ed. Étienne Houvet (Chartres: 1926). See pp. 115 – 116 and pp. 122 – 411. Delaporte indicates that early restoration on the windows were attempted to be done *in situ* and the plan of the stained glass in its position before World War II is the same as the position it is in now. Importantly, Frankl indicates that the Lawrence window was moved from furthest east on the straight perimeter of the choir to the furthest north on the western side of the north transept. Lillich agrees and notes that the Lawrence Window would likely have been moved to be included with its border into the space of the subsequently bordered space in the Angel Altar in the northern transept in 1259 where it was until 1791. Meredith Parsons Lillich, "A Redating of the Thirteenth-Century Grisaille Windows of Chartres Cathedral," *Gesta* 11, no. 1 (1972):11 - 18. I suggest on the other hand that the Blaise Window was in this position and that the Lawrence Window was in the eastern portion of the south transept where Blaise is maintained as being located. Frankl and Lillich present the space in the north of the choir because of the location of the Lawrence altar; however, none of the other altars correspond with the window placements. See Paul Frankl, "The Chronology of the Stained Glass in Chartres Cathedral," *The Art Bulletin* 45, no. 4 (1963):301 - 22..

⁷ For the word 'figura,' see E. A. Andrews, Charlton T. Lewis, and Charles Short, *A Latin Dictionary: founded on Andrew's edition of Freund's Latin dictionary* (Oxford: Clarendon Press, 1879). See p. 748. Jan Frederik Niermeyer, *Mediae Latinitatis lexicon minus : lexique latin médiéval-français* (Leiden: E. J. Brill, 1993).

architectural parts in medieval decoration remains largely unexplored for content-based and interpretive significance. Yet medieval manuscripts preserve a wealth of diagrammatic material transmitted in a variety of textual contexts and these have indeed provided the basis for theoretical exploration by modern scholars, notably Michael Evans in his pioneering study, “The Geometry of the Mind” which offers a wide-ranging survey of the complex ways in which medieval thought structure and diagrammatic concepts were inextricably linked one with the other.⁸ Was the Cathedral of Chartres framed in its plan and the layout of its decoration as an arrangement that evoked medieval manuscript diagrams in the mind of the viewer? My conception of the viewer for Chartres is a student of medieval philosophy and religion.

I consider here how the static arrangement of the hagiographical windows/as parts and thus, temporal markers of the building invite a kinetic response of movement or pattern of visitation from the viewer, either physically or visually; but neither is quite adequate due to the movement of these lines extending beyond the interior of the building to its exterior.

Following the pioneering approach taken by Evans, I suggest that diagrammatic structures are intentional since their parallels—and sources—may be found in medieval manuscript drawings and are not accidental or fancies of the imagination. It is the goal of this dissertation to demonstrate how such diagrammatic structures are intentionally manifested. The question remains, as always when meaning is transferred with form, as to who would have created or understood the meaning embedded in the form.⁹ For that reason much of what follows will inevitably remain likely but ultimately unprovable.

⁸ See particularly Evans, “The Geometry of the Mind.” Further analyses are listed in the appendix which summarizes the major categories of diagrams that are preserved in medieval manuscript sources.

⁹ See Meyer Schapiro, *Words and Pictures: On the literal and the symbolic in the illustration of a text* (The Hague: Mouton, 1973).

Part of the present argument depends upon informing the movement within the building with the knowledge that the Chartres Cathedral library would have imparted to the users of the collection in the late twelfth (after the fire of 1194) and the early thirteenth century when the cathedral began to take the form it preserves today. As is evident in the extant manuscripts of the twelfth and thirteenth centuries, there were many diagrams in the libraries of the cathedral and religious foundations in the city, as well as a plethora of diagrams that were part of the informing culture of medieval society.¹⁰ Chartres owned astronomical and astrological texts. Taking the evidence of existing schemas to be like those in reading patterns of the stained glass of the cathedral (not only the rose windows but also the narrative windows), the labyrinth diagram on the floor of the nave, and the testing of this hypothesis of embedded diagrams in the structure, this dissertation will explore how the Cathedral of Chartres can be interpreted as a spatial, theological and interactive text that may preserve or supplement some of what was lost in the library holdings.

As already stated, the arrangement of the windows in their positions within the building will be of interest as will the order of the narratives in each window. These arrangements may be intended to form on the one hand a celebration of feast days and on the other, a penitential program for the medieval intellectual. The program I suggest seems to be meant to be deciphered.

It is dangerous to hazard the question of whether the medieval cathedral has what one might call a “soul.” But in some respects, that is what this study is asking, e.g. is there anything

¹⁰ Unfortunately, for those studying what the viewer may have known, the Chartres Cathedral library was largely destroyed in 1944; however, there is significant literature on the contents of the collection. In the Chartres library there were manuscripts containing diagrams; some are extant in microfilm like Thierry of Chartres’s two volume work on the seven liberal arts (MS 497 and 498); others are known, but destroyed. *Catalogue générale des manuscrits des bibliothèques publiques de France*, vol. 11 (Paris: Bibliothèque Nationale, 1962). Yves Delaporte, *Les manuscrits enluminés de la Bibliothèque de Chartres* (Chartres: Société archéologique d’Eure-et-Loir, 1929). See Appendix B.

in a building's physical make-up that can mark the intangible and infer such a possibility? Conversely, if the building has a "soul," the evidence comes from its masonry or its "body." What does the architectural "soul" look like? I suggest that the term, *figura*, that is used in Eucharistic senses as well as diagrammatic senses is the key to understanding the medieval concept of what the physical object's "soul" looks like. In the course of this study, I define and examine the word, *figura*. Using manuscript diagrams that include a body, presentation figure, or human corporeal form in conjunction with the diagrammatic shape that I suggest for the cathedral's "soul," these diagrams like consanguinity trees and Zodiac Man diagrams can be superimposed onto the cathedral plan.

By using the Cathedral of Chartres as an example, I explore the philosophy of the masters of Chartres in tandem with the physical make-up of the cathedral to come to a theological hypothesis of the Chartrain soul and its definition's relationship to the stones and glass that now remain from the twelfth-century version of the cathedral following the 1194 fire.

There is evidence that the *figura* is integral to Chartres's make-up, specifically in its rose windows and labyrinth in the nave which are subjects of diagrams in a variety of manuscripts. Thus, it must be understood as having correlations to manuscripts. This is a large part of the contribution that this study makes, the interpretation of architecture through manuscripts and vice versa.

Before writing a history of the Chartrain soul, it is important to read one. And so, that is where this study begins. With the consumption of texts to prove how one can reconstruct through a literal writing upon the cathedral, the recognition of the building's soul. Of importance throughout this study, are the writings of William of Conches. He argues:

Apposita non est, quia tunc extra corpus anima esset nec aequaliter illud moveret. Omne etenim appositum extra illud est, cui est appositum, et maiores vires habet in proximo, ut

ignis alicui appositus. Concreta non est. Concretum est id, quod ex sua substantia transit in alterius substantiam, ut aqua per ebullitionem in salem. Cum ergo anima non transeat in corporis substantiam, sed semper spiritus est, concreta illi non est. Commixta non est illi. Nullum etenim commixtorum esse sum retinet, sed ex duobus fit unum, ut ex auro et argento electrum. Cum ergo utrumque esse sum retineat, non sunt commixta corpus et anima. Conjuncta ergo sunt, sed ita, quod tota anima in omnibus partibus est corporis esse sum retinens tota et integra.¹¹

The soul is not attached, because then it would be outside the body, and not move with it evenly. Everything attached namely is found outside of which it is attached to, and the nearer it is, the larger its influence, as fire is when it becomes near to anything. It is not integrated. Integration is when something passes over from its own substance into the substance of another, like when salt boils in water. Since therefore the soul does not pass over into the substance of the body, but the spirit always remains [intact], it is not integrated into the body. It is not mixed with it. None of the elements of a mixture keeps its own nature, but the two would become one, like electrum comes from gold and silver. Since however both keep their own nature, bodies and souls are not in a mixture. Therefore, whatever way they are retained, they are not mixed. They are therefore, joined but in such a way that the whole soul is in all parts of the body and they are each totally retained and unmixed.¹²

To these points, it can be stated that the *figura* that I define for Chartres is not completely contained within the confines of the building nor is it completely exterior to it; hence, its congruence with the definition of soul by William of Conches. As explored in Chapter Five, the parts (the windows) relate to the body (the building) through their own individual mnemonic orderings.

It could be argued that the liturgical processions of the city of Chartres, which are documented within the surviving thirteenth-century Ordinary of Chartres accomplish this goal.¹³ However, I suggest that the interspersing of liturgical processions among churches within the city occurs within and outside the churches is an example of a more macrocosmic process of the

¹¹ William of Conches, *Philosophia Mundi: Ausgabe des. I. Buchs von Wilhelm von Conches' Philosophia mit Anhang, Übersetzung und Anmerkungen* (Pretoria : University of South Africa, 1974) (Latin and German), p. 111

¹² Peter Ellard, *The Sacred Cosmos: Theological, Philosophical, and Scientific Conversations in the Twelfth-Century School of Chartres* (Scranton: University of Scranton Press, 2007). See pp. 192 – 193.

¹³ *L'Ordinaire chartrain de XIIIe siècle*, ed. Yves Delaporte, vol. XIX, 1952 – 1953, *Société Archéologique d'Eure-et-Loir Memoires* (Chartres: Société Archéologique d'Eure-et-Loir, 1953).

entire city that is mixed among the various church locales. What I am focusing on is the *figura* or ‘soul’ of one church, that of Chartres. I will look to the Ordinary for some guidance in this process, because I will be considering the calendrical feast days of the windows in the cathedral. The difference between the soul of a city and the soul of a church is suggested as the difference between consumption and making. The liturgical procession of the town is understood by reading, e.g. the Ordinary or the actual visitation of the sites, which is the process of consuming, while the apprehension of the soul of Chartres is a process of making and literally writing on the walls of the building. This, I suggest, explains the appearance of the trades on the base of the windows of Chartres (See Chapter Four). They act as reminders that the windows are for “making” or “writing” while the liturgy is for “reading” or consumption. This is further related to ideas of the *figura* as connected to the Eucharist and its associations with consumption (and its ‘antidote’ to the Fall) and how this definition feeds into the theological character of this study’s reading of the building.¹⁴

¹⁴ In the context of Chartres’s history, Berengar of Tours, who was Bishop Fulbert of Chartres’s student, argued that there was a difference between the *figura* of the Eucharistic sacraments and the true body and blood of Christ. Berengar of Tours, *Epistola ad Ascelinum*, printed under the *Vita Beatus Lanfranci* by Milo Crispinus under Berengarius, under PL 150, 66A – 67A. Edward J. Kilmartin, *The Eucharist in the West* (Collegeville, MN: Liturgical Press, 1998). See p. 97. Chartres Cathedral seems to answer this heresy, not with affirmation as the separation of body and soul would suggest, but with a more complex response. Throughout the sculpture and representations at Chartres, there is a theme of body and blood as signifier and signification. As Chapter Four shows, the Belle Verrière illustrates the changing of water into wine at the Marriage of Cana, but the refusal of changing the stone into bread at Christ’s temptation. The Temptation of Christ by the devil on the west façade frieze is coupled with the selling of Christ’s body for money by Judas. The consumption of the apple by Adam and Eve is shown in a nave window. All of these scenes suggest the idea of bread and body as signifiers and wine and blood as signification and how these elements of consumption are subjected to rules of appropriateness. As the signifier, Adam ‘reads’ or consumes another signifier, a cannibalism of one signifier by another. As the signification, Eve ‘reads’ the apple when signification should lead to an act of writing another signifier, not reading and that should be performed upon itself, an action of incest. As Judas exchanges the signifier of Christ’s body for the signifier of money, Judas recreates the Fall of Adam. The only repair for all of these sins is the merging of signifier and signification in the Eucharistic sacraments. By making an ambiguity between signifier and signification, the other taboos are undone. The changing of water into wine is deemed appropriate as water and wine are mixed and not separated. This receives further treatment in Chapter Three; however, I bring it up here as an introduction to the full import of *figurae* as balancing between presence and absence, visibility and invisibility.

As this demonstrates, all diagrams cannot be treated the same way. For example, the most obvious diagram in the cathedral—the circular nave labyrinth, a 42' 4.25" (12m 1 cm) diameter diagram—is an example of a diagram that has one solution since it represents a unicursal or single-choice maze.¹⁵ I propose to demonstrate that Chartres Cathedral in its larger context may be read as a diagram that is a multicursal maze or a maze with many choices in which pathways can be chosen with the use of metaphorical thread for many different image possibilities. The importance of this result is that it relates to the soul and body of the cathedral that is neither integrated (subsumed within and as I argue, astrological) nor attached (exterior and as I argue astronomical), it is both (see below).

The circular motif of the labyrinth is also evident in the three rose windows, in the west façade (soon after 1194) and in the north and south transepts (c. 1205 and c. 1210). Other diagrammatic schema found in manuscripts that may help to explain the diagrammatic structures found at Chartres, such as the 11th c. Oxford, MS Ashmole 328 and its remnant of the Byrhtferth diagram and 12th c. Byrhtferth diagram (St. John's College 17, 7v), most likely known at Chartres through its links to the Benedictine Abbey of Fleury; and the later drawings in the sketchbook of Villard de Honnecourt (discussed below).¹⁶

¹⁵ The measurement was taken by the author and Professor M. A. Stones. Barbara Lilan Laishley, "Labyrinths in American contemporary religion: rituals that engage a sacred cosmos" (University of Pittsburgh, 2004), Penelope Doob, *The Idea of the Labyrinth from Classical Antiquity through the Middle Ages* (Ithaca, New York: Cornell University Press, 1990), Jean Villette, "L'énigme de labyrinthe de la cathédrale," *Notre-Dame de Chartres* 58 (1984):4 - 13. There are no medieval documentations of the labyrinth, but modern interpretations abound. Villette proposes four interpretations of the labyrinth: 1) the replacement of a pilgrimage to Jerusalem by walking the labyrinth, 2) the figurative representation of the Heavenly Jerusalem and the walk as a reinforcement of this archetypal destination following death 3) a monument celebrating the builders of Chartres like the labyrinth at Amiens, 4) a point of positioning that helped in the construction of the cathedral. In addition to these reasons, Doob suggests the twelve circuits of the labyrinth as representative of the zodiac. Doob strongly disagrees and even dismisses the idea of a substitution of a pilgrimage to Jerusalem with the walking of the labyrinth. Laishley suggests that this idea be reconsidered due to the building of Chartres and other labyrinth cathedrals and churches during the time of the Crusades. See Appendix A.

¹⁶ *Byrhtferth's Enchiridion*. Ed. Peter S. Baker and Michael Lapidge. (Oxford: Oxford University Press, 1995). See p. xlii. The Ashmole version of the Byrhtferth is missing the folio with the specific diagram of interest; however,

But Chartres Cathedral is not just a preserve of manuscript diagrams, as a diagram in and of itself, it is an intellectual game, a theological timepiece, and as I will try to demonstrate, an environment that acts as an experiential process of enlightenment through intellectual labor in which the key to its deciphering is in an understanding of astronomy and astrology. The building is self-aware as a text or body of ideas that asks its viewers to interpret its idiosyncrasies in order to formulate how its space is an arrangement or diagram. It takes an attentive and educated mind to identify these idiosyncrasies because they are found in orderings like the zodiac, part of the Liberal Art of Astronomy, part of the quadrivium which, along with the trivium, formed the basic curriculum of the schools. The calendrical order of the feast days also plays an important part in determining the structural layout as I demonstrate. They link the zodiac signs to the windows and less educated people would have known the feast days and labors of the months because that is the work schedule they used and the feast days that they celebrated; however, it is less certain if the uneducated would be able to decipher the building's diagramming.

This study aims to create a dialogue about methods of looking at architecture in terms of conceptual interpretations and theological juxtapositions made into a physical form. I suggest that the architecture of Chartres is filled with conceptual and intentional diagrams which take different forms.¹⁷ Following the distinctions laid out by Tatarkiewicz, two of these distinctions are 1) diagrams of conception and intention and 2) diagrams of visual accident. Here I am concerned with diagrams of intention (see below).

the folio was ripped out and a corner of it remains that suggests it is the same diagram as 7v in Oxford, St. John's College MS 17.

¹⁷ Wladyslaw Tatarkiewicz, *Dictionary of the History of Ideas: Studies of Selected Pivotal Ideas*, ed. Philip P. Wiener, vol. 2 (New York: Scribner, 1973). See pp. 216 – 225.

With its preserved collection of stained glass in its original position in the cathedral, Chartres epitomizes the definition at the root of the word diagram, arrangement.¹⁸ Definitions of *figura* or ‘arrangement’ from the masters associated with Chartres Alan of Lille (d. 1202) in his *Anticlaudianus* state:

Forma, figura, modus, numerus, juncture decenter membris aptatur et debita numera solvit. Sic sibi respondent concordi pace ligata membra, quod in nullo discors juncture videtur.¹⁹

Form, shape, measure, number and relation adapt themselves to every member and create proper proportion. Members linked concordantly fit one another so well that there is no discordant relation in any of them.

In turn, Abelard in *Logica* “*ingredientibus*” states:

Sunt qui figuram vocant compositionem corporis facti ad representationem sicut compositionem statuæ quæ Achillem representat.²⁰

Some men give the name “figure” both to the arrangement of a body which is to be represented and to the statue representing the body, for example, one of Achilles.

The key to this quotation is the word, ‘represent.’ The difference between representing and being are an important distinction.

Additionally, the concept of ‘arrangement’ or ‘ordering’ is at the root of not only the cathedral, but of medieval society as a whole. The essence of a hierarchical society is one of arrangement or ordering and thus, the analysis of the use of diagrammatic structure as demonstrated in this dissertation is an idea that is long overdue. The construct of the cathedral’s development and its physical construction are based on similar principles.

¹⁸ Wladyslaw Tatarkiewicz, *History of Aesthetics: Volume II Medieval Aesthetics*, ed. C. Barrett, 3 vols., vol. 2 (Mouton: PWN--Polish Scientific Publishers, 1970).

¹⁹ Alan of Lille, *Anticlaudianus*, printed amongst his other works listed under Alanus de Insulis, PL 210, col. 504. Translation by Tatarkiewicz. Tatarkiewicz, *History of Aesthetics: Volume II Medieval Aesthetics*. See p. 209. There is a strong possibility that Alan of Lille was in part, educated at Chartres. See Mary Carruthers and Jan M. Ziolkowski, *The Medieval Craft of Memory: an Anthology of Texts and Pictures* (Philadelphia: University of Pennsylvania Press, 2004). See p. 83.

²⁰ Peter Abelard, *Peter Abaelards philosophische Schriften* (Munster: Aschendorff, 1919). See p. 236. Translation from Tatarkiewicz, *History of Aesthetics: Volume II Medieval Aesthetics*. See p. 211.

Contextual reasons for the choice of Chartres as the basis for this study involve the dispute played out in the works of one of the bishops of Chartres, John of Salisbury (c.1115 – 1176), and a master of Chartres, William of Conches (c. 1090 – after 1154), regarding the most conservative Chartrain masters, the radical approaches of a sect named by John as the ‘Cornificians,’ and the certain moderates like Peter Abelard (1079 – 1142).²¹ As will be shown, the ‘Cornificians’ are a group of thinkers that relied on looking at surfaces and daily fortune-based ideologies like astrology as a method instead of engaging in “below the surface interpretation.” Meanwhile, the Chartrains used the allegorical method of *integumentum* (explained below) to penetrate surfaces yet tempered by a literal, natural science-dependent and astronomical method. The fact that Chartres was on the fringes of Paris may have contributed to the ability of formative influences to combine the radical Cornifician practices and the more orthodox Chartrain ideologies in the structure of Chartres Cathedral to create both an astronomical and astrological building.

One of the primary methods employed in this study is the Chartrain method of interpretation that the Chartrain masters called *integumentum*.²² This can be defined as

²¹ Thierry and William confront the ‘Cornificians,’ but John is the one who names them the followers of “our ‘Cornificius’,”. Joannes Saresberiensis, *Metalogicus* PL 199, 823 – 946. John of Salisbury, *The Metalogicon of John of Salisbury: A Twelfth-Century Defense of the Verbal and Logical Arts of the Trivium*. Ed. and Trans. Daniel D. McGarry. (Berkeley: University of California Press, 1962). Book I, p. 11. For further discussion see Chapter 5.

²² As Jeauneau has noted, the idea of *integumentum* is usually accompanied by the word *veritas*. This seems to relate to the notion of *figura* and *veritas* that was present in the Eucharistic debate. Beranger of Tours separated the *figura* of the bread and wine from its proclaimed *veritas* as the body and blood. Again, the Chartrain masters seem to be placing the idea of *integumentum* as an affront to this heretical emergence born from a Chartrain student of Fulbert. Berengar of Tours, *Epistola ad Ascelinum*, printed under the *Vita Beatus Lanfranci* by Milo Crispinus under Berengarius, under PL 150, 66A – 67A. Kilmartin, *The Eucharist in the West*. See p. 97. Bernard Silvestris defines *integumentum* in this way in his *Commentary on the Aeneid*: “Integumentum est genus demonstrationis sub fabulosa narratione veritatis involvens intellectum, unde et involucrum dicitur.” “The integument is a type of exposition which wraps the apprehension of truth in a fictional narrative, and thus it is also called an *involucrum*, a cover.” Bernard states that the fabulous can be deciphered by the intellect to yield a Christian truth. Bernard Silvestris dedicated his *Cosmographia* to Thierry of Chartres, at least suggesting a relation between the Chartrain masters and Bernard. Bernard Silvestris, *Commentum super sex libros Eneidos Virgilii*. Ed. Julianus and Elizabetha Jones. (Lincoln, Nebraska: University of Nebraska Press, 1977). See p. 3. Bernardus Silvestris, *Commentary on the*

“unwrapping” what are usually pagan texts to apply a Christian content to them. In this usage of the method, the text is the pictorial like the pagan zodiac in the Zodiac Window and the left western tympanum and the mythological labyrinth. *Integumentum* is shown to involve the Pauline idea of seeing through a mirror darkly and then seeing face to face.²³ This classic phraseology involves the concepts of confronting something as an object with the viewing party as an observer and in turn, the thing looked at as an embodied other or observed and thus, face to face. The idea of observing oneself is connected to the mirror imagery and may also be connected with the medieval concept of the interior man discussed in Chapter Two; hence, the judgment that is done through a mirror darkly is upon oneself and so mixed with mercy and judgment, signification and signifier. The confrontational, face to face judgment may be considered as done after death in heaven, signifier to signifier. The interplay between the earthly and the heavenly, the human and the divine, and the feminine and the masculine are some of the dichotomies that will be related to medieval thinking. By utilizing the Chartrain masters’ own

First Six Books of Virgil’s Aeneid, Trans. Earl G. Schreiber and Thomas E. Maresca. (Lincoln: University of Nebraska Press, 1979). See p. 5. Bernard of Chartres also uses the word *integumentum* in his *Glosae super Platonem* where he states that he uses *integumentum* as a method. “Haec ordination ad litteram potest intelligi, et etiam ad integumentum.” This establishes and outright declares the use of the practice by the Chartrains. Bernard of Chartres, *The Glosae Super Platonem of Bernard of Chartres*. Ed. Paul Edward Dutton. (Toronto: Pontifical Institute of Mediaeval Studies, 1991). While not coming forth with a declaration of his usage of the method, William uses the term *integumentum* to discuss the representation of fabulous creature, Polyphemus the Cyclops from the Aeneid, as “de voluptate est curiosa” in his *Glosses on the Consolation of Philosophy of Boethius*. This use of *integumentum* expresses the idea of the lust or curiosity of the eye through the single-sighted creature. It is this lust of the eye that is discussed in Chapter Two in regard to the Cornificians. Perhaps juxtaposing the use of *integumentum* with the lust of the eye suggests the divorcing of *figura* from *veritas* or *integumentum* (signifier) with *veritas* (signification) as integral to the Cornifician folly. The *Glosses on the Consolation of Philosophy* are currently unavailable. See also Winthrop Wetherbee, “The School of Chartres,” in *A Companion to Philosophy in the Middle Ages*, ed. Jorge J. E. & Noone Gracia, Timothy B. (Malden, MA: Blackwell Publishing, 2006), 36 - 44, Edouard Jeuneau, “L’usage de la notion d’*integumentum* a travers les gloses de Guillaume de Conches,” *Archives d’histoire doctrinale et littéraire du Moyen Âge* 24 (1957):35 - 100. Julian Ward Jones illustrates the confusion between the Tours master, Bernardus Silvestris and the Chartrain master, Bernard of Chartres. Julian Ward Jones Jr., “The So-Called Silvestris Commentary on the Aeneid and Two Other Interpretations,” *Speculum* 64, no. 4 (1989):835 - 48. See p. 836.

²³ I Corinthians, 13:12, “Videmus nunc per speculum in aenigmate: tunc autem facie ad faciem.” “We see now by a glass in a dark sort: but then face to face.” *Vulgate New Testament with the Douay Version of 1582 in Parallel Columns* (London: Samuel Bagster and Sons, 1872). See p. 237.

methods to read the building, this method buttresses the understanding that medieval viewers could have used these methods and thus, seen the building in this diagrammatic way.

Another method of analysis that is used in this study is the application of astrological knowledge to visual language as diagrammatic intention. This involves the relating of descriptive postures of the zodiac signs to abstracted body postures as defined by Marcus Manilius and in the Prayer Postures of Peter the Chanter²⁴. One of the objectives of this dissertation will be to demonstrate—through the *figurae* of the building and windows of Chartres—that the postures method was used in the middle ages. The diagram that will be important in this method is folio 7v of the twelfth-century St. John's College MS 17, a copy of the well-known Byrhtferth diagram. This diagram is believed to be related to the tutelage of Byrhtferth of Ramsey (c. 970 – 1020) by Abbo of Fleury (c. 945 – 1004).²⁵ In addition to the Reims master of the *quadrivium*, Gerbert of Aurillac (c.940 – 1003), Abbo of Fleury was one of the most prominent teachers of astrology and astronomy in the tenth century. Charles Burnett makes a strong case for the exchange of manuscripts among Fleury, Micy, and Chartres.²⁶ By tracing important astrological and astronomical texts found in Chartres MS 214, Burnett creates a recension of manuscript evidence that interconnects the three locales. Byrhtferth of Ramsey was a student of Abbo and if the diagram is a production of Abbo, its influence would have undoubtedly been felt across this geography of exchange.

²⁴ For diagrams see Appendix A. Marcus Manilius, *Astronomica*. Trans. G. P. Goold. (Cambridge: Harvard University Press, 1977). (Latin and English). Peter the Chanter, *De penitentia et partibus eius* in *The Christian at Prayer: An Illustrated Prayer Manual Attributed to Peter the Chanter (d. 1197)*. Ed. Richard C. Trexler. (Binghamton, New York: Medieval & Renaissance Texts & Studies, 1987). (Latin)

²⁵ *Byrhtferth's Enchiridion*. Ed. Peter S. Baker and Michael Lapidge. (Oxford: Oxford University Press, 1995). See p. xlii.

²⁶ Charles Burnett, "King Ptolemy and Alchandreus the Philosopher: The Earliest Texts on the Astrolabe and Arabic Astrology at Fleury, Micy, and Chartres " *Annals of Science* 55 (2000):329 – 68.

A second set of diagrams that bear upon the issue of posture and its representation in schematic form are the sketches in the so-called sketchbook of Villard de Honnecourt (MS BNF Fr. 19093).²⁷ Villard de Honnecourt (sketchbook c. 1230) is the name associated with a group of schematic and geometric drawings on what was in the middle ages a set of loose parchment quires in a folder. It is uncertain if he is the figure who should be connected with the drawings, the writing in the manuscript, or both. The schematics of interest show men in stick-like forms walking with legs at an acute angle, standing vertically, and sitting on a profile, L-shaped throne (See Appendix A). These diagrams offer visual evidence that schemas were significant elements in medieval thought and open possibilities of reading them as related to written posture descriptions as there is also written evidence.

1.1 LITERARY REFERENCES TO DIAGRAMS

Postures and positioning of the body are important in rhetorical texts of the middle ages and the text of the Roman poet who references these postures, Marcus Manilius (1st c. A.D.). His text is extant in two manuscripts from the middle ages and it is likely that the information that Manilius provides is earlier than even him. Manilius's text is found today in Brussels, BR 10012 (11th c.),

²⁷ Villard of Honnecourt, *The Portfolio of Villard de Honnecourt* (Paris, Bibliothèque nationale de France, MS Fr 19093). Ed. Carl F. Barnes, Jr.. (Aldershot: Ashgate Publishing, 2009). See Appendix A for bibliography. Villard de Honnecourt includes in his sketchbook an image of Chartres's west façade rose window that has many suggestions of a wheel-like form that relate to both the wheel of fortune and the wheel of true religion as discussed in Chapter Two.

the other in Leipzig, Bibliotheca Albertina MS 1465 (11th c.).²⁸ The Brussels copy came from Gembloux and Traube ascribes the Leipzig copy also to Gembloux.²⁹ There is an entry in a catalogue of c.1049 to c.1060 indicating that there was a Manilius text at the Abbey of Lobbes.³⁰ This abbey is in the Diocese of Liège, close to Gembloux, and it had contact with Chartres and also Reims. This suggests a possible line of transit for the text of Manilius, which is requested at Reims in 998 by Gerbert of Aurillac and then likely passed through Chartres and Liège.³¹ The time period of the manuscript would also provide a reasonable proximity for influence on the post-1194 building of Chartres.

The postures take on a penitential tenor with the medieval writings of Peter the Chanter (d. 1197) who associates penance with the posture of the body during prayer.³² Peter was associated with Alan of Lille as seen in folio 217 of the mid-thirteenth-century MS BL Additional 19767 in which a medieval illuminator has pictured them together.³³ Alan of Lille alludes in his *Anticlaudianus* to the figure of the Virgin who is asked by God to stand so that her

²⁸ M. D. Reeve, "Some Astronomical Manuscripts," *The Classical Quarterly (New Series)* 30, no. 2 (1980):508 - 22. The extant library lists for Chartres Cathedral do not list a copy of Manilius specifically, but the likelihood of it being known there is considerable.

²⁹ *Quellen und Untersuchungen zur lateinischen Philologie des Mittelalters*, ed. Ludwig Traube and Paul Joachim Georg Lehmann, vol. 3, no. 1 (Munich: C. H. Beck, 1908). See p. 82.

³⁰ The manuscript is entered as follows: "Astronomicon lib. VI. T. Claudii Caesaris Arati phenomena. Periegesis Prisciani. Vol. I."

³¹ Gerbert of Aurillac, *Lettres de Gerbert (983 – 997)*. Ed. Julien Havet. See Letter 130. (Paris: A Picard, 1889). Gerbert of Aurillac, *The Letters of Gerbert with his Papal Privileges as Sylvester II*. Trans. Harriet Pratt Lattin. (New York: Columbia University Press, 1961). Michel Parisse, "Lotharingia," in *The New Cambridge Medieval History: c. 900 - c. 1024*, ed. Timothy Reuter, et al. (Cambridge: Cambridge University Press, 1999). See 325 – 326.

³² Tester states that Manilius derived the concept of the postures from visual evidence, but he also says that the root of Manilian thought is pre-Roman. S. J. Tester, *A History of Western Astrology* (Woodbridge, Suffolk: Boydell Press, 1987). See p. 33, 44.

³³ For a reference with reproduction, information, and the abridged primary text in Latin of Peter the Chanter, see Richard C. Trexler, *The Christian at Prayer: An Illustrated Prayer Manual Attributed to Peter the Chanter (d. 1197)* (Binghamton, N.Y.: Medieval and Renaissance Texts and Studies, 1987).

“uplifted mind equals the position of her body.” Wetherbee suggests that this alludes to the fact that man needs to reclaim his original ‘erectness’ before Original Sin.³⁴

The postures of a person are a kind of *integumentum* and astrological diagrams accord with this interpretation as a person’s *internal* predisposition in the universe is believed in astrology to determine their fate.

1.2 THE WORD *FIGURA*

W. Tatarkiewicz indicates that the origins of the word *figura* are enfolded in the aesthetic term, *forma*. This Latin word was a substitution for two Greek words, *morphe* and *eidos*.³⁵ Tatarkiewicz discusses five modern types of classifications for the word *forma*. The first of these classifications is the idea of arrangement or the combination of parts in a particular order to create a composite and rational whole. This definition will be related to the organization of the structure and the order of the Zodiac Window. The second classification is sensory information. This type of form will be exemplified in the idea of the outer man or Cornificians in Chapter Two when the idea of hearing without understanding is discussed. The third classification is the

³⁴ Alanus de Insulis *Anticlaudianus* PL 210, col. 545.

Sed superum genitor reddens sua jura saluti
Erigit hanc, et stare jubet, motusque timoris
Sistere, ne terror animum vocemque retardet
Erigitur, mentemque regit, partimque retardat
Virgo metum, stat mens cum corpore, corporis aequat
Mens erecta situm; sic vox submissa resumit
Vires, erectam mentem sua verba sequuntur.

Alan of Lille, *Anticlaudianus; or the good and perfect man*. Trans. James J. Sheridan. (Toronto: Pontifical Institute of Mediaeval Studies, 1973). Book VI, Chap. 5, p. 124. Winthrop Wetherbee, "Philosophy, cosmology, and the twelfth-century Renaissance," in *History of Twelfth-century Western Philosophy*, ed. Peter Dronke (Cambridge: Cambridge University Press, 1988), 21 - 53. See p. 52.

³⁵ Tatarkiewicz, *Dictionary of the History of Ideas: Studies of Selected Pivotal Ideas*. Volume 2: Form in the History of Aesthetics, pp. 216 – 225.

contour or boundary of an object. This definition aligns itself with diagrams and schematics. The fourth classification of form is based on the philosophy of Aristotle and relates to an object's "conceptual essence." The word of Aristotle's that Tatarkiewicz draws upon is *entelechy*.³⁶

Aristotle's *Metaphysics* in which the word *entelechy* is known to have appeared was not available to the Chartrains; however, the concept presents itself both in Boethius and Chalcidius, which the Chartrains are known to have studied—specifically, Boethius's work on the Trinity and Chalcidius's Commentary on the *Timaeus*.³⁷ Paul Dutton explains the importance of Plato to Bernard of Chartres.³⁸ Using copies of the *Glosae super Platonem*, Dutton shows that there are allusions in the text of one manuscript that includes an abridged version of the *Glosae* that mentions Bernard of Chartres's authorship of the text. In most cases, glossed texts remain anonymous; however, in an Irish manuscript, Oxford, Bodleian Auct, F.3.15 from the twelfth century, there are citations that credit the information to Bernard's glossing of both Plato and Chalcidius.³⁹ Importantly, in the *Glosae*, Bernard uses the word *endelichia*.⁴⁰ He states: "Merito uero dicitur anima constare ex natiuis formis, quia secundum Aristotelem *anima est endelichia, id est forma corporis, quae corpus uiuificando quodammodo informat*."⁴¹ In this statement, the soul and the body are taken up once again and the soul is suggested to be the *forma corporis*, which connects the soul and entelechy with *forma* or *figura*.⁴² Additionally, in his *Metalogicon*

³⁶ Tatarkiewicz, *Dictionary of the History of Ideas: Studies of Selected Pivotal Ideas*. The fifth classification of the word form is Kantian and refers to a mental comment upon an object. See pp. 216 – 225.

³⁷ See Appendix B for library list and Chapter Two. Boethius manuscripts include Chartres MSS 59 and 48. Chalcidius is known to be glossed by Bernard of Chartres in Oxford, Bodleian Auct, F.3.15.

³⁸ Bernard of Chartres, *The Glosae Super Platonem of Bernard of Chartres*. Ed. Paul Edward Dutton. (Toronto: Pontifical Institute of Mediaeval Studies, 1991).

³⁹ Bernard of Chartres, *The Glosae Super Platonem of Bernard of Chartres*. See pp. 10 – 12.

⁴⁰ Bernard of Chartres, *The Glosae Super Platonem of Bernard of Chartres*. See pp. 80, 175.

⁴¹ Bernard of Chartres, *The Glosae Super Platonem of Bernard of Chartres*. Book 5, 71 – 74, p. 175.

⁴² For more on Oxford, Bodleian Auct, F.3.15, see Chapters Three and Four.

Book IV, Chapter 35, John of Salisbury names Bernard, “. . . perfectissimus inter Platonicos saeculi nostri . . . ,” “the greatest Platonist of our time.”⁴³

Thierry of Chartres commentary on *De Trinitate* of Boethius is found in the library of Chartres. In this work, Thierry discusses the *actus* and *possibilitas* of form and matter.⁴⁴ Taking a moment to consider these ideas in relationship to Aristotle’s use of the term *endelichia* is of benefit as it may relate to not only the object of the Cathedral of Chartres and its diagrams, but to the process of comprehending the building. It may also explicate and act as an example of the type of process this study is attempting to establish in architecture.

1.3 ENTELECHY AND DIAGRAMMATIC THINKING

Chartres’s philosophers may have been some of the first in the twelfth century to introduce Aristotle’s doctrine of hylomorphism.⁴⁵ The word, *hyle*, appears in Bernard’s work on Plato and in John of Salisbury’s quotation of one of Bernard of Chartres’s poetic verses.⁴⁶ The term, hylomorphism, means that there are substantial and accidental forms that dictated the arrangement of an object or identity.

⁴³ Joannes Saresberiensis, *Metalogicus*, PL 199, col. 938. John of Salisbury, *Metalogicon* Book IV, Chapter 35 Wetherbee, "The School of Chartres." See p. 38 for Chalcidius. Wetherbee, "Philosophy, cosmology, and the twelfth-century Renaissance." See p. 35 for Boethius.

⁴⁴ Thierry of Chartres, *De Trinitate* in *Commentaries on Boethius by Thierry of Chartres*. Ed. Nikolaus Häring, S.A. C. Toronto: Pontifical Institute of Mediaeval Studies, 1971), Book II, 20, p. 74.

⁴⁵ Aristotle’s doctrine of *hylomorphism* comes from his work *De Anima*. The translation of this work was likely undertaken by Averroës in 1230 according to Simon Kemp. See Simon Kemp, *Cognitive Psychology in the Middle Ages* (Westport, Connecticut: Greenwood Press, 1996).

⁴⁶ Bernard of Chartres, *The Glosae Super Platonem of Bernard of Chartres*. See pp. 164, 166, 174 – 176, 182, 194, 218 – 233. Joannes Saresberiensis, *Metalogicus* PL 199, col. 938. John of Salisbury *Metalogicon* Book IV, Chapter 35.

Naturally stemming from the intentional diagram is a process by which it is formed. Another Aristotelian idea that suggests dichotomies that develop the term, hylomorphism is the term, *entelechy*. Though there is some uncertainty, it is believed to be a term that originated with Aristotle; however, nowhere does he define it and if he is not the creator of the term, nowhere does he indicate its source.⁴⁷ Twentieth-century scholars have debated whether the etymology of the word comes from *telos* or *entelês*. *Telos* denotes a finite end and *entelês* denotes a sense of motion or process. While many scholars support an understanding in terms of *entelês*, Stan A. Lindsay asserts that *telos* is the important origin of the word. Though Lindsay is speaking of Kenneth Burke's philosophical usage (1897 - 1993), this interpretation, Lindsay maintains, stands true for Aristotle as well. He concludes this based on the proximity of the use of the word, *telos* to *entelechia* in Aristotle's *Metaphysics*. This juxtaposition is telling for Lindsay.⁴⁸

Aristotle, however, attempts to balance his use of kinetic motion and static end (the *actus* and *possibilitas* of Thierry). The fact that this word *entelechia* is used in aesthetic contexts of form with building production and visual processes lends this study's use more pertinence.⁴⁹ The tenuous balance between presence and absence in this term's usage suggests comparisons with the writings of the Church Fathers.

⁴⁷ "Again "being" and "that which is" mean that some of the things which we have mentioned "are" potentially [*dunamis*], others in complete reality [*entelecheia*]. For we say both of that which sees potentially [*dunamis*] and of that which sees actually [*entelecheia*], that it is "seeing." (1017a35 – 1017b3) "And we get thus the doctrine of Anaxagoras, that all things are mixed together, so that nothing really exists. They seem, then, to be speaking of the indeterminate, and while fancying themselves to be speaking of being, they are speaking about non-being; for it is that which exists potentially [*dunamis*] and not in complete reality [*entelecheia*] that is indeterminate." (1007b26 – 29) See Aristotle, *Metaphysica*. Trans. J. A. Smith. (Oxford: Clarendon Press, 1931); reprinted in *The Works of Aristotle Translated into English*. Ed. W. D. Ross. (Oxford: Clarendon Press, 1968). These quotations recall both the sunrise quotations of Augustine mentioned in footnote 50 and the quotation on soul by William of Conches in Chapter One and also in footnote 145. Stan A. Lindsay, *Implicit Rhetoric: Kenneth Burke's Extension of Aristotle's Concept of Entelechy* (Lanham: University Press of America, 1998), Tatarkiewicz, *Dictionary of the History of Ideas: Studies of Selected Pivotal Ideas*. Lindsay, see pp. 33 – 34.

⁴⁸ Lindsay, *Implicit Rhetoric: Kenneth Burke's Extension of Aristotle's Concept of Entelechy*. See p. 34.

⁴⁹ Lindsay, *Implicit Rhetoric: Kenneth Burke's Extension of Aristotle's Concept of Entelechy*. See pp. 41 – 42.

Augustine (354 – 430) discusses the sunrise as something that is complete in our knowledge and in how we see it, but as something that may not be happening at the same time as we think of it.⁵⁰ This idea of seeing is suggestive of Aristotelian definitions of entelechy. In contrast to this, John Cassian (c. 360 – 435) states in his story of the monk, Sarapion, and in the empathetic response of the followers of a man named, Abba Isaac:

Quam confusionem idcirco nobis accidere satis certum est, quia speciale aliquid prae oculis propositum uelut formulam quondam stabiliter non tenemus, ad quam posit uagus animus post multos anfractus ac discursus uarios reuocari et post longa naufragia uelut ebria per diuersa iactetur . . .⁵¹

We had nothing particular, no formula which we could hold constantly before our eyes, one to which the wandering mind could return after many wanderings and various travels, one that the mind could enter as into a haven of peace after long shipwreck.

⁵⁰ “Quoquo modo se itaque habeat arcana praesensio futurorum, videri nisi quod est non potest. Quod autem jam est, non futurum sed praesens est. Cum ergo videri dicuntur futura, non ipsa quae nondum sunt, id est quae futura sunt, sed eorum causae, vel signa forsitan videntur, quae jam sunt; ideo non futura, sed praesentia sunt jam videntibus, ex quibus futura praedicantur animo concepta. Quae rursus conceptiones jam sunt, et eas praesentes apud se intuentur qui illa praedicunt. Loquatur mihi aliquod exemplum tanta rerum numerositas. Intueor auroram, oriturum solem praenuntio: quod intueor, praesens est; quod praenuntio, futurum: non sol futurus qui jam est, sed ortus ejus qui nondum est: tamen etiam ortum ipsum nisi animo imaginarer, sicut modo cum id loquor, non eum possem praedicere. Sed nec illa aurora quam in coelo video, solis ortus est, quamvis eum praecedat; nec illa imaginatio in animo meo: [col. 819] quae duo praesentia cernuntur, ut futurus ille ante dicatur. Futura ergo nondum sunt; et si nondum sunt, non sunt: et si non sunt, videri omnino non possunt; sed praedici possunt ex praesentibus, quae jam sunt, et videntur.” Augustinus Hipponensis *Confessiones* PL 32, col. 819.

“Whatever may be the mode of this mysterious foreseeing of things to come, unless the thing is, it cannot be seen. But what now is, is not future but present. Therefore when we speak of seeing the future, obviously what is seen is not the things which are not yet because they are still to come, but their causes or perhaps the signs that foretell them, for these causes and signs do exist here and now. Thus to those who see them now, they are not future but present, and from them things to come are conceived by the mind and foretold. These concepts already exist, and those who foretell are gazing upon them, present within themselves. Let me take one example from a vast number of such things. I am looking at the horizon at dawn: I foretell that the sun is about to rise. What I am looking at is present, what I foretell is future—not the sun of course, for it now is, but its rising which is not yet. But unless I could imagine the actual rising in my mind, as now when I speak of it, I could not possibly foretell it. But the dawn which I see in the sky is not the sunrise, although it precedes the sunrise; nor is the dawn the image of the sunrise that is in my mind. But both—the dawn and the image of the sunrise—are present and seen by me, so that the sunrise which is future can be told in advance. Thus the future is not yet; and if it is not yet, it is not; and if it is not, then it is totally impossible to see it. But it can be foretold from things present which now exist and are seen.” Augustine, *Confessions*. 2nd ed. Ed. Michael P. Foley. Trans. F. J. Sheed. (Indianapolis: Hackett Publishing Co., 2006), Book 11, 18, pp. 245 – 246. Chartres owned Book 13 of the *Confessions* (MS 39).

⁵¹ Iohannis Cassiani, *Collationes XXIII*. Ed. Michael Petschenig. CSE. Vol. XIII (Wien: Verlag Österreichischen Akademie der Wissenschaften, 2004), Book X, 8 p. 295 – 296. Though Chartres held a manuscript of John Cassian, the beginning point of its excerpt is Book XI.

Abba Isaac instructs that his followers should have a model for their inner eye to help them understand and find their way.⁵²

This further suggests entelechy: a process necessitates a “formula” or “diagram” to see the entelechy in some form of completion during its process of becoming. This study would like to suggest that in this same way, Chartres can be thought of as a marker and process—as an entelechy. The process of experiencing it can occur despite its obvious existence as a completed whole. The diagrams in the building can exist without being perceived, but the entelechy is finished once they are perceived. Likewise, the zodiacal emphasis that this study places on Chartres’s entelechy is justified through the word *forma* because it also refers to the makeup of constellations and is used as such in pertinent sources like the writings of Priscillian, Manilius, and Firmicus Maternus.⁵³

⁵² Mary Carruthers, *The Craft of Thought: Meditation, Rhetoric, and the Making of Images, 400-1200* (Cambridge: Cambridge University Press, 2000).

⁵³ In Book I, line 60 of the *Astronomica*, Manilius uses the word *forma* (“Postquam omnis caeli species, refeuntibue astris, percepta, in propias sedes, et reffita certis fatorum orfinibus sua cuique potential formae, per varios usus artem experiential fecit . . .”) to refer to the “figuration [or position] of the planets.” Marcus Manilius, *Astronomica*. Trans. G. P. Goold. (Cambridge: Harvard University Press, 1977). (Latin and English). See pp. 8 – 9. “Ut formas integras ordinationis acciperes, et scires quatenus sint in zodiaco circulo signa disposita, hac ex causa istius rei secreta tractavimus. Neque enim certo ordine et certo gradu haec duodecimo signa collocata sunt, nec sic sunt posita, ut quae posteriori loco oriuntur praecedentia vel sequential signa semper aspiciant. Ut ergo non argumentis sed re ipsa tibi hoc ostenderem, tractatum istum ex Abrahae libris excerptum edidimus, ut hoc quod diximus sermo noster manifestis tibi interpretationibus intimaret.” Ivlīi Firmici Materni, *Matheseos Libri VIII*. Ed. W. Kroll and F. Skutsch. Stuttgart: B.G. Teubner, 1968), Book VIII, 5, see p. 287. “We have discussed these secrets so that you may understand the order of the stars and know how they are located in the circle of the zodiac. For the twelve signs are not located in a definite order, or in equal steps, nor are they so placed that those that rise in a later position always are in aspect to those that precede or follow. So that I may show you not in argument but in the thing itself. I appended this extract from the *Book of Abraham* so that our writing may show you this matter in a clear interpretation.” Julius Firmicus Maternus, *Ancient Astrology: Theory and Practice Matheseos Libri VIII*. Trans. Jean Rhys Bram. (Park Ridge, New Jersey: Noyes Press, 1975). Book VIII, 5. Orosius extracts from a letter written by Priscillian the following passage: “Haec prima sapientia est in animarum typis divinarum virtutem intellegere naturas et corporis dispositionem, in qua obligatum caelum videtur et terra omnesque principatus saeculi videntur adstricti; sanctorum vero dispositiones superare. Nam primum circulum et mittendarum in carne animarum divinum chirographum, angelorum et dei et omnium animarum consensibus fabricatum patriarchae tenent; qui contra *formalis militiae* opus possident, et reliqua.”

“The first wisdom consists in recognizing in the types of souls the natures of divine powers and the disposition of the body, in which the heaven and the earth are bound and all the powers of the world are gripped; but the dispositions of the holy ones overcome. For the first circle and the divine record of souls to be sent into the flesh are

As a contribution to art history and cultural studies, this study's use of Chartres is only one particular example of the vast potential that diagrammatic methodologies can have on art objects and even on complete disciplines. Entelechy as the fundamental principle of diagrammatic methods represents a means of approaching history that looks at the larger picture or structure as well as the particular object or event.

Part of this is the understanding of the heavenly in terms of the earthly. Revisiting Alan of Lille's quotation mentioned earlier in this chapter, it related the members or parts to the overall 'relation.' This suggests the relationship between the parts and the whole. This and Abelard's definition of *figura* suggest the difference between an inner linkage as seen in Alan of Lille's definition and Abelard's suggests an external judgment. While Alan of Lille's understanding of *figura* fit a theological definition, Abelard's is one that fits a physical or concrete definition. Both can be seen in this study to work together in Chartrain understandings and Cornifician understandings to promote, as Abelard does, an external looking and as Alan of Lille does a canopy under which to comprehend the relationship between external and internal looking.

made by the co-operation of the angels and of God and of all , and are in the control of the patriarchs. Those on the opposite side who control the force of the zodiacal host . . . and the rest."

Henry Chadwick pays special attention to the phrase *formalis militiae* and though "hazardous[ly]", translates it as "zodiacal host." But with the added suggestion of Manilius and Firmicus Maternus, he suggests that the word, *forma*, can be read as relating to astronomical and astrological contexts and contents and the notion of the *schema* or *figura*. Henry Chadwick, *Priscillian of Avila: The Occult and the Charismatic in the Early Church* (Oxford: Clarendon Press, 1976). See pp. 192 – 194.



Figure 1: Inscription below the Sylvester Window

One of the important pieces of evidence found at Chartres is a date that has been inscribed in the east end of the cathedral under the Sylvester Window in Arabic numerals, 1019. This is the year that the religious community at Chartres experienced the loss of one of its newly appointed sub-deans who was given the appointment at Chartres for his esteemed work there and the greed and jealousy of competing clergy at Amiens resulted in the death of the sub-dean in front of the Cathedral of Chartres one night in 1019. In Fulbert's personal correspondence, he wrote to the perpetrators the following about interior and exterior penance⁵⁴:

Nec porta iustitiae nex ianua misericordiae uobis clausa est apud nos; neque . . . fecimus hostiarium qui uos (ut significatis) a nostris penitralibus arcet, sed utrumque adytum seruandum rationi commisimus. Si uultis intrare per portam iustitiae, defendite culpam. Si per ianuam misericordiae, agite penitentiam. Aliter eim uos ratio non admittet.

⁵⁴ The progression to interior and exterior penance can be understood from the statement of Fulbert to the official terminology of "interior and exterior penance" used by Alan of Lille. Alanus de Insulis *Liber poenitentialis* PL 210, col. 295. Book III.6, vol. II, p. 129. "Poenitentia aliquando cordis contrition dicitur, quando quis deflet delicta, nolens amplius iterare commissam, . . . Vel poenitentia dicitur etiam satisfaction poenitentiam comitans; quae dicitur poenitentia quasi poena tenens hominem. Haec dicitur exterior, praedicta vero interior." "Repent before it is too late, the heart pleads, when you are able to brush aside these feelings you should give yourself to tears. Judgment renews the undertaking of penitence. Repentance accompanies a change of mind as if a retribution of the Carthaginian on the feudal landowner. This said outwardly should be preceded by true inward repentance." For more on interior and exterior penance, see Mary C. Mansfield, *The Humiliation of Sinners: Public Penance in Thirteenth-Century France* (Ithaca, New York: Cornell University Press, 1995).

Neither the gate of justice nor the door of mercy is closed to you in our sight, nor have we made . . . a doorkeeper to prevent (as you claim) your entering into our presence; but we have entrusted the keeping of both entrances to Reason. If you wish to enter through the gate of justice, disprove your guilt; if through the door of mercy, do penance. Otherwise Reason will not let you in.⁵⁵

The balance of the interior and exterior as well as the balance of judgment and mercy should be noted. Additionally, the period of this occurrence with the date inscribed on the east end of the cathedral is of interest to the penitential nature of the cathedral.

Ultimately, the methodology laid out in this introduction is the other part informing the definition of what the word “diagrammatic” is expressing. As the idea of *integumentum*, the zodiac, and substitution were methods and ideas known in the middle ages, they also can be used to define the word “diagram” in its medieval context. Though the word, *figura*, means arrangement, it also implies an arrangement that requires action. A diagram is not static as seen in the diagram of the elemental *cybus* in the manuscripts of Isidore of Seville, (see Appendix A) which twentieth-century scholars have suggested is a compressed three-dimensional cube.⁵⁶ The diagram suggests Platonic thought and teaching in its being representative of an archetype that in varying ways insinuates itself into the actual world.⁵⁷ It is a Platonic question that requires the hearer to answer or a musical chord that compels the ear to search for a harmonic resolution. In the case of substitution, the diagram is a theorem that requires application. In other words, it is a

⁵⁵ Already, this suggests two of the tympana on the west façade created in 1154, Christ in Majesty or judgment and the merciful throne of wisdom. The quotation is from Fulbert of Chartres, *The Letters and Poems of Fulbert of Chartres*. Ed. and Trans. Frederick Behrends. (Oxford: Clarendon Press, 1976). (Latin and English) See Letter 31, p. 59.

⁵⁶ Bruce Eastwood, "The diagram of the four elements in the oldest manuscripts of Isidore's "De natura rerum", "*Studi Medievali* 3, no. 42 (2001):547 - 68.

⁵⁷ "Sed unitas que pluralitatem omnium rerum preedit dues est. Quare dues unitas est. Sed que unitas est eternitas: forma scilicet essendi omnibus rebus. Oportet ifitur considerare formam formarum que deus est. Oportet etiam considerare formas que ab ipsa forma essendi prodeunt. Oportet quoque considerare cursum temporalem cui cuncta in actu supposita sunt." Thierry of Chartres, *De Hebdomadibus* in *Commentaries on Boethius by Thierry of Chartres and his School*. Ed. Nikolaus M. Häring. (Toronto: Pontifical Institute of Mediaeval Studies, 1971). See p. 410. Wetherbee, "The School of Chartres." See pp. 40 – 41.

conversation that requires a response according to the information given in the diagram. The diagram requires knowledge of vantage point and context to be effectively resolved.

The diagram's vantage point, like the labyrinth on the floor of the Cathedral of Chartres, is complemented by the position of the rose window on a vertical surface. According to Jean Villette, the rose window measures precisely the same size as the labyrinth.⁵⁸ The position of the rose in exact measure on the west façade and the labyrinth from the front door in equal measure to its place on the floor suggest a correlation of the windows or the confrontational and the vertical elements in the cathedral with the horizontal or the embodiment of the space or being self-enclosed. Based on these juxtapositions, this study suggests as a new claim in Chartrain scholarship, that the Zodiac Window in the eastern end of the cathedral is a way of confronting the cathedral because if the plan of the window is reflective of the plan of the cathedral, it permits the confrontation of the cathedral face to face simultaneous with a self-reflective or embodying stance of being within the structure.

This is supported by the experience reflected in the poem of Baudri de Bourgueil (1060 - 1130) addressed to the Countess Adela of Blois (Chartres is in the County of Blois).⁵⁹ In this poem, the poet positions himself in her bedchamber with a diagram of the world or *mappamundi* upon the floor and able to confront an astronomical diagram on the ceiling.⁶⁰ The arrangement

⁵⁸ Villette, "L'énigme de labyrinthe de la cathédrale." See p. 12.

⁵⁹ Baudri de Bourgueil, *Baudri de Bourgueil: Poèmes*. Ed. and Trans. Jean-Yves Tilliette. (Paris: Les Belles Lettres, 2002). (Latin and French). Baudri de Bourgueil, "To Countess Adela" *The Journal of Medieval Latin* 11 (2001), 60 – 141. (English Translation by Monica Otter)

⁶⁰ Namque in eo mundi forma recensa fuit. Quippe pauimentum mundi fuit altera mappa, Hic uideas terrae monstra marisque simul. Res designabant superaddita nomina rebus, Sic ea cura sagax pinxerat artificis. Ne uero puluis picturam lederet ullus, Tota fuit uitrea tecta superficie: Ipsa superficies uitreum mare nomen habebat, Lucida materies lucifiorque uitro; Hanc ne protereret pes inuidus ingredientum. Baudri de Bourgueil, *Baudri de Bourgueil: Poèmes*. See p. 23. For the whole poem, see pp. 1 – 43. *A mundi forma* literally means a map of the world, whether this is a T-O map or a *mappamundi* is uncertain. Because the monstrous races are depicted, it is likely a *mappamundi*. See Appendix A for the difference. In Countess Adela's bedchamber the map on "the floor depicted the world . . . Monsters and marvels it showed both of land and of sea. Each thing was named in writing, in *tituli* close to the pictures: And the entire picture was under a glass-like cover . . . To protect it from breaking, as people

of these diagrams is based on the vantage point enabled by their context. Thus, a study that examines a cathedral like Chartres as a context for diagrams is also vital to understanding diagrams themselves.

It may be argued that in this dissertation, the diagrams are abstractions of concrete ideas; however, the abstract or the “soul” becomes concrete through examination of the body and thus, the idea becomes concrete in the actual mortar and glass of the cathedral proper. Arguing these abstractions as being concrete is the inverse of the previous period before the middle ages, in which during antiquity, the concrete context of the abstractions was in itself abstract as it was a memory building or something that is known to allow organization of ideas through conceptual mapping called artificial memory.⁶¹ This method is described in the text available to the middle ages (and commented upon by Thierry of Chartres), *Rhetorica ad Herennium*.⁶²

Constat igitur artificiosa memoria ex locis et imaginibus. Locos appellamus eos qui breuiter, perfecte, insignite aut natura aut manu sunt absolute, ut eos facile naturali memoria comprehendere et amplecti queamus: ut aedes, intercolumnium, angulum, fornicem et alia quae his similia sunt. Imagines sunt formae quaedam et notae et simulacra eius rei quam meminisse uolumus: quod genus equi, leonis, aquilae, memoriam si uolumus habere, imagines eorum in locis ceris conlocare nos oportebit. . . . Oportet igitur, si uolumus multa meminisse, multos nobis locos conparare ut in multis locis multas imagines conlocare possimus. Item putamus oportere ex ordine hos locos habere, ne quando perturbatione ordinis inpediamur quo setius, quoto quoquo loco libebit, uel ab superior uel ab inferiore parte, images squi et ea quae mandata locis erunt uidere et proferre possimus: nam ut, si in ordine stantes notos quomplures uiderimus, nihil nostra intersit utrum ab summon an ab imo an ab medio nomina eorum dicere incipiamus, item in locis ex ordine conlocatis eueniet ut in quamlibebit partem quoque loco lubebit, imaginibus commoniti, dicere possimus id quod locis mandauerimus.⁶³

daily walk on it.” Baudri de Bourgueil, “To Countess Adela,” *The Journal of Medieval Latin* 11 (2001), 60 – 141. (English Translation by Monica Otter) Lines 722-731 p.83

⁶¹ [Cicero] *ad C. Herennium de Ratione Dicendi (Rhetorica ad Herennium)* Trans. Harry Caplan. (London: William Heinemann Ltd., 1968). (Latin and English). Frances A. Yates, *The Art of Memory* (London: Routledge, 1966).

⁶² Thierry of Chartres, *The Latin Rhetorical Commentaries by Thierry of Chartres*. Ed. Karin M. Fredborg. (Toronto: Pontifical Institute of Mediaeval Studies, 1988). (Latin)

⁶³ [Cicero] *ad C. Herennium de Ratione Dicendi (Rhetorica ad Herennium)* Book III, 29 -30, pp. 208 – 211.

The artificial memory includes background and images. By backgrounds I mean such scenes as are naturally or artificially set off on a small scale, complete and conspicuous, so that we can grasp and embrace them easily by the natural memory—for example, a house, an intercolumnar space, a recess, an arch, or the like. An image is, as it were, a figure, mark, or portrait of the object we wish to remember; for example, if we wish to recall a horse, a lion, or an eagle, we must place its image in a definite background. . . . We should therefore, if we desire to memorize a large number of items, equip ourselves with a large number of backgrounds so that in these we may set a large number of images. I likewise think it obligatory to have these backgrounds in a series, so that we may never by confusion in their order be prevented from following the images—proceeding from any background we wish, whatsoever its place in the series, and whether we go forwards or backwards—nor from delivering orally what has been committed to the backgrounds. For example, if we should see a great number of our acquaintances standing in a certain order, it would not make any difference to us whether we should tell their names beginning with the person standing at the head of the line or at the foot or in the middle. So with respect to backgrounds. If these have been arranged in order, the result will be that, reminded by the images, we can repeat orally what we have committed to the backgrounds, proceeding in either direction from any background we please.

Orators would use an interior to organize the order of a speech according to how the building was decorated in their minds with important points represented by key images being called *loci*.⁶⁴

The poet's imagination of the layout of Adela of Blois's bedroom is only a hint at how this ideology manifests itself in concrete form. It should be stated that Adela's bedroom is not necessarily real as it is only left to contemporary scholars in a poetic document, but it plants the seed for understandings of actual buildings in this way. Baudri de Bourgueil's poetic vision can be understood as based on an actual, concrete manifestation of an idea.

What this dissertation will present is an interpretation of Chartres Cathedral as a memory building. This memory building is one that is a teaching device just like the room of Adela of Blois. It speaks of astrological doctrines, theological doctrines, and serves almost like the origin of a graph in which the vantage points of above, below, and all four cardinal directions are

⁶⁴ [Cicero] *ad C. Herennium de Ratione Dicendi (Rhetorica ad Herennium)* Book III, 29 -30, pp. 208 – 211. Yates, *The Art of Memory*. See pp. 22 – 25.

visible. This idea of the vantage point can also be considered a sociological vantage point based on the diagram or “arrangement” of hierarchy or the vantage point of cultural periods and what it truly means to be in the context of the middle ages.

In fact, the middle ages bring even more vantage points to the table in the cathedral as the literal and allegorical modes of interpretation are seen in the context of the literal as astronomical and the allegorical as astrological and astronomical. The diagram of the cathedral which takes on the form of the later manuscript diagrams of the Zodiac Man and Consanguinity Tree, presents the nave in a literal diagramming of astronomical constellation symbols and the choir in an allegorical diagramming of astrological methods.

1.4 PREVIOUS SCHOLARSHIP

This dissertation differs from the classic group of Chartrain studies centered around the subset of church architecture based on its integration and theological interpretation of typical approaches to Chartrain subjects. Typically, this subject involves a material pragmatism by centering its subject on material object questions, production questions, building campaigns, style of sculpture, dating of parts (Frankl), or all of these combined (Branner and Henderson).⁶⁵ Even scholars like Kimpel and Suckale, though they are looking to patronage and kingship as formative factors on architectural development and difference, still look to strong formal methods that equate formal units like responds, the form of radiating chapels, and “types” of

⁶⁵ *Chartres Cathedral*, ed. Robert Branner (New York: Norton, 1996), Paul Frankl, "The Chronology of Chartres Cathedral," *Art Bulletin* 39 (1957):33 - 47. George Henderson, *Chartres* (Harmondsworth: Penguin, 1968).

architectural pieces or units in structural production with meaning. This suggests the methods of scholars like Günter Bandmann and finding an iconography of architecture.

I am doing something similar in the sense that the units which I am finding embedded in a system of meaning and semiotic relations are mental imprints. While Suckale and Kimpel use architectonic units, I use elemental associations and zodiacal categories to interpret the structure iconographically.⁶⁶

On the other hand, Erwin Panofsky defines scholasticism as the organizing principle behind Gothic architecture.⁶⁷ In the process of defining scholasticism as a study of particulars, Panofsky mentions William of Ockham. The overall tenor of the lecture is Suger's notion of "transparency" and, as can be inferred, a straight-forward or Occam's Razor (the simplest solution is the best) approach to the formulation of the Gothic. Panofsky relays the notion of evolution and the importance of Thomas Aquinas. The evolutionary technique is a technological one, but in the view of a diagrammatic history, technology was restricted or held back by virtue of there being a time and a season for certain developments to appear. It does not mean they were not known as Panofsky suggests.

The unit of my analysis, the diagram, becomes central to avoiding the opposite problem from Aristotle's and Panofsky's particulars to Sedlmayr's study on the Gothic Cathedral in which he uses semiotic conflation that subjects the Gothic Cathedral to the influences of idolatry.⁶⁸ He states: The Gothic Cathedral *is* the Heavenly Jerusalem. It is, instead, the schema as entelechy that informs the structure that *is* the Heavenly Jerusalem. The act of conceptual mapping in tandem with the vision of what its completion will be is divinity, not the result—just

⁶⁶ Dieter Kimpel and Robert Suckale, *Die gotische Architektur in Frankreich 1130 - 1270* (München: Hirmer, 1985).

⁶⁷ Erwin Panofsky, *Gothic Architecture and Scholasticism* (New York: World Publishing, 1957).

⁶⁸ Hans Sedlmayr, *Die Entstehung der Kathedrale* (Graz: Akademische Druck u. Verlagsanstalt, 1976).

like it is not the Renaissance painting that organizes one-point perspective, but the application of perspectival diagrams that result in the creation of the painting. The soul and the body are not one and the same.

Other scholars, like Otto von Simson, were models for the development of this project as von Simson situates the interpretation of the Gothic Cathedral in theological texts, but his method of proving this meaning is based again on the strictly formal use of building unit proportions.⁶⁹

Other art historical studies on Chartres center on reception like the work of Madeline Caviness and Wolfgang Kemp.⁷⁰ By looking at how the windows of the cathedral are intellectually processed or read, these scholars begin to suggest an approach to reading the windows; however, to them, the reading is more self-evident rather than the mental writing that I am suggesting (See Chapter Five).

Twelfth-century themes explored in cultural studies place the cathedral in the background of the study or as an indirect source of information using historical methods of analysis with comparisons of contemporaneous twelfth-century texts. André Chédeville discusses Chartres Cathedral as an institution ancillary to his three themes: economy, society, and its institutions.⁷¹ Predominantly using medieval charters, Chédeville establishes that economically while urban centers were experiencing an increase in growth, the country only grew at a gradual pace.

⁶⁹ Otto von Simson, *The Gothic Cathedral: Origins of Gothic Architecture and the Medieval Concept of Order* (New York: Pantheon Books, 1956).

⁷⁰ Madeline Caviness, "Biblical Stories in Windows: Were They Bibles for the Poor?," in *Paintings on Glass: Studies in Romanesque and Gothic Monumental Art* (Aldershot: Variorum, 1997), Wolfgang Kemp, *The Narratives of Gothic Stained Glass* (Cambridge: Cambridge University Press, 1997), Madeline Caviness, "Biblical Stories in Windows: Were They Bibles for the Poor?," in *The Bible in the Middle Ages: its Influence on Literature and Art* (Binghamton, NY: Medieval and Renaissance Texts and Studies, 1992), 103 - 47, Wolfgang Kemp, *Sermo corporeus : die Erzählung der mittelalterlichen Glasfenster* (München: Schirmer, 1987).

⁷¹ André Chédeville, *Chartres et ses campagnes, XIe-XIIIe s* (Paris: Klincksieck, 1973).

Bridging art historians studying Chartres and historian-based examinations, Jane Welch Williams undertakes a study that looks to the workers' reality of the creation of a cathedral upon the populace.⁷² She interweaves social uprisings and events into the tale of the cathedral's construction.

Thus, these scholars look to material production or the object, experience or reception of the object, the cathedral as a product or as indicative of the societal fabric, or the cathedral as an oppressor and source of social strife for the lower classes. This study looks at all these viewpoints as a combined process. Restricting Chartres Cathedral to object, experience, product, or oppressor misses the larger point. As an object and experience, Chartres is a machine. As a product and oppressor, it is something that must be conceptually and physically deciphered. The audience for the windows of Chartres is everyone touched by what Catholicism deems "Original Sin." Everyone entering the cathedral represents Eve and the structure become a means of achieving redemption. Some sets of people are better equipped to find the thread of redemption like the thread Ariadne gave to Theseus to exit the labyrinth. Whether Chartres achieved this end or not is uncertain. The intangible *figurae* of Chartres can be considered mental linear connections or diagrammatic lines of the building whose windows become *loci*. As will be shown, because the interior of Chartres is for the redemption and edification of the interior man (see Chapter Two), there would be no need of a record for external approbation; thus, there is no written documentation of the concept that I am attempting to prove. Redemption and paradise's return require the labor of Adam and Eve and in turn, the labor of the viewer of the cathedral. As the Virgin Mary is the Second Eve and the repairer of Eve's sins, her building would be an appropriate venue for a personal redemption machine.

⁷² Jane Welch Williams, *Bread, wine & money : the windows of the trades at Chartres Cathedral* (Chicago: University of Chicago Press, 1993).

The literature on diagrams tends to be more diffuse and newer than the long stretching bibliography on Chartres Cathedral. Because of this fact, the scholars talking about diagrams are not always in dialogue. In Appendix A, I give examples of thematic categories of diagrams based on function and shape. This is not novel. Michael Evans has classified medieval scientific and some religious diagrams.⁷³ He is a major pioneer of diagrammatic studies; however, he did not initiate the study. Before Michael Evans could set the stage for particular application of diagrams based on their larger thematic function, Ellen J. Beer and Stanley Ferber jumped ahead of a broad classification into cross-medium studies. Their studies have been important in establishing how to consider bridging media such as stained glass and diagrams.

Beer has looked at the south transept rose of Lausanne Cathedral and began the process in 1952 by recognizing the themes and position of the subjects in the stained glass as related to scientific diagrams.⁷⁴ This scholarly nod to the presence of interactions between manuscript and window is an important starting point for diagrammatic studies.

In 1966, Stanley Ferber also engaged in a cross-medium study whereby he superimposed manuscript diagrams onto a Carolingian ivory.⁷⁵ Though he had an imperfect endproduct, he established a means of looking at different media by positional and substitutional methods. Also later in 1991, Marcia Kupfer looked to wall painting and the use of manuscript forms in *mappamundae* to suggest a correlation between the architectural decoration and the manuscript illumination.⁷⁶

⁷³ Evans, "The Geometry of the Mind."

⁷⁴ Ellen J. Beer, *Die Rose Kathedrale von Lausanne* (Bern: Benteli Verlag, 1952).

⁷⁵ Stanley Ferber, "Crucifixion Iconography in a Group of Carolingian Ivory Plaques," *The Art Bulletin* 48, no. 48 (1966):323 - 34.

⁷⁶ Marcia Kupfer, "The Lost Mappamundi at Chalivoy-Milon," *Speculum* 66, no. 3 (1991):540 - 71.

The study of manuscripts alone is a far more prevalent phenomenon. Harry Bober, Michael Evans, Wesley Stevens, Elizabeth Sears, Madeline Caviness, Bianca Kühnel, and Naomi Kline are among the scholars to look seriously at the use of diagrams as a subject or the appropriation of diagrams to the structure of manuscript illumination. Harry Bober highlights the importance of themes like the Zodiac Man and *syzygy* (a subject taken up in Chapter Three) by looking at manuscript diagrams that are neither completely utilitarian as diagrams nor are they completely decorative as illuminations.⁷⁷ Michael Evans as stated previously attempts to categorize and compile manuscript diagrams by theme and function.⁷⁸ Wesley Stevens looks at something vital to this study which is vantage point with respect to viewer and manuscript in space. Positionally, he associates inverted T-O map renderings to a different way of interacting with physical space and the universe.⁷⁹ This was indispensable to this study in considering the manuscript and the architectural space. Another manuscript scholar, Elizabeth Sears, chooses to specialize by using the ages of man as a broad theme. She delves into the allusions to the written literature and visual corpus of this subject in the middle ages.⁸⁰ Madeline Caviness and Bianca Kühnel on the other hand, apply diagrams to manuscript illuminations. Caviness is broader in her scope while Kühnel chooses to focus on Carolingian and Ottonian manuscripts.⁸¹ Finally, Naomi Kline investigates a particular map, the Hereford *mappamundi* in terms of its positional

⁷⁷ Harry Bober, "The Zodiacal Miniature of the Très Riches Heures of the Duke of Berry: Its Sources and Meaning," *Journal of the Warburg and Courtauld Institutes* 11 (1948):1 - 34.

⁷⁸ Evans, "The Geometry of the Mind."

⁷⁹ Wesley M. Stevens, "The Figure of the Earth in Isidore's "De Natura Rerum"," *Isis* 71, no. 2 (1980):268-77.

⁸⁰ Elizabeth Sears, *The Ages of Man: Medieval Interpretations of the Life Cycle* (Princeton, New Jersey: Princeton University Press, 1986).

⁸¹ Bianca Kühnel, *The End of Time in the Order of Things: Science and Eschatology in Early Medieval Art* (Regensburg: Verlag Schnell and Steiner GmbH, 2003), Madeline Caviness, "Images of Divine Order and the Third Mode of Seeing," *Gesta* 22, no. 2 (1983):99-120.

organization and function.⁸² There are other scholars to be mentioned in this list, but they will be considered in future literature on the historiography of diagrams.

One of the important works that bridge diagrammatic thinking and architecture is the work of Nigel Hiscock. He looks at geometry as it applies in general to medieval architecture. Hiscock's aim is to refute Modernism's cloaking of medieval numerology as a nonsensical practice. By closely examining Platonic geometry and its religious connotations, Hiscock manages to come probably as close as any scholar to yoking form and meaning in medieval architecture.⁸³

1.5 CHAPTER SUMMARIES

Chapter Two examines the intellectual context of the astrological Cornificians and astronomical Chartrain masters. This section of the study suggests that in the building of Chartres Cathedral, these two "opposing" vantage points can be seen to relate in the physical situation of the viewer to present the building as a an interior of self-judgment and ultimately the entire building as a theological timepiece and personal redemption machine.

Chapter Three looks at the saint's feast days of each of the lower nave and choir window's thematic saint's lives told in their glass. The feast days of the saints are mapped along with their zodiac signs and labors of the month on the cathedral plan. This suggests the comprehension of the larger diagrammatic sense of the building as both a vision and a process

⁸² Naomi Kline, *Maps of Medieval Thought: The Hereford Paradigm* (Woodbridge: Boydell Press, 2001).

⁸³ Nigel Hiscock, *The Symbol at Your Door: Number and Geometry in Religious Architecture of the Greek and Latin Middle Ages* (Aldershot: Ashgate, 2007).

that is developed physically or visually. The building's diagrammatic order that is suggested is connected to Zodiac Man diagrams, Consanguinity Trees, and Priscillianist heretical ideology.

Chapter Four explores the idea of color in medieval society and its relation to meaning. Sources like the Byrhtferth diagram from St. John's College MS 17, the Cambrai Homily, *De reparatione lapsi* by Bacharius, and other texts serve as evidence for color meanings that may have been used to interpret Chartres Cathedral. The idea of penitential postures and zodiacal postures are introduced and further connected to Priscillianism.

Chapter Five examines each lower window of the building that is extant, dates to the middle ages, and has not been significantly restored. The halo colors of the figures in the windows are used as *loci* in each window that can be grouped by likeness of color, proximity, and narrative character. The patterns of reading that result are suggested as a visual example of abstracted astrological postures from the writings of Marcus Manilius and the sketchbook of Villard de Honnecourt (MS BNF Fr 19093). This establishes a sense of the diagrammatic rules that may have been at play in the conception of the structure. These can be used to understand the Cornifician and Chartrain contribution.

2.0 INTELLECTUAL CONTEXT: THE CHARTRAINS AND THE CORNIFICIANS

Whether or not there was a formal school of theology at Chartres, there were certainly individual thinkers associated with the cathedral whose writings and commentaries on earlier theologians represent an important intellectual context against which to assess the design and execution of the cathedral.⁸⁴ The library holdings of the cathedral (See Appendix B) and neighboring abbeys bear witness to the availability of texts and in some cases diagrams that may be considered in relation to the structures of the plan and decorative programs in the post-1194 building. I establish here some of the major protagonists in the intellectual debates of the twelfth and early thirteenth centuries which set the stage for the rebuilding of Chartres in 1194 and the creation of its sculptural and glass programs.

Already in the late tenth century, Fulbert of Chartres is known for his letters and hymns.⁸⁵ These letters become instrumental in assessing what Fulbert knew and when he knew it. Fulbert arrived in Chartres in 990 and was promoted to bishop in 1006. Prior to this, he was a

⁸⁴ A useful survey of Chartres thinkers is Edouard Jeuneau, *L'Age d'or des Écoles de Chartres*, 2nd Ed. ed. (Chartres: Houvet, 2000). Jeuneau stands on the School side of the debate, as against Southern, R. W. Southern, "'Humanism and the School of Chartres'," in *Medieval Humanism and Other Studies* (Oxford: Basil Blackwell, 1970). More recently Charles Burnett has emphasized the importance of the reception of Arabic learning through the medical school of Salerno and the writings of Constantine the African as noted below among the library holdings that are still extant.

⁸⁵ Fulbert of Chartres, *The Letters and Poems of Fulbert of Chartres*. Ed. and Trans. Frederick Behrends. (Oxford: Clarendon Press, 1976). (Latin and English), For hymns of Fulbert in the *Codex Calixtinus*, see Santiago de Compostela, Archivo de la Catedral (no shelf number), Folios 132v – 139r, from c. 1138 or c. 1173, Alison Stones and Jeanne Krochalis, *The Pilgrim's Guide: a Critical Edition*, ed. Paula Gerson (London: Harvey Miller Publishers, 1998). See Volume Two, pp. 76 – 77.

student at Reims under Gerbert of Aurillac who is an essential figure in this study. The information that can be transferred across geographical locations, based on tutelage, sets the stage for the complex and encyclopedic structure that Chartres Cathedral represents in this study. Twelfth-century figures include Bernard of Chartres (died after 1124), William of Conches (c. 1090 – after 1154), Thierry of Chartres (died c. 1155), John of Salisbury (c. 1120 – October 25, 1180), and relations between Chartres and the neighboring abbeys of Micy and Fleury played an important part in the transmission of intellectual ideas.⁸⁶

Bernard of Chartres encouraged a scholarly development of the community at Chartres by bringing students of well-renowned masters to Chartres. Bernard began instructing others during the final year of Bishop Ivo of Chartres's episcopacy (1090 – 1115).⁸⁷ Bernard was also teaching during the construction and development of the Portail Royal (the current west façade). John of Salisbury documents his work.⁸⁸ Bernard's commentary on Chalcidius's treatise on the Timaeus is important to establishing an Irish connection to Chartres. This will enable a relating of Fulbert's study of Bacharius's text on the colors of martyrdom (documented in his letters) to the Cambrai Homily which is an Irish text that also introduces spectrum-based symbolism for martyrs. The idea of color and martyrdom is vital to a reading of the halo colors of Chartres's windows in Chapter Five. Another important figure is William of Conches was born in Normandy and taught between 1120 and 1154. While most of Bernard's works are not preserved, many of William's remain for study and create a knowledge-base of the development of the natural sciences in the twelfth century. William mentions Chartres in his first version of his commentary on Priscian although he removed these references in his revision. William wrote

⁸⁶ *Byrhtferth's Enchiridion*. Ed. Peter S. Baker and Michael Lapidge. (Oxford: Oxford University Press, 1995). See p. xlii.

⁸⁷ For a twelfth-century copy of the Letters of Ivo of Chartres see MS H.I.19.

⁸⁸ Jeauneau, *L'Age d'or des Écoles de Chartres*. See pp. 35 – 39.

the *Dragmaticon* that is structured in the form of a Platonic dialogue. This work is an emendation of his *Philosophia Mundi*, which was considered heretical. William glossed the Consolation of Philosophy by Boethius, the Dream of Scipio by Macrobius, Plato's Timaeus, and likely did the same with Virgil, Juvenal, and Martianus Capella (cf. Chartres, BM MS 105/102, listed in Appendix B; it is unclear whether or not it was glossed). His discussion of grammatical practices compares Chartres use with his native Norman use.⁸⁹ William's use of diagrams will be compared to masons' marks and the idea of elemental and astrological ideas in the organization of the cathedral.

Thierry of Chartres and John of Salisbury both held office at the Cathedral. Thierry was Chancellor of Chartres from 1142 to 1150. Thierry's twelfth-century epitaph (no longer extant but recorded in MS 923 from the Bibliothèque municipale de Troyes) compares him with Aristotle and praises him as a master of Latin.⁹⁰ A two volume manuscript of his *Heptateuchon* was destroyed in the 1944 fire and remains only on microfilm (cf. MS 497/141). In this work, Thierry developed a curriculum for studying the seven liberal arts. This too suggests a preparation of materials for an educational legacy. While Thierry's pupil, John of Salisbury, was

⁸⁹ As Karin Fredborg has noted, William mentions Chartrains and their grammatical observances as compared with the Normans. Additionally, there is textual evidence of his presence as a Chartrain master. Citing from the early version of William's *Glose super Priscianum* in Firenze, Bibl. Med.-Laur MS San Marco 310, fol. 5b in which the following citations about Chartres were removed in his second edition, Karin Fredborg transcribes the following: "Nec ergo nimis spisse debemus proferre *quis*, ut *Normannici* faciunt, nec nimis tenuiter, ut *Carnotenses*, sed inter utrumque ita scilicet quod *u* aliquantulum ibi sonnet sed parum. These citations continue on fol. 10v: *Pompeiius* et *maius*. Unde stiam in ecclesiis in prolatione huiusmodi dictionis est fiversitas. Quidam enim si volunt *-eius* pronuntiare quod *I* tantum sonnet consequente vocali, ut *Carnotenses*, dicentes quod, quia est de sequente syllaba, cum vocali ipsius tantum proferri debet. Alii vero, ut *Normanni*, dicunt quod quia ponitur loco duarum conconantium, quarum altera cum praecedente syllaba, altera cum subsequente sonabat, ideo sic debet conduse proferri quod aliquantulum cum utraque sonnet—quod melius voce exprimi quam scripto doceri potest." See *The Latin Rhetorical Commentaries by Thierry of Chartres*. Ed. Karin M. Fredborg. (Toronto: Pontifical Institute of Mediaeval Studies, 1988), p. 7.

⁹⁰ Thierry of Chartres's epitaph is as follows: dignus Aristotelis successor Teodericus/ hic jacet, hac tegitur nobile corpus humo./Scepra magisterii tenuit refimenque scholarum/doctore sumo lingua Latina dedit./Doctoreum, protholevitam simul et logothetem/hunc habuit Cartis vix habitura parem. Hence, this establishes the presence of masters and teaching at Chartres. André Vernet, "Une épitaphe de Thierry de Chartres," *Recueil de Travaux offert à M. Clovis Brunel* 2 (1955):660 - 70. See pp. 669 – 670.

a secretary to Thomas Becket, he is also known for writing an entire work on education, the *Metalogicon*. A large amount of information about the previous Chartrain masters comes from the texts and references of John of Salisbury.⁹¹ John alludes to the heyday of the works and teaching of Bernard of Chartres and he derides the Cornificians, who were enemies of logic.⁹² The Cornificians are named and described by John. Later in this chapter, quotations of teaching-based compromises related to Cornifician influence are found that suggest one style of teaching is traded for another. Hence, this is suggestive of a “penitential turn” away from Cornifician influence and vice in light of ideals that are held by the masters.

The works of these authors were essential to a rudimentary education. At Chartres they were coupled with the importation of Arabic sources through the works of Hermann the Dalmatian, student of Thierry of Chartres, and the works of the medical school of Salerno are critical.⁹³ Burnett posits that this knowledge arrived at Chartres through its close links with the abbeys of Micy and Fleury. As previously stated, Chartres MS 214 demonstrates a recension of manuscripts that suggest an exchange among Fleury, Micy, and Chartres.⁹⁴ The Chartres library contains numerous works on medicine including one containing the work of Constantine the African, known for his translations from the Arabic.⁹⁵ Chartres MS 160/153 includes medical works by Constantine. Also fundamental to the thinking of the Chartres masters listed above is

⁹¹ Jeauneau, *L'Age d'or des Écoles de Chartres*. See pp. 65 – 72.

⁹² John of Salisbury, *The Metalogicon of John of Salisbury: A Twelfth-Century Defense of the Verbal and Logical Arts of the Trivium*. Ed. and Trans. Daniel D. McGarry. (Berkeley: University of California Press, 1962). See pp. 5, 10 – 25, 62 73, 241 – 242.

⁹³ Charles Burnett, *Hermann of Carinthia De Essentiis: A Critical Edition with Translation and Commentary* (Leiden: E. J. Brill, 1982). See p. 4.

⁹⁴ Burnett, "King Ptolemy and Alchandreus the Philosopher: The Earliest Texts on the Astrolabe and Arabic Astrology at Fleury, Micy, and Chartres ". *Byrhtferth's Enchiridion*. Ed. Peter S. Baker and Michael Lapidge. (Oxford: Oxford University Press, 1995). See p. xlii.

⁹⁵ William of Conches mentions Constantine the African's contribution in the *Philosophia Mundi* PL 172.49 – 50. The manuscript is also listed in Appendix B. See also Burnett, *Hermann of Carinthia De Essentiis: A Critical Edition with Translation and Commentary*. See p. 23.

the medieval concept of *integumentum* by which is meant the encasing of interior Christianized content in an *external pagan shell*.⁹⁶

Whether myth or reality, the School of Chartres, which has remained in flux in scholarly literature between the status of modern construct and historical fact, cannot be denied at least its encyclopedic building, an educational tool. If even the bedchamber of Adela of Blois, daughter of William the Conqueror in whose county the cathedral is situated, can be considered a place of medieval education based on Baudri de Bourgueil's real or imagined vision of its décor of *mappamundi* and the seven liberal arts, surely the cathedral with its lives of saints and the library of Chartres's volumes of books can be considered a 'school' even if not in the traditional sense.⁹⁷

From the epitaph of Chartrain master, Thierry of Chartres, by looking at the pedagogical role related to the writings of the cathedrals' archbishops on educational trends, Chartres presents itself as a home to medieval knowledge and instruction. If one were to examine the medieval library list of Chartres as will be done here, it becomes evident through the books and their combinations of authors, the main ideas that circulated in the community. From exchanges among Micy, Fleury, and Chartres as explored by Charles Burnett, Peter Baker, and Michael Lapidge and based on the transmission of Arabic knowledge to the library, it appears that a wide range of sources were open to these masters. However, what remain essential are the contents of the library.⁹⁸ Unfortunately, the library was burned by the Allied forces during World War II in 1944.

⁹⁶ For full references see Ch. 1, note 22.

⁹⁷ Patrick Gautier Dalché and Jean-Yves Tilliette, "Un nouveau document sur la tradition du poème de Baudri de Bourgueil à la comtesse Adèle," *Bibliothèque de l'Ecole des Chartes* 144, no. 2 (1986):241 - 57.

⁹⁸ *Byrhtferth's Enchiridion*. Ed. Peter S. Baker and Michael Lapidge. (Oxford: Oxford University Press, 1995). See p. xlii. Burnett, "King Ptolemy and Alchandreus the Philosopher: The Earliest Texts on the Astrolabe and Arabic Astrology at Fleury, Micy, and Chartres ". See pp. 151 - 176

Table 1: Authors and Manuscripts in the Chartres Library

Authors and Diagrams	Manuscripts in the Chartres Library
Boethius: Wheel of Fortune	11 th century – MS 59 (possibly contained in this copy of the Consolation of Philosophy) Destroyed
Boethius: Musical Intervals	11 th century – MS 48 (Book 5) Destroyed
Aristotle (from Boethius): Square of Opposition	9 th century – MS 72 (Commentary on Aristotle's <i>On Interpretation</i>) Destroyed
Isidore of Seville: term <i>machine</i>	10 th century – MS 68 (“Libri Aethimologiarum”) Destroyed
<i>Mappamundi</i>	9 th century – MS 80 (Bede and Isidore) Destroyed
Aristotle, Boethius, Cicero: Compilation of these thinkers	9 th century – MS 71 11 th century – MS 100 (also includes Alcuin) Destroyed
Augustine: The interior and exterior man	10 th century – MS 152 (Augustine's <i>On the Trinity Book 15</i>) Partially Usable (folios 2-5 at Bib. Mun. de Chartres, Microfilm at IRHT)
Astrological treatises and diagrams	12 th century – MS 213 Destroyed
Thierry's treatise on the Seven Liberal Arts with diagrams	12 th century – MS 497 and 498 Destroyed, but on microfilm at the Chartres Municipal Library

Table 2: Authors and their Connections to Chartres

Author	Known by	Chartrain Relationship	Scholarly Association
Marcus Manilius	-Copy in library of Gerbert d'Aurillac (letter)	-Fulbert of Chartres was a student of Gerbert	
Byrhtferth diagram	- Producer was Byrhtferth of Ramsey -Believed to be the product of Abbo of Fleury		the library exchange of Micy, Fleury, and Chartres
Richard of St. Victor	1) “Four modes of seeing” in the Commentary on the Apocalypse of John the Evangelist 2)	Abelard was a student at the school of St. Victor	
Hugo of Folieto	From the community of	Influenced by	

	St.-Laurent-au-Bois, in Picardie, France	the collegiate church of St. Quentin, once headed by the moderate Ivo of Chartres	
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2.1 THE LIBRARY AT CHARTRES

Today the library of Chartres contains 1,450 volumes. After the fire of 1944, it is only through medieval library lists and contemporary documentation before the 1940s that allow knowledge of the library's contents. There were twenty-nine copies of manuscripts with Augustinian contents ranging from the eighth century to the twelfth century. MS 152 is particularly interesting as it contains Book 15 from Augustine's *De Trinitate* and the idea of the interior and exterior man that will be related to the Chartrain idea of *integumentum*. There are eleven Bede manuscripts, partial and complete, including one that contained Bede and Isidore together with a *mappamundi*. Nineteen manuscripts with themes or an author of Jerome were included, one Aratus, and one Rhabanus Maurus.

MS 497 and MS 498 are the works of Thierry of Chartres on the seven liberal arts. Included are diagrams related to music and geometry; it is uncertain if the diagrams are contemporaneous or added later because there are spaces that should have diagrams where they have been excluded. Significantly, there are ten Boethius manuscripts. It is known that both Thierry of Chartres and William of Conches relied heavily on Boethian texts. There are six Cassidorus manuscripts and one of these also includes Isidore of Seville. There are a total of four Isidore manuscripts and two of the Pseudo-Isidore. MS 213 proves that there was

astrological knowledge in the library because it contained treatises and diagrams. This type of knowledge is considered at the heart of Chartres and its cathedral.

2.1.1 Polarities at Chartres Addressed in Manuscript Collections

Six manuscripts from Chartres are compilations of Ciceronian, Boethian, and Aristotelian thought. The combination of these three thinkers certainly is telling. There were polarities of ideas present in the community of Chartres related to Boethian and Aristotelian/Augustinian thinking. Boethian thought has been considered by F. P. Pickering as “secular thought” in the middle ages.⁹⁹ This seems too general a way of categorizing the use of Boethius. The Wheel of Fortune, which appears as a literary motif in Boethius’s *Consolation of Philosophy* comes to be used by ecclesiastics to epitomize “false thought.” This negative association with Fortuna is also seen in John of Salisbury’s *Policraticus*.¹⁰⁰ So this first set of books lend an attention to this debate and suggest that there were attempts at a balancing of opposing forces at Chartres.

Aristotle’s *On Interpretation*, which is included in the commentaries of Boethius, is about linguistic opposition and the space between signifier and signified/subject and predicate. And as I will show later in this chapter, the linguistic opposition is bypassed by the Cornificians and it is precisely this grammatical and logic-violating practice that the Chartrain masters oppose. Though this seems elementary, it is in fact an issue that connects linguistics to a danger of

⁹⁹ Frederick Pickering, *Literature and Art in the Middle Ages* (Coral Gables, FL: University of Miami Press, 1970), Frederick Pickering, *Augustinus oder Boethius? Geschichtsschreibung und epische Dichtung im Mittelalter und in der Neuzeit* (Berlin: E. Schmidt, 1967).

¹⁰⁰ “et publicae Fortunae imago aurea in Capitolio ab advenis, convenis, et indigenis, publice adoretur, et tantam prae caeteris habet auctoritatem, quod in tota ratione mortalium (ut dici solet) sola utramque paginam videtur implere. Videas eam ibi rota versare volubilem, quodque magis mirere, ejusdem rotae impulsu de pectore Jovis sororum pensa praecipitat, et conculcat. [col. 546A] Quisquis enim fortunam statuit, fata praecipitat, et convellit. Fata, inquit Stoicus, regunt homines, fatum est in partibus illis, Quas sinus abscondit. Joannes Saresberiensis *Policraticus* PL 199, col. 545. Book V, Chapter IV. Of particular interest is the mixing of the ideas of the “thread” of the Fates and the wheel of Fortune.

philosophical magnitude. The Cornificians suggested that the surface of words has a life and importance all its own.¹⁰¹

2.2 THE CHARTRAIN MASTERS

The “School of Chartres” may be even more interesting in its likely status not as an institutional entity, but its cultural climate of discussion.¹⁰² Opinions and theological methodologies that were born from Chartres as intellectual hub seem to be influenced by two major thinkers of Chartres, Thierry of Chartres and William of Conches. They were known to have taken a strong Platonic approach to theology. Using the technique known as *integumentum*, Thierry and William used Pagan thought as a directive force towards Christian resolution. *Integumentum* is the encasing of interior Christianized content in an *external pagan shell*. For example, in theology, the earlier idea of the pagan Cyclops, Polythemus, as proud and lusting eye provides a corollary to the Cornificians, and materially, the Cathedral of Chartres is the first cathedral in the western world to represent pagan philosophers on the *exterior* of the structure.¹⁰³

It is uncertain if *integumentum* was the source of an intellectual problem at Chartres or an attempt at resolution. It could have been an attempt to force surface thinkers to delve deeper. The surface thought of the Cornificians, the Chartrain foes, allowed thinkers to remain on the

¹⁰¹ For more on surface importance, see below. The other extreme of linguistic violation is collapsing the distance between the signifier and its signification which is not only an example of idolatry, it fixes interpretation. I reserve this topic for discussion at a later date in the Cornifician and spatial collapsing difference that reflects on the issues of the Social Nationalist Party and the *avant garde* during World War II.

¹⁰² Jeaneau, *L'Age d'or des Écoles de Chartres*, Nikolaus Häring, "Chartres and Paris Revisited," in *Essays in Honour of Anton Charles Pegis*, ed. J. Reginald O'Donnell (Toronto: Pontifical Institute of Mediaeval Studies, 1974), 268-329, Southern, "'Humanism and the School of Chartres'."

¹⁰³ See footnote 22 from Chapter One. On the exterior pagan representations, see Ellard, *The Sacred Cosmos: Theological, Philosophical, and Scientific Conversations in the Twelfth-Century School of Chartres*.

exterior shell of a sort of pagan thought without moving deeper into the core of what the surface clothed in the Chartrain's mind, a Christian core. Lingering on surfaces (signifier to signifier instead of signifier to signification) was the problem with heretical approaches to Chartrain thought.

William of Conches and Thierry of Chartres were able to sidestep heretical ideas in pagan philosophers by using different translations of texts. William, who was a strong believer in the divine Wisdom of Christ as Platonic archetype, reworded Macrobian use of the word "created" to "generated" to refer to the mystery of Christ's existence for human comprehension.¹⁰⁴ If it is simply a question of 'genitus non factus' this is part of the Nicene Creed and correspondingly ancient. Thierry, in turn, refers to the 'enfolding' (*complicatio*) and 'unfolding' (*explicatio*) of the cosmos. The former to refer to its unity and the latter to refer to its plurality; both of these refer to the cosmos as image of God.¹⁰⁵

The importance of diagrams to Thierry seems to be seen in the idea that divinity does not unite with matter, but instead, he states:

. . . when we say that divinity is the form of being for all things, we do not say that the divinity is a form that must exist in matter, just as [is said] of a triangle or a quadrangle or something similar. But we say that it expresses itself to us in this way because the presence of divinity is retained as the total and only existence of all creatures, so that even matter has its existence from the presence of divinity, and it is not the divinity that derives from the matter, neither is it in it.¹⁰⁶

¹⁰⁴ See footnote 167 from Chapter #. Ellard, *The Sacred Cosmos: Theological, Philosophical, and Scientific Conversations in the Twelfth-Century School of Chartres*. See p. 86.

¹⁰⁵ See footnote 18.

¹⁰⁶ "Sed cum dicimus divinitatem singulis esse rebus formam essendi non hoc dicimus quod divinitas sit aliqua forma que in material habeat consistere cuiusmodi est triangulation vel quadrangulatio vela liquid consimile. Sed hoc idcirco dicimus quoniam presentia dicinitatis singulis creaturis totum et unicum esse consistit ut etiam ipsa material ex presentia divinitatis habeat existere: non ipsa divinitas aut ex ipsa aut in ipsa." *Tractatus de sex dierum operibus* in *Commentaries on Boethius by Thierry of Chartres and his School*. Ed. Nikolaus M. Häring. (Toronto: Pontifical Institute of Mediaeval Studies, 1971). See p. 569 Ellard, *The Sacred Cosmos: Theological, Philosophical, and Scientific Conversations in the Twelfth-Century School of Chartres*. See p. 111.

Thus, as shown in this dissertation, the medieval manuscript diagram may be seen as a “divine” form that places divinity in the material, but does not unite with it similar to the body and the soul.

John of Salisbury was a student of William of Conches and later was a bishop of Chartres (1176 – 1180). Though there is debate about whether there was a school at Chartres, certainly the debates felt in the climate of Paris were also felt in the Chartrain milieu.

2.2.1 The Legacy of the Chartrain Masters

While John of Salisbury and Thierry of Chartres left their libraries to the Chartrain collection, Abelard left controversy to Chartres.¹⁰⁷ In 1122, Abelard, wrote a treatise called *Sic et Non*. The title makes it understood that he is interested in dichotomies and the disputational approach to learning. His book became listed as heretical in 1141 because he left the issues open to resolution by the reader.¹⁰⁸ The interesting part about *Sic et Non* for this dissertation is its reliance on polarities and how it may relate to polar audiences that may have been involved in the development of Chartres Cathedral, specifically the audience of the Chartrain masters and their foes the Cornificians.

In this chapter, the Cornificians, who may have left no writings and are only given a title in the writings of John of Salisbury, are examined based on the hostile descriptions of their beliefs and practices in the judgments of the Chartrains. In particular, the Cornificians’ use of

¹⁰⁷ William W. Kibler and Grover A. Zinn, *Medieval France*, ed. William W. Kibler and Grover A. Zinn (New York: Routledge, 1995). See p. 547. *Catalogue générale des manuscrits des bibliothèques publiques de France*. See pp. 211 – 212.

¹⁰⁸ John Marenbon, "Life, milieu, and intellectual contexts," in *The Cambridge Companion to Abelard*, ed. Jeffrey E. Brower and Kevin Guilfooy (Cambridge: Cambridge University Press, 2004), William Turner, "Peter Abelard," in *The Catholic Encyclopedia* (New York: Robert Appleton, 1907). See p. 19.

unorthodox word order and nonsensical statements reflects the idea of externality and the appearance (*logos*) of words as being informative through their non-grammatical sentence structure. This in turn recalls Boethius's approach to the relationship of language to visuality which he also expressed in diagram form. All this further suggests a link to Augustine's concept of the interior and exterior man.

2.2.2 Abelard's Plea for Dialectics

In *Sic et Non*, Abelard supports the appropriation of heretical methodologies to persuade heretics to convert their thinking to orthodox beliefs. Abelard was not unfamiliar with the heretical label. When he wrote *Sic et Non*, it was not long after he was accused of heresy at the Council of Soissons in 1121 because of his views on the Trinity in *Theologia summi boni*.¹⁰⁹ Abelard attempts to bridge the gap between the Chartrains and the Cornificians. He states:

Saepe etiam, pro diversitate eorum quibus loquimur, verba commutari oportet; cum frequenter eveniat ut verborum propria significatio nonnullis sit incognita aut minus usitata. Quibus quidem si ad doctrinam, ut oportet, loqui volumus, magis eorum usus quam proprietas sermonis aemulandus est, sicut et ipse grammaticae princeps et locutionum instructor Priscianus edocet. Quod etiam diligentissimus Ecclesiae doctor beatus attendens Augustinus, cum in quarto *De doctrina Christiana* ecclesiasticum instrueret doctorem . . . *In bonis doctoribus tanta docendi cura sit, ut verbum, quod, nisi obscurum sit vel ambiguum, Latinum esse non potest, vulgi autem more, sicut dicitur*

. . . it is often appropriate to *change the wording* to suit the differences among those with whom we speak, since it frequently happens that the proper meaning of a word is unknown or less familiar to some people. Certainly if we wish, as is fitting, to speak to these people, to teach them, we should strive after their usage, rather than after proper speech, as that leader in the grammatical arts and instructor of speaking, Priscian himself, taught. Even the most painstaking doctor of the Church, St. Augustine, took this into account when he instructed . . . 'Among good teachers there is such a zeal for teaching

¹⁰⁹ Marenbon, "Life, milieu, and intellectual contexts." See p. 19.

that whenever the word that is neither obscure nor ambiguous does not happen to be ‘correct’ Latin, they use it anyways.’¹¹⁰

He continues by saying that those that do not judge are not judged. Thus, Abelard may be referring to resistance to compromise.

2.2.3 The Chartrains’ Perception of the Cornificians

In the *Dragmaticon* of William of Conches, one of the first items of business is a reprimand of the educators that John of Salisbury labels, Cornificians. William states:

. . . cur magistris nostril temporis minus creditor quam antiquis crederetur. Huius rei causam tum in ipsis magistris tum discipulis tum in praelatis esse intelligas. Duo namque sunt quibus doctrinae alicuius creditor, uidelicet quando unde ab alio falli non posit et unde alium fallere non uelit illi inesse cognoscitur.¹¹¹

Teachers in our time are less trusted than in the past. The reason for this you should understand, lies not only with the teachers themselves but also with the pupils and prelates. For two things make a person’s teaching reliable: namely, when it is known that he possesses the particular quality that, first, would not allow him to be deceived by another and, second, would not make him wish to deceive another.¹¹²

William continues by describing the negative arts of sophistry and the pupils’ refusal to listen for seven years before asking questions. The disregard of these tenets leads John of Salisbury to state: “Observance of rules has come to be contemned, while a spirit of false intoxication has insinuated itself [into the cloisters] under the guise of philosophy.”¹¹³

In his earlier work, *Philosophia Mundi*, William discusses the difference between *nomos* or the suffix for ‘astronomy’ and *logos* or the suffix for ‘astrology.’ William favors *nomos* like

¹¹⁰ Petrus Abaelardus *Sic et Non* PL 178, col. 1340, *Sic et Non*, ed. Blanche B. Boyer and Richard McKeon Trans. W. J. Lewis. (Chicago: University of Chicago Press, 1976).

¹¹¹ Guillelmus de Conchis, *Dragmaticon philosophiae* (Turnhout : Brepols, 2001). Book 1, Line 6 – 12, pp. 3 – 4

¹¹² William of Conches, *A Dialogue on Natural Philosophy (Dragmaticon Philosophiae)*, See p. 3. For an interesting parallel, see Manilius lines 131 – 135. Marcus Manilius, *Astronomica*.

¹¹³ John of Salisbury, *The Metalogicon*. 1.4. Joannes Saresberiensis, *Metalogicus* PL 199, col. 830. “Miratur [col. 830C] Ritus observationum contemnitur, et sub imagine philosophantis, spiritus fallacis elationis obrepit.”

many of the Chartrain masters, seeing it as rule-based. Outside of a Biblical context, *logos* which is usually canonical, is related to astrology and indeed forms part of the word itself.¹¹⁴ This reversion of good and bad connotations occurs in the word, *logos*, can be explained by Christ who is considered uniform in what is usually negative, external appearance, and interior meaning. William's work demonstratively uses many of its diagrams to explicate natural science and astronomical phenomena suggesting diagrams established on principles of written ideas as rule-based. William makes some mention of astrology, but for the most part it is in a very negative light. John of Salisbury battles to discredit 'astrology' among the court and courtiers of Henri II of England in his *Policraticus*.¹¹⁵ While the terms, 'trifle' and 'novelty' are used in associations by all the Chartrain masters to refer to the group John dubs the Cornificians in his *Metalogicon* and also to life at court in the *Policraticus*, which is related to Henri II of England and Thomas Becket.¹¹⁶ William of Conches states:

Haec duodecimo signa iuxta qualitates elementorum quidam astrologi in quatuor diuiserunt, asserentes Arietem, Leonem et Sagittarium calidos esse et siccos; Taurum, Virginem et Capricornum frigidos et siccos; Geminos, Libram et Aquarium calidos et humidos; Cancrum, Scorpionem et Pisces frigidos et humidos. Quaedam stiam masculini sexus, quaedam feminini esse dixerunt. Quae omia, quasi falsi et nugatoria, praeterire dignum duximus.¹¹⁷

Certain astrologers have divided these twelve signs into four categories according to the qualities of the elements, declaring that the Ram, Leo, and Sagittarius are hot and dry; Taurus, Virgo, and Capricorn are cold and dry; Gemini, Libra, and Aquarius are hot and wet; Cancer, Scorpio, and Pisces are cold and humid. They have also said that some

¹¹⁴ Of course 'logos' also means the Word of God and pertains to Christ, a point to which I return below.

¹¹⁵ Joannes Saresberiensis, *Policraticus* PL 199, col. 409. John of Salisbury, *Policraticus* Trans. Joseph B. Pike. (Minneapolis: The University of Minnesota Press, 1938), Book I.12, Book II.19

¹¹⁶ Henri II of England (1154 – 1189) is not mentioned by name in the book, but the book is dedicated to Thomas Becket.

¹¹⁷ Guillelmus de Conchis, *Dragmaticon philosophiae*, p. 77

signs are masculine in gender, others feminine. All this we think should be left out as false and *trifling*. (52-53)Book III, 7, v¹¹⁸

This is directly aimed at astrology and the word *nugis* appeared earlier in his treatise to allude to the Cornificians. At the beginning of Book II, William states: “Adolescentes uero et iuuenes, in quibus aliquid spei consistere deberet, nugis et inutilibus desruiunt.”¹¹⁹ “But adolescents and young men, in whom there ought to exist some hope, devote themselves to *trifling* and futile activities.”¹²⁰

It is possible to conceive a hypothesis that from this verbal association the Cornificians were advocates of astrological suppositions such as the equation of the zodiac signs with elements.

Though William only refers to the pedagogical conflict in vague terms, in his Glosses on the text of Priscian, he states:

. . . we wretched masters of today, what is there for us to say in *districto examine*? We confuse our lectures with *verbal novelty*, or *we adopt unusual arrangement of material*, with the result that our pupils understand little or nothing. Nothing we write profits them; what we write we set down obscurely, with the result that we retain around us only the insignificant few for the display of our pomp. Two evils arise from this. Sometimes, on account of the obscurity of our teaching, the pupils view the arts with hatred. Certain of them, in whom there may be detected an innate love of learning, acquire understanding slowly and with great difficulty. Swiftly and without difficulty would they learn if we were only to lecture and write out of love for them (my emphasis).¹²¹

Chartres has precisely these “novelties” and “unusual arrangements of material.” The Zodiac and Labors of the Months Window is out of order in its positioning of Gemini before Taurus and its positioning of July with Cancer and June with Leo. The armature of the window prevents

¹¹⁸ William of Conches, *A Dialogue on Natural Philosophy (Dragmaticon Philosophiae)*. See Book III, 7, v, pp. 52-53.

¹¹⁹ Guillelmus de Conchis, *Dragmaticon philosophiae*, Book II, Prologue, 1.3 Lines 23 – 24, p. 34

¹²⁰ William of Conches, *A Dialogue on Natural Philosophy (Dragmaticon Philosophiae)*, Book II, Prologue, 1.3 Lines 23 – 24, p. 21.

¹²¹ Not yet available in independent text, see J. O. Ward

these “mistakes” from being a result of mixing up of panes when the window was put back in place after World War II. The Gemini/May pane and the Leo/June are both quatrefoils instead of the separate roundels for Cancer and July and Taurus and April seen in the window. The alternation of two zodiac signs and labors in roundels with the integrated labor and sign in the quatrefoil prevent these aberrations from being mistakes. Additionally, on the west façade, the tympanum on the left places the zodiac signs out of order, segregating Gemini and Pisces from the rest. Hence, these orderings can be considered the unusual arrangement and novelty of the Cornificians.

It seems probable from textual references, like the one above, that William of Conches and Thierry of Chartres compromised their teaching philosophies to accommodate the Cornificians, as William states in the plural first person in this excerpt and also references like John of Salisbury’s comment: “insipientes itaque facti sunt, dum insipientiae resistebant.”¹²² Thierry comments that “we masters will be left alone in the schools unless we flatter the multitude and trap them into listening. . . . I have prostituted my wares before many, but won the favor of only a few.”¹²³ The burden of Cornifician methods was something that affected the status and position of William and Thierry. Also as J. O. Ward states about this excerpt, the “intricacy and obscurity” of modern lectures that it refers to correlates with this classic Cornifician “vice” as John points out in *Metalogicon* 2.17 which talks of the obsolete jargon of present-day doctors and “confusing babel” and “subtle intricacies” in *Metalogicon* 4.3.¹²⁴

¹²² Joannes Saresberiensis, *Metalogicus* PL 199, col. 832, Book 1, Chapter Five. J. O. Ward, "The Date of the Commentary on Cicero's "De Inventione" by Thierry of Chartres (ca. 1095 - 1160?) and the Cornifician Attack on the Liberal Arts," *Viator* 3 (1972). See p. 237.

¹²³ Thierry of Chartres, (1884) Commentary on the *De inventione*, in *Melanges Graux*. 41 – 45. *The Latin Rhetorical Commentaries by Thierry of Chartres*. Ed. Karin M. Fredborg. (Toronto: Pontifical Institute of Mediaeval Studies, 1988).

¹²⁴ John of Salisbury, *Metalogicon*, Book 2, 17 “Hoc autem nomen in quo auctorum invenerit, [col. 876B] vel hanc distinctionem, incertum habeo; nisi forte in glossematibus, aut modernorum linguis doctorum. *Metalogicon* 4.3

The term “frivolities” (*nuges*) used by Augustine becomes popular in eleventh-century writing along with the term “novelties” (*novitates*). William of Conches utilizes the term and John of Salisbury uses it to refer to the Cornificians. Abbot Siegfried of Gorze refers to novelties of conduct in Provence during the beginning of the eleventh century.¹²⁵ Goswin of Mainz refers to the moral sculptor who works without novelty and states of novelty that:

These men lay in wait for incautious and simple-minded brothers and especially for those who frivolously run after intellectual curiosities and lure them with the bait of new teaching . . . snared in the toils of sophistic disputation and blunted by the sharpness of earned understanding, they are lead through the capacious labyrinth of necessary argumentation until with a superfluous novelty of questions alien to salvation they are elegantly instructed to their own ruin, and they sink into the pit of destruction.¹²⁶

True perception becomes something that is deep and significant for the Chartrains, not novel curiosity. But the logic that is external is “That [Logic] which makes a pretext of being dialectical and demonstrative [logic] with a flourish of hollow imitation, and strives more to acquire the [external] semblance than the [true] virtue of wisdom, is known as “sophistry.”¹²⁷ Thus, the exterior or perceived/mimicry-based man imitates and is demonstrative by self-conscious obsession with his reputation and not with “true wisdom,” which is the goal of the internal perceiver/learner. Like the obsession with an external “semblance,” the use of diagrams in illumination to overcome surface looking is something that allows the *figura* or diagram to reinforce the seemingly vacant interior of images with the interior logic and “virtue of wisdom.”

Unde qui Aristotelem sequuntur, in turbatione nominum et verborum, et intricata subtilitate, ut suum vindicent, aliorum obtundunt ingenia, partem pessimam [col. 917D] mihi praelegisse videntur.” Joannes Saresberiensis *Metalogicus* PL 199, col. 876 and 917.

¹²⁵C. Stephen Jaeger, *The Envy of Angels : Cathedral Schools and Social Ideals in Medieval Europe, 950-1200* (Philadelphia University of Pennsylvania Press, 1994). See p. 200.

¹²⁶ Not available in Latin. “Letter of Goswin of Mainz to His Student Walcher,” Appendix B of Jaeger, *Ibid.* 367.

¹²⁷ “Sophisticam esse, dictum est, quae falsa imagine tam dialecticam quam demonstrativam aemulatur, et speciem quam virtutem sapientiae magis affectat.” Joannes Saresberiensis *Metalogicus* PL 199, col. 929. John of Salisbury, *The Metalogicon*, Book IV, Chapter 22, 236.

William's work uses many of its diagrams to explicate natural science and astronomical phenomena suggesting diagrams established on principles of written ideas as rule-based.

2.2.4 Augustine and Boethius

In F. P. Pickering's work on Augustine and Boethius, he maintains that Augustine is the basis for Christian thinking and Boethius is the basis for secular thinking; however, this does not seem to be altogether the case.¹²⁸ Boethian thought is evaluated in logical and semantic terms that relate it to the surface-based Cornifician thought in his development of concepts like the Wheel of Fortune. This "secular" image appears in the mid-twelfth-century *De Avibus* by Hugh of Folieto as False Religion that as John of Salisbury shows in his *Polycraticus* has many connections with secular ideology and astrology.¹²⁹

The revival of Augustinian ideals in the Carolingian period evokes the same concerns with surface looking as in the Romanesque and Gothic period. In the *Libri Carolini*, Theodulf and the Franks revile the Iconodule Greeks for their non-grammatical use of language, conflation of 'to have' and 'to adore', and their unusual word orderings.¹³⁰ The love of images is always connected to grammatical error which impedes deep meaning, leaving the reader on the surface of the words. The juxtaposition of Boethian diagrams of the Wheel of Fortune and the Aristotelian Square of Opposition (incorporated into Boethian writings) will be shown to

¹²⁸ Pickering, *Augustinus oder Boethius? Geschichtsschreibung und epische Dichtung im Mittelalter und in der Neuzeit*. He also explores the topic in a chapter in Pickering, *Literature and Art in the Middle Ages*.

¹²⁹ *Polycraticus*, printed amongst his other works listed under Joannes Saresberiensis in PL 199, 379 – 822. See Book Two, Chap. 19.

¹³⁰ Celia Chazelle, "'Not in Painting but in Writing': Augustine and the Supremacy of the Word in the *Libri Carolini*," in *Reading and Wisdom: The De Doctrina Christiana of Augustine in the Middle Ages*, ed. Edward D. English (1995).

demonstrate two approaches to logic and two languages that may be coexisting in the middle ages that are closely tied to religious ideology and relationships to the word and to the image.

2.2.5 Hugo of Folieto's Diagrams of True and False Religion

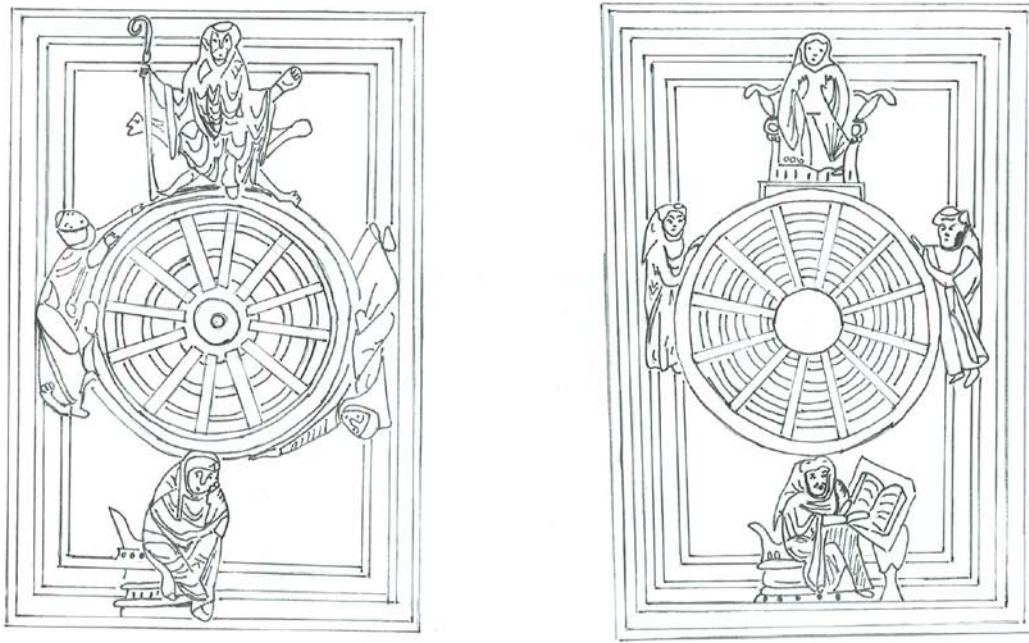


Figure 2: Wheels of False and True Religion, Hugo of Folieto, Heiligenkreuz, Stiftsbibliothek, MS Cod. 226, fol. 149v and 146r

The Wheels of True and False religion demonstrate this Boethian dichotomy. The outer man is literally on the exterior or rim of the temporal wheel as shown in the Augustinian-influenced book, *De Avibus*. Hugh of Folieto (1096 - 1172) illustrates False and True

Religion.¹³¹ False Religion appears like a Wheel of Fortune. Two figures appear at either side of the wheel, the one on the right is upside down and the one on the left is right side up. These figures are being controlled by the motions of the wheel. True Religion has a throne at the apex of the wheel and two figures to either side of the wheel; both are right side up and they are in control of the wheel that does not move.

The interior man who is an inward perceiver, and the external man who is the corporeal perceived, makes the latter subject to the tides of *Fortuna*, time, and age as well as the quickly lost approval of his fellow man. The external man looks for exterior approbation to buttress his ego. His relationship to the external world is one of appearances.

The stationary position of the wheel compared with the immovable square and the diagonal lines of the wheel bear resemblance to the Square of Opposition that places contraries on the diagonals.

¹³¹ See Hugh of Folieto, *The Medieval Book of Birds, Hugh of Fouilloys Aviarium*, Ed. and Trans. Willene B. Clark. (Medieval & Renaissance Texts and Studies: Binghamton, N.Y., 1992).

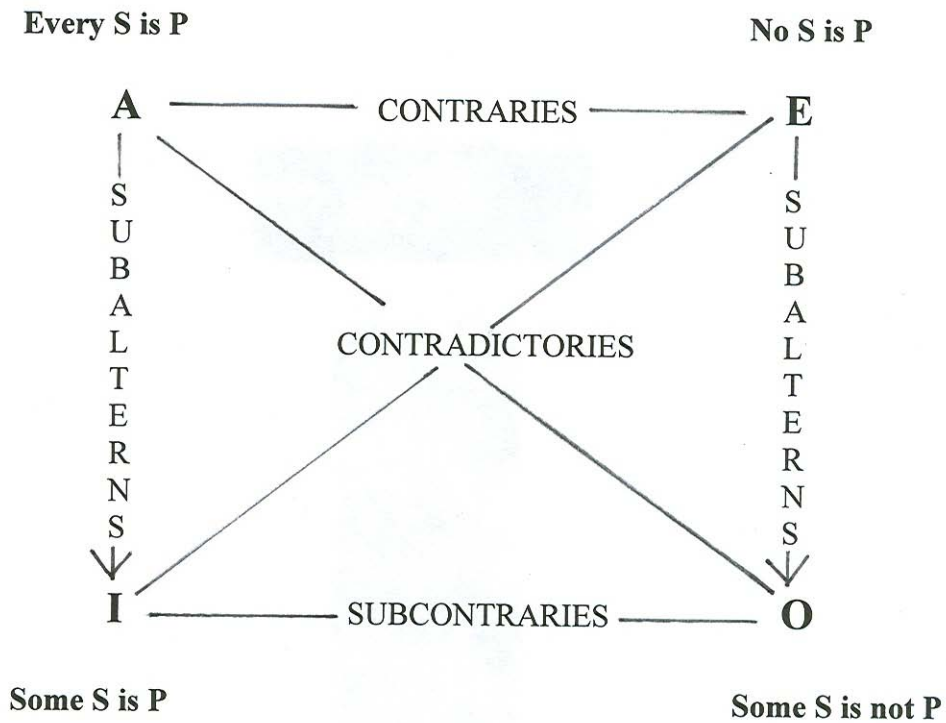


Figure 3: Aristotelian Square of Opposition

On the Wheel of True Religion, the Square of Opposition can be considered a possible logic for the image. The head and feet (top and bottom corners) on each diagonal express difference or Aristotelian contradiction while the Wheel of Fortune the diagonal lines connect two heads or two sets of feet and thus violate the logic of the square.

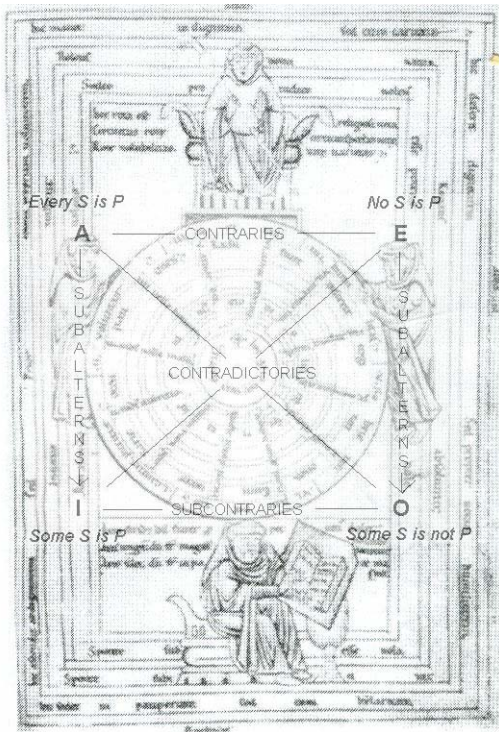


Figure 4: Superimposition of Square of Opposition on the Wheel of True Religion

This violation can be seen in the Square of Opposition's position of the subject or signifier on the top of the square at the position of the head on the Wheel of True Religion and the signified or feet are on the base of the square or bottom of the Wheel of True Religion. The head is the subject and the feet are the predicates. The Wheel of False Religion on the other hand equates the signifier (head) on one side with the signifier (upside down) on the other, and the predicate (or signified—feet) on one side with the predicate on the other (also upside down).¹³²

¹³² This further suggests from Chapter One, Judas's trading of one signifier for another and the consumption of the signifier (the apple) by Adam who is also a signifier.

2.2.6 The Perceiver and the Perceived

The Cornificians remain on the surface of the subjects or on the surface of the predicates not bothering with signifier and signified relationships, but to the surface order and pictorial apprehension of words on the page, color, or auditory music of the sound of words. They are not therefore active and not penetrating to the deeper meaning.¹³³ This surface vision or “the eyes of the body” or the “lust of the eyes” is associated with novelty and curiosity. Augustine says of this kind of seeing: “What evil vulgar, shameless curiosity is the cause of the lust of the eyes, the avid craving for frivolous shows and spectacles . . . ”¹³⁴

Augustine discusses the perceiver and the perceived in his *De Trinitate*. Augustine takes the position of the perceiver and writes about the exterior and interior man as if perceiving through them.

In his text, *De Trinitate*, Augustine states:

Hujus igitur verba fidei quisquis in solis vocibus memoriae commendaverit, nesciens quid significant; sicut solent qui graece nesciunt, graeca verba tenere memoriter, vel latina similiter, vel cujusque alterius linguae, qui ejus ignari sunt: nonne habet quamdam in suo animo trinitatem, quia et in memoria sunt illi verborum soni, etiam quando inde non cogitat; et inde formatur acies recordationis ejus, quando de his cogitat; et voluntas recordantis atque cogitantis utrumque conjungit? Nullo modo tamen dixerimus istum, cum hoc agit, secundum trinitatem interioris hominis agere, sed potius exterioris: quia id solum meminit, et quando vult, quantum vult intuetur, quod ad sensum corporis pertinet, qui vocatur auditus, nec aliud quam corporalium rerum, id est sonorum, tali cogitatione imagines versat. Si autem quod verba illa significant, teneat et recolat; [col. 1036] jam quidem aliquid interioris hominis agit:

¹³³ Sedlmayr's book on the Gothic Cathedral shows a medieval methodology in this sense. By presenting two subjects or two signifiers as equivalent, i.e. “The Gothic Cathedral *is* the Heavenly Jerusalem,” he equates and conflates signifier and signified relations. This places all meaning on surface appearances. The relationship between the opposite extreme of Cornifician thought and Socialist-Nationalist thought (which Sedlmayr was of that party) will be illustrated in further studies.

¹³⁴ “Ad concupiscentiam carnis pertinent illecebrae voluptatum: ad concupiscentiam oculorum, nugacitas spectaculorum” Augustinus Hipponensis, *Sermo III de symbolo*. PL 40, col. 653, Patricia Cox Miller, “Seeing the Invisible in Late Antiquity and the Early Middle Ages,” ed. Giselle de Nie, Karl F. Morrison, and Marco Mostert (Turnhout, Belgium: Brepols, 2005). See p. 30.

sed nondum dicendus vel putandus est vivere secundum interioris hominis trinitatem, si ea non diligit quae ibi praedicantur, praecipuntur, promittuntur.¹³⁵

If anyone, therefore, has committed to memory the words of this faith according to the sounds alone without knowing what they mean, as they are wont to retain Greek words in their memory who do not know Greek or similarly Latin words, or those of any other language of which they are ignorant, does he not have a kind of trinity in his mind, since those sounds of the words are also in the memory even when he does not think of them; and the vision of his recollection is formed from them when he thinks of them; and the will of him who remembers and thinks joins both together? Yet we should by no means say that such a one, when he acts in this manner, acts according to the trinity of the *inner man*, but rather according to that of the *outer man* because he remembers, and when he wills, contemplates as much as he wills, that alone which belongs to the *sense of the body* which is called hearing; and when such a thought is in his mind he is concerned with nothing else than the images of corporeal things, that is, of sounds. If, however, he retains and recalls what these words signify, then he is already doing something that is indeed characteristic of the inner man, but even so, we must not yet say or think that he lives according to the trinity of the *inner man* if he does not love those things which are proclaimed, commanded, and promised there.

For he can also retain and think of them, so that supposing them to be false, even endeavors to refute them. Hence, the will, which there combines those things retained in the memory, and those impressed from it on the gaze of thought, completes indeed a trinity of some kind, since itself is added as a third; but the man does not live according to this when he does not accept those things of which he has thought, since he regards them as false.¹³⁶ (Emphasis mine)

Thus, the exterior man is brought into and trusts the ear though not knowing what words mean. The exterior man is corporeal vision, but uses this vision through the instruction of the ear or oral tradition. The inner man hears the spiritual and understands it through his knowledge of faith, but only trusts what he can see in writing and considers those things of the “gaze of thought” as false.

¹³⁵ Augustinus Hipponensis, *De Trinitate*, PL 42, col. 1035 – 1036.

¹³⁶ Augustine of Hippo, *On the Trinity Books 8 – 15*. Ed. Gareth B. Matthews. Trans. Stephen McKenna, (Cambridge: Cambridge University Press, 2002). See p. 134.

Augustine believed that the eye as an organ and reading as a perceiving process were active.¹³⁷ The perception through the eye is equated above with the Chartrain masters and a reading culture. Augustine states:

Excutite fidem vestram, oculos cordis proferte, nolite humanos: habetis enim alios intus, quos vobis Dominus fecit, qui vobis oculos cordis aperuit, quando fidem dedit.

Shake up your faith, bring the eyes of your heart [*oculos cordis*] to bear, not your human eyes. You have other ones inside, after all, which God made for you. He opened the eyes of your heart when he gave you faith.¹³⁸

The eyes of the heart is a catch phrase that occurs in the Augustinian-influenced thought of Richard of St. Victor when he writes about the four modes of seeing, specifically the third mode.¹³⁹ In the *Metalogicon*, John urges students in an Augustinian manner to:

“[S]hake out” the authors, and without exciting ridicule, despoil them of their feathers, which (crow fashion) they have borrowed from the several branches of learning in order to bedeck their works and make them more colorful.”¹⁴⁰ The idea of visual images is encouraged in this passage and the words may allude to a kind of written means to interior sight or sight of the heart. This passage goes further to distill words through discussion to find their meaning. Reference is made to their arrangement (*diacrisis*) and pomp. However, this is not spoken of as completely negative as there is meaning to the words despite their elaborate dressings. There is a thin line between eloquence, which is supported by the Chartrain masters, and superficial wordplay

¹³⁷ Miller, "Seeing the Invisible in Late Antiquity and the Early Middle Ages." See p. 29.

¹³⁸ Augustinus Hipponensis, *Sermones de Sanctis*, PL 38, col. 1300

32. Miller, "Seeing the Invisible in Late Antiquity and the Early Middle Ages." See p. 29

¹³⁹ Augustine considers there to be three “modes of seeing” that of corporeal vision, imaginative vision (pictomorphic), and vision through the intuition of the mind that is the soul’s vision (conceptual). The Victorines added a fourth mode to Augustine’s three.

¹⁴⁰ Auctores excutiat, et sine intuentium risu eos plumis spoliēt, quas (ad modum corniculæ) ex variis disciplinis, ut color aptior sit, suis operibus indiderunt. Quantum pluribus disciplinis et abundantius quisque imbutus fuerit, tanto elegantiam auctorum plenius intuebitur, planiusque docebit. Illi enim per *diacrisim*, quam nos *illustrationem* [col. 854B] sive *picturationem* possumus appellare, cum rudem materiam historiae, aut argumenti, aut fabulae, aliamve quamlibet suscepissent, eam tanta disciplinarum copia et tanta compositionis et condimenti gratia excolebant, ut opus consummatum, omnium artium quodammodo videretur imago. Joannes Saresberiensis *Metalogicus* PL 199, col. 854. John of Salisbury, *The Metalogicon*, Book I, Chapter 24, p. 66.

through illogical arrangements. The words must *bear* meaning instead of wearing it in their non-grammatical positions and arrangements.

Not too far from Chartres, Guibert of Nogent wrote in his *Moralia Geneseos* about the three or four-fold motions of the *interior homo* that he appropriated from Anselm of Canterbury. This suggests comparison with the Augustinian three modes of seeing and the Victorine four modes of seeing. Anselm stated that the four ideas of Affection, Will, Reason, and Intellect could not equate Affection and Will unless the third or third and fourth terms were present.¹⁴¹ Added to this statement, Guibert alludes to how Anselm does this almost without changing the order of the words—“penitus immutato locutionum ordine.”¹⁴² Anselm may be trying to avoid Cornifician-type leanings. Thinkers like the Cornificians treat language like an image. It can be deciphered and apprehended in the appearance of its grammar violating structure similar to their treatment of color as an external sign (See Chapter Three). John discusses the violations of logic in this false religion and the non-apprehending listener of the perceiving outer man.

Guibert of Nogent who was writing about the authorization of relics in 1125 in his *De Pignoribus Sanctorum*, takes issue with popular culture or the verification of authenticity

¹⁴¹ “Is itaque tripartito aut quadripartito mentem modo distinguere docens, sub affectum sub voluntate, sub ratione, sub intellectu commercial totius interni mysterii tractare, et quae una a plerisque et a me ipso putabantur certis divisionibus resolute, non idem duo prima fore monstrabat, quae tamen accedentibus quarto vel tertio eadem mox esse promptis assertionibus constat. Super quo sensu cum quaedam evangelica capitula mihi disseruisset, cum primum quidem quid inter velle et affici distaret luculentissime aperuisset, quae tamen non ex se, sed ex quibusdam contiguis voluminibus, at minus patenter quidem ista tractantibus eum habuisse constaret, coepi postmodum et ego ejus sensa commentis, prout poteram, similibus aemulari et ubique sxripturarum, si quid istis moraliter arrideret sensibus, multa animi acrimonia perscurtari.” *Guibert of Nogent, De vita sua, sive monodiae* in *Autobiographie*. Ed. and Trans. Edmond-René Labande. (Paris: Société d’édition Les Belles Lettres, 1981) Jay Rubenstein, *Guibert of Nogent: Portrait of a Medieval Man* (New York: Routledge, 2002). See p. 40.

For information on relics in relation to the imagery of Chartres, see Claudine Lautier, “Les vitraux de la cathédrale de Chartres, Reliques et images,” *Bulletin monumentale* 161, no. 1 (2003):3 - 96.

¹⁴² “Quod decem libris / complexum, secundum illos quatuor praenominatos interioris hominis motus, ita moralem executus sum in omnibus tropum, ut penitus immutatio locutionum ordine initia continuarentur ad supremum.” *Guibert of Nogent, De vita sua, sive monodiae* in *Autobiographie*. Ed. and Trans. Edmond-René Labande. (Paris: Société d’édition Les Belles Lettres, 1981)

through oral and written means.¹⁴³ Guibert's book was addressed in particular to the diocese of Soissons. This is quite convenient timing as the Council of Soissons which condemned Abelard occurred in 1121 and Guibert wrote his treatise in 1125. The fact that Guibert is taking up the issue of St. Medard of Soissons's relic of the tooth of Christ as a false relic that is based on false popular devotion suggests an underlying strike at the Council of Soissons and its condemnation of Abelard.¹⁴⁴ Guibert is firing back at the condemning at Soissons to charge Soissons with the same crime as Abelard, or the reliance on oral tradition. It is particularly interesting that Guibert takes up both oral and written tradition in his *De Pignoribus*. The mostly popular culture based orality is considered inept as the burden of proof for relics, but both methods of orality and the written tradition are put under scrutiny.

Thus, Guibert and Abelard may be considered thinkers who are moderates in the extreme camps represented by the Chartrains on the one hand and the Cornificians on the other. The *Sic et Non* are integral to one another.

The exterior or surface obsession of the Cornificians and the position as an interior reader of the Chartrains present a semantic dichotomy that expresses itself in the form and function of Chartres Cathedral, both methods of representation being of necessity to the other.

The conundrum of the Chartrain school may not be all that complicated. If the Chartrain masters were opposed to the dominance of exteriorized signification, the surface, the exterior man, and fortune-based ideologies, they likely would not have been concerned with the prestige of building a name for their school. Perhaps to prevent what may have been foreseen as what

¹⁴³ Guibert of Nogent, *De pignoribus sanctorum*, printed amongst his other works listed under Guibertus S. Mariae de Novigento in PL 156, 607 – 679.

¹⁴⁴ This did not prevent Gautier de Coinci from including a miracle about the tooth in his *Miracles de Nostre Dame*. See *Gautier de Coinci: Miracles, Music, and Manuscripts*, ed. Kathy M. Krause and Alison Stones (Turnhout: Brepols, 2007).

would happen in Paris, no reputation was established to become blemished. As a set of intellectuals sharing common ideas, they read and wrote to fulfill an artisan-like relationship to teaching.

3.0 CATHEDRAL PLAN AND WINDOWS AS *LOCI*

It would be only appropriate that the macrocosmic and microcosmic beliefs of the Chartrains, seen in the concept of body and soul introduced in Chapter One, could be applied to the Cathedral of Chartres.¹⁴⁵ In this chapter, the building will be treated like a body that can provide suggestive evidence that allows the distillation of a diagrammatic soul in its stained glass windows' positions within the structure. This body is exemplified in the arrow-shape present in consanguinity trees and Zodiac Man diagrams that feature the human body as part of these *figurae*. The *figura* of Chartres emerges by interpreting the placement of the windows in the cathedral. In this way, the *figura* of the building, corresponds to Abelard's definition of *figura* as

¹⁴⁵ "Apposita non est, quia tunc extra corpus anima esset nec aequaliter illud moveret. Omne etenim appositum extra illud est, cui est appositum, et maiores vires habet in proximo, ut ignis alicui appositus. Concreta non est. Concretum est id, quod ex sua substantia transit in alterius substantiam, ut aqua per ebullitionem in salem. Cum ergo anima non transeat in corporis substantiam, sed semper spiritus est, concreta illi non est. Commixta non est illi. Nullum etenim commixtorum esse sum retinet, sed ex duobus fit unum, ut ex auro et argento electrum. Cum ergo utrumque esse sum retineat, non sunt commixta corpus et anima. Conjuncta ergo sunt, sed ita, quod tota anima in omnibus partibus est corporis esse sum retinens tota et integra."

William of Conches, *Philosophia Mundi: Ausgabe des 1. Buchs von Wilhelm von Conches' Philosophia mit Anhang, Übersetzung und Anmerkungen* (Pretoria : University of South Africa, 1974) (Latin and German), p. 111 "The soul is not attached, because then it would be outside the body, and not move with it evenly. Everything attached namely is found outside of which it is attached to, and the nearer it is, the larger its influence, as fire is when it becomes near to anything. It is not integrated. Integration is when something passes over from its own substance into the substance of another, like when salt boils in water. Since therefore the soul does not pass over into the substance of the body, but the spirit always remains [intact], it is not integrated into the body. It is not mixed with it. *None of the elements of a mixture keeps its own nature*, but the two would become one, like electrum comes from gold and silver. Since however both keep their own nature, bodies and souls are not in a mixture. Therefore, whatever way they are retained, they are not mixed. They are therefore, joined but in such a way that the *whole soul is in all parts of the body* and they are each totally retained and unmixed." William of Conches's quotation above is further supplemented in this chapter with his theory of universals and mixtures which relate to the diagramming of Chartres.

an arrangement of the body.¹⁴⁶ By considering the building as body and the diagramming as soul, this correspondence allows a consideration of the *figura* that suggests the Eucharist definition of *figura* as something that occurs when the body of the cathedral is joined to its soul like the bread and body as opposed to Berengar who separates the Eucharistic substances from their *figurae*.¹⁴⁷ In Chapter One, arrangement was discussed as a *figura* and in this chapter, the *figura* that is presented as a hypothesis is one that suggests the windows as *loci* for intangible forms of Zodiac Man diagrams or Consanguinity Trees. These *loci* are determined by their astrological signs and elemental substances. These signs and substances are defined by the feast days celebrated in honor of each window's protagonist. Within this study's examination of diagrammatic possibilities, these *figurae* or arrangement of the windows suggest larger theological topics like 1) four sets of three zodiac signs sharing common elements in each group as a speculative corollary to Trinitarian philosophy, 2) the potential to substitute zodiac signs within each of these groups with one another as an interpretation of three-in-one doctrine.

3.1 ENTELECHY AND MICROCOSM/MACROCOSM

For William of Conches, the whole is in all of the parts like the Platonic body and soul. Here I address whether one of the windows could have acted as a template or microcosm of the overall entelechy of the Cathedral of Chartres as macrocosm. The Chartrains knew the Aristotelian idea of *entelechia* (defined in Chapter One as a process of becoming and a diagrammatic

¹⁴⁶ See p. 9, Footnote 20.

¹⁴⁷ See footnote 14.

predetermination) and they may have also known the concept through Plato (See Chapter One).

In the *Timaeus*, Plato states:

What is that which is always real and has no becoming, and what is that which is always becoming and is never real? That which is apprehensible by thought with a rational account is the thing that is always unchangeably real. . . . [E]verything that becomes must of necessity do so by the agency of some cause; without a cause nothing comes to be. Whenever the maker of an object looks to that which is always unchanging and uses a model of that kind in fashioning the form and quality of his work, all that he thus accomplishes must be good.¹⁴⁸

I suggest that the unusual ordering of the Zodiac Window may be read as a conceptual map of the cathedral as a whole. By using the zodiac and cosmos as an “unchanging” model that is changed in order by Cornifician cause, Chartres fits into the definition of a Platonically-defined work of the “good,” but it is also defined as in a state of becoming. The unusual ordering of the zodiac in this window is the first hint of illogical arrangement and Cornifician influence.

Chartres’s windows are especially important for art historical investigation because they provide one of the few examples of windows in their original position and windows preserved from destruction during the French Revolution.¹⁴⁹ In this chapter, I provide the preliminary data essential to looking at the cathedral in a diagrammatic way. By investigating the Zodiac Window as a microcosm in relationship to the macrocosm of the cathedral plan, I argue that twenty-two of the fifty-nine windows in the cathedral represent markers that suggest comparisons between the parts and the whole and the whole and the parts. If these twenty-two windows are marked in their position and feast day as a corollary to the zodiac signs and labors of the months in the window in the second bay of the south choir aisle, the idea of mixed and

¹⁴⁸ Plato, *Timaeus*. Ed. and Trans. John Warrington. (Dent: London, 1965), 29d – 30c, p.19.

¹⁴⁹ The windows are in their original position except the Lawrence Window, which is discussed by Meredith Lillich. Lillich explains that the no longer extant St. Lawrence Window was moved in August of 1259 to make way for St. Louis’s Altar of the Angels. Lillich, “A Redating of the Thirteenth-Century Grisaille Windows of Chartres Cathedral.” See p. 14.

universal elements are arranged and for the most part divide to one side or the other of the cathedral.¹⁵⁰ Part of this mixing is related to the gender associations ascribed to the zodiac signs which William of Conches acknowledges as part of astrological observance that he rejects but explains in his *Dragmaticon*.

Haec duodecimo signa iuxta qualitates elementorum quidam astrologi in quatuor diuiserunt, asserentes Arietem, Leonem et Sagittarium calidos esse et siccos; Taurum, Virginem et Capricornum frigidos et siccos; Geminos, Libram et Aquarium calidos et humidos; Cancrum, Scorpionem et Pisces frigidos et humidos. Quaedam stiam masculini sexus, quaedam feminini esse dixerunt. Quae omnia, quasi falsi et nugatoria, praeterire dignum duximus.¹⁵¹

Certain astrologers have divided these twelve signs into four categories according to the qualities of the elements, declaring that the Ram, Leo, and Sagittarius are hot and dry; Taurus, Virgo, and Capricorn are cold and dry; Gemini, Libra, and Aquarius are hot and wet; Cancer, Scorpio, and Pisces are cold and humid. They have also said that some signs are masculine in gender, others feminine. All this we think should be left out as false and *trifling*.¹⁵²

The relationship of the zodiac signs to the qualities of moisture, hotness, dryness, and coldness are qualities that help to determine their elemental associations. For example, fire is hot and dry, air is hot and moist, earth is cold and dry, and water is moist and cold making Aries, Leo, and Sagittarius fire signs, Aquarius, Gemini, and Libra air signs, Taurus, Virgo, and Capricorn earth signs, and Pisces, Cancer, and Scorpio water signs. William of Conches establishes these qualities and their elemental connections (syzygy) in a diagram.

¹⁵⁰ As Abbé Bulteau indicates the span of the zodiac signs in the middle ages would have been different than that of today. Instead of beginning around the twenty-second and ending on the twenty-first, the medieval zodiac would have begun and ended during the middle of the month around the thirteenth or fourteenth. Abbé Bulteau, *Monographie de la Cathédrale de Chartres*, vol. II (Chartres: Société Archéologie d'Eure-et-Loir, 1888). See p. 52. Bulteau's observations were directed to the left tympanum of the west façade of Chartres. Bulteau does not give an absolutely accurate account of which days would have been used. These dates can, however, be accurately determined from medieval calendars which include reference to Zodiac signs. One conveniently available thirteenth-century example is the Psalter Hours of Yolande de Soissons New York, Pierpont Morgan Library, MS M.729, folios 8r – 13v, which can be consulted on the Corsair web site.

¹⁵¹ Guillelmus de Conchis, *Dragmaticon philosophiae*, p. 77.

¹⁵² William of Conches, *A Dialogue on Natural Philosophy (Dragmaticon Philosophiae)*. Book III, 7, v, See pp. 52-53.

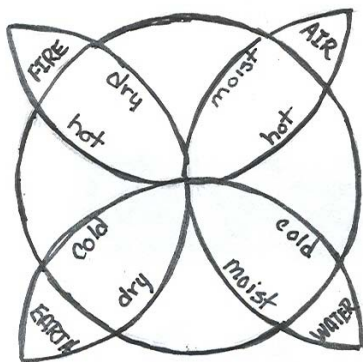


Figure 5. Syzygy Diagram from William of Conches's *Dragmaticon*

These elemental associations which are universal or single pure elements in zodiac signs or the tips of the petals of William's diagram and combined or mixed elements in the center of the circle that can be connected to monthly associations are vital to understanding how the Zodiac Window is replicated in the structure of Chartres. Each zodiac sign spans two different months and thus, each month is marked as a mixture of two different zodiac signs and by extension two different elements. I examine in the following chapter the elemental associations of the feast days of select windows of the cathedral. These elements are instructive in connecting the elemental substance related to zodiac dates of the feast days with the elemental substance of the zodiac sign that can be imposed on the plan. While some windows have single dates of feasting, other windows have multiple dates of feasting and they represent monthly or combined elements by including more than one elemental association for the *locus* which that window represents. For this reason, the sign of the feast day may be of one of the four core elemental associations (fire, air, water, earth), but reflect one of these elements and not the signifier or zodiac sign that that specific day implies. For example, when the Zodiac Window is plotted on the cathedral

plan, the Andrew Window whose feast day (November 30th) occurs in Sagittarius will not be associated with this particular fire sign, but with one of the other fire signs (Aries and Leo) in its elemental triplicity as I explain in detail below. This can be considered a theoretical conversion of Trinitarian philosophy in which the signifier (zodiac sign or hypostasis of the Trinity) is interchangeable with the other signifiers (the zodiac signs and the hypostases) due to their being of the same substance. In the case of Sagittarius and Andrew, this could be Aries or Leo, but in this case, it is Leo due to the elements that surround it in the *loci* in the building (air and water) and imply monthly and zodiacal associations that correspond with the position of Leo in the Zodiac Window, as further explained below.¹⁵³

As seen in the quotation on body and soul, the microcosmic and macrocosmic relationships of humanity to the cosmos are ideas that were wholly embraced by the Chartrains like William of Conches. This and other concerns of the texts of John of Salisbury (c.1120 -

¹⁵³ Trinitarian theory for Abelard was one in which the properties of the Trinity were different but their substance was one and the same. “Substantia uero in propria natura per se ipsas subsistere ac perseuerare possunt, omnibus et aliis rebus destructis. Vnde et substantiae quasi ‘subsistentiae’ dictae sunt et ceteris rebus quae eis assistant, non per se subsistent, naturaliter priores sunt. Vnde liquidum est Deum, qui omnium rerum est unicum et singulare principium, nullo modo in eo rerum contineri quae substantiae non sunt.” Petri Abaelardi, *Theologia Christiana* in *Petri Abaelardi Opera Theologica*. (CChr) Ed. Eligii M. Buytaert O.F.M. (Tvrnholti: Brepols, 1969), Book III, 119, lines 1405 – 1411, p. 238. Abelard’s observations on the Trinity were viewed with consternation and he and his ideas were rejected at the Council of Soissons. Thierry of Chartres another Chartrain master was present and defended him. “Terricus quidam scholaris magister irridendo subintulit . . . “ Abelard, *Historia Calamitatum*, ed. Jacques Monfrin (Paris, 1967), p. 88. There are many scholars who suggest that this is Thierry. Vernet, “Une épitaphe de Thierry de Chartres.” See p. 661. Häring, “Chartres and Paris Revisited.” See p. 268. Though Thierry was a likely exception to the acceptance of Abelard, the structure of Chartres may have been thought of as an embodiment of Abelard’s theory of the Trinity. The zodiac signs of the same substance or elemental association are known as a triplicity. Abelard’s philosophy of the Trinity that the Council of Soissons rejected was one in which he maintained that the persons of the Trinity had sameness in substance, but are different in definition or property. Petri Abaelardi, *Theologia Christiana* in *Petri Abaelardi Opera Theologica*. (CChr), Book III, 165, lines 1989 – 2004, p. 256. “Et post aliqua personas etiam ipsas ‘proprietates’ appellat dicens: ‘Non enim nomina tantummodo sed etiam nomine proprietates, id est personas uel ut Graeci exprimunt hypostases, hoc est subsistentias confitemur’. Vbi et rursus adiecit: ‘Itaque substantia unum sunt, personis ac nominibus ditinguuntur.’” See also Jeffrey E. Brower, “Trinity,” in *The Cambridge Companion to Abelard* (Cambridge: Cambridge University Press, 2004). Thus, the elements that represent the feast days of the cathedral windows can be understood as any of the three zodiac signs because they all share the same substance/element, making the particular feast day’s signification its substance and thus, static, and its signifier or person its zodiac sign and thus, fluid. They are of the same element or substance like fire, earth, air, or water, but they are different in definition or person like Father, Son, Holy Spirit or Aries, Leo, Sagittarius.

1180) and William of Conches (c.1090 – after 1154) are the fundamental texts I use to undertake an interpretation of Chartres Cathedral. The positions of these thinkers are by implication connected to their antagonists, the Cornificians.

I endeavor to show that the Chartrain masters' use of diagrams in manuscripts and the use of diagrams in architectural structures were intended to balance rules or *nomos* with the very liberal approaches of the Cornificians. Diagrams were an especial favorite form of instructing for William, and the *Dragmaticon* gives frequent reference to these in the words of its text like the following:

Sed quia melius retinentur quae oculis uidentur, utriusque sinzugiae fiat descriptio.¹⁵⁴

But since what one sees with one's own eyes is better retained [by the mind], a diagram of each syzygy should be provided.¹⁵⁵

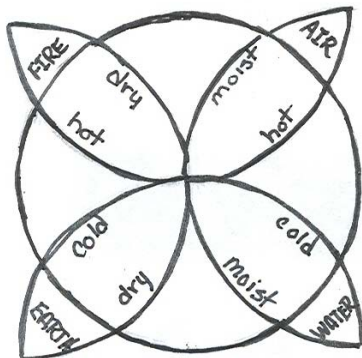


Figure 6: Syzygy Diagram



Figure 7: "Mason's Mark"

On the north side of the nave of Chartres under the Eustace Window appears a so-called mason's mark that replicates the elemental diagram of William of Conches from the *Dragmaticon*. The

¹⁵⁴ Guillelmus de Conchis, *Dragmaticon philosophiae*. Line 11 – 13 p. 45

¹⁵⁵ William of Conches, *A Dialogue on Natural Philosophy (Dragmaticon Philosophiae)*, 30. (Book II, Chapter v).

Dragmaticon is a correction of an earlier work by William, *De Philosophia Mundi* considered heretical by the Church.¹⁵⁶ This diagram is one that relays the notion of *syzygy* or conjugation. Notably, the diagram on the north of the cathedral excludes the points of the diagram which label the elements as universals. This will be suggestive of this side of the cathedral acting only in terms of elemental combinations like in the interior of William's diagram. The diagram is intended to illustrate how the elements can co-exist in the order of earth, water, air, and fire in the cosmos. William's primary argument about the elements is that they are found in the particular or worldly realm in the form of combinations while in the universal or heavenly realm, they are found in pure singleness.¹⁵⁷ This is a Platonic argument akin to that of the 'forms' that are perfected in the heavens.¹⁵⁸

¹⁵⁶ André Vernet, "Un Remaniement de la *Philosophia* de Guillaume de Conches," *Scriptorium* 1 (1947):243 - 59. See p. 244. In *Philosophia*, William explains the creation of Eve as not from a rib of Adam's but like Adam from earth. In this way, Eve represents a separate creation in William's earlier doctrine and not as in her creation from Adam's side as a representation or an imperfect mimetic Platonic form. This is sort of like the combined elements of the months that are represented laterally to the universal zodiac signs and are pulled from their interconnections.

¹⁵⁷ When comparing this diagram to the description of the Vitruvian Man in Book 3, Chapter 1, 3 of Vitruvius's *Ten Books on Architecture*, the measurement of the height of the body from feet to head is the same as the width of the outstretched arms. However, when Vitruvius discusses the circle, he states that the circle can be formed by the pivoting of all limbs to circumscribe the body in a circle. This is literally impossible. Allegorically/figuratively, it may have meant something else to the medieval individual. If the four independent limbs pivot on their own they create the diagram of William of Conches that is on the north side of the cathedral under the Eustace Window. The association with this diagram to architecture in the Vitruvian Man may testify to a medieval reading of Vitruvius's text. "Similiter vero sacrarum aedium membra ad universam totius magnitudinis summam ex partibus sinfulis convenientissimum debent habere commensus responsum. Item corporis centrum medium naturaliter est umbilicus. Namque si homo conlocatus fuerit supinus minibus et pedibus pansies circinique conlocatum centrum in umbilico eius, circumagendo rotundationem utrarumque manuum et pedum digiti linea tangentur. Non minus quemadmodum schema rotundationis in corpore efficitur, item quadrata designation in eo invenietur. Nam si a pedibus imis ad summum caput mensum erit eaque mensura relata furit ad manus pansas, invenietur eadem latitudo uti altitudo, quemadmodum areae quae ad normam sunt quadratae. Ergo si ita natura composuit corpus hominis, uti proportionibus membra ad summam figurationem eius respondeant, cum causa constituisse videntur antique, ut etiam in operum perfestionibus singulorum membrorum ad universam figurae speciem habeant commensus exactionem."

"In like fashion the members of temples ought to have dimensions of their several parts answering suitably to the general sum of their whole magnitude. Now the navel is naturally the exact center of the body. For if a man lies on his back with hands and feet outspread, and the centre of the circle is placed on his navel, his figure and toes will be touched by the circumference. Also a square will be found described within the figure, in the same way as a round figure is produced. For if we measure from the sole of the foot to the top of the head, and apply the measure to the outstretched hands, the breadth will be found equal to the height, just like sites which are squared by rule. Therefore if Nature has planned the human body so that the members correspond in their proportions to its complete

Though William does not care for the association, astrological practice relates the elements to the zodiac as William points out. For example, Leo is known as a fire sign and the month of July associated with Leo includes the zodiac signs of Cancer and Leo. Thus, the month of July is related to the elements of Fire for Leo and Water for Cancer.

The first step in attempting to determine a diagramming of the structure in relationship to window position is to consider the zodiac signs of the windows and their position in space. In the diagram below, the windows are represented with colors that are taken from the Byrhtferth diagram and that allude to elements. These elemental designations are based on the feast day and zodiac sign to which each saints' feast day relates in astrological thinking. According to the Byrhtferth from Oxford, St. John's College MS 17, yellow is air, red is fire, blue is earth, and green is water. This same association is used in the table below to mark the zodiac signs of the feast days of the saints' windows.

configuration, the ancients seem to have had reason in determining that in the execution of their works they should observe an exact adjustment of the several members to the general pattern of the plan." Vitruvius, *On Architecture* Ed. from the Harleian Manuscript 2767 and Trans. Frank Granger. 2 v. (Loeb Classical Library, Cambridge, MA, Harvard University Press, 1945). See Volume One, Book III, Chapter I, 3-4, see pp. 160 – 161.

¹⁵⁸ Plato, *Timaeus*. Ed. and Trans. John Warrington. (Dent: London, 1965). See 49a1–4, 52a8, d2–4.

Table 3: Windows as Consanguinity Tree

					HEAD (Apse) Apostles Window— Pentecost May 18th in the year 1220						
					(Apse) Simon and Jude— October 28th (Scorpio -water)	(Apse) Andrew — Novemb er 30th (Sagittar ius-Fire)					
				Pantaleon —July 27th (Leo- fire)	(Apse) Grisaille	(Apse) Paul— June 29th (Cancer -water)	Grisaille				
			Theodor e and Vincent (Unkno wn)	Charlema gne	James the Great— July 25th (Leo- fire)	Grisaille	Sylvester — December 31st (Capricorn -Earth)	Remi (Caprico rn- January 13)			
		Grisaille	Savinian and Potentia n (Caprico rn-	Cheron (Gemini- May 28th)	Stephen — Decemb er 26th (Caprico rn-earth)	Nicholas — Decemb er 6th (Sagittar ius-Fire)	Margaret (July 20th: Leo-Fire) and Catherine (Novembe	Thomas Becket — Decemb er 29th (Caprico	Martin of Tours— November 11th (Sagittarius- fire)		

			Decemb er 31 st)				r 25 th : Sagittarius -Fire)	rn- Earth)			
	Grisaille	Grisaille	Grisaille	Thomas the Apostle— December 21 st (Capricorn -earth)	Julian the Hospital ler— Februar y 12 th (Aquari us-air)	Grisaille	Grisaille	Grisaille	Grisaille	Zodiac	
Blaise (destroye d)— February 3 rd (Aquarius -air)	Prodigal Son (Lecton ary Reading)	Modern	Germain of Auxerre —July 31 st (Leo- fire)	Nicholas (relics)— May 9 th (Taurus, earth)	Grisaille	Life of the Virgin	Belle Verrière— March 25 th (Aries- fire)	Anthony Septemb er 2 nd (Virgo, earth) and Paul (January 15 th : Air- Aquariu s)	Lawrence (destroyed)— August 10 th (Leo-Fire)	Apollinare —July 23 rd (Leo- Fire)	Grisaille
					Typolog ical— Venerati on of the Cross and ember days (Virgo and Libra)	Miracles of the Virgin (mostly destroye d)					

					Nicholas — December 6 th (Sagittarius-fire)	Vendôme Chapel					
					Joseph	Glorification of the Virgin — August 15 th (Leo-fire)					
					Eustace — September 20 th (Libra-air)	Creation /Good Samaritan					
					Lubin— (March 14 th and September 16 th — Pisces and Virgo)	Mary Magdalen—July 22 nd (Leo-fire)					
					Noah	John the Evangelist— December					

						er 27 th (Capricorn-earth)					
				Tree of Jesse	Infancy Window	Passion Window					
					FEET						

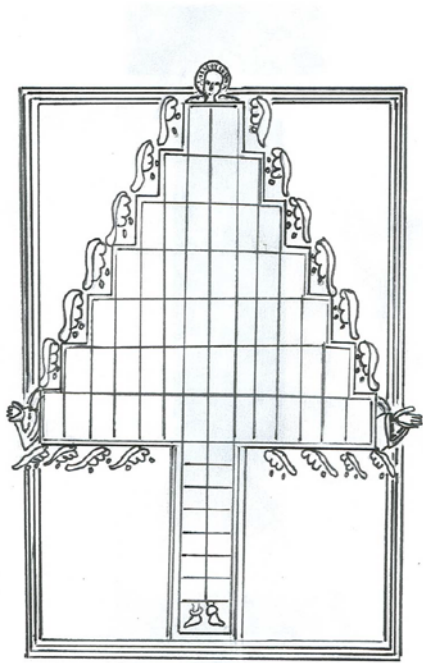


Figure 8: Madrid, Real. Acad. de la Hist. MS 76, fol. 73v

The position and regular grid that maps the windows suggest a twelve row diagram of a consanguinity tree with a total of fifty-nine windows. This number and amount of windows may relate to the date of the moving of the Lawrence Window in 1259 (twelve rows, fifty-nine windows) and the 1260 consecration. To the consanguinity tree point, this study will return towards the end of the chapter. However, the top of the diagram suggests a triad of elements like fire (red), water (green), and air (yellow) and the bottom suggests the triad of elements like air (yellow), earth (blue), and fire (red). These are the colors on the halos and shoes of the Virgin in the Life of the Virgin Window. The red, green, and yellow colors of the halos in the midsection of the Life of the Virgin Window are indicated in the Byrhtferth diagram to relate to fire, air, and water. In this window, they appear at the head of the Virgin and the fire, air, and earth are represented at the feet of the Virgin with the yellow, blue, and red colors of her shoes.

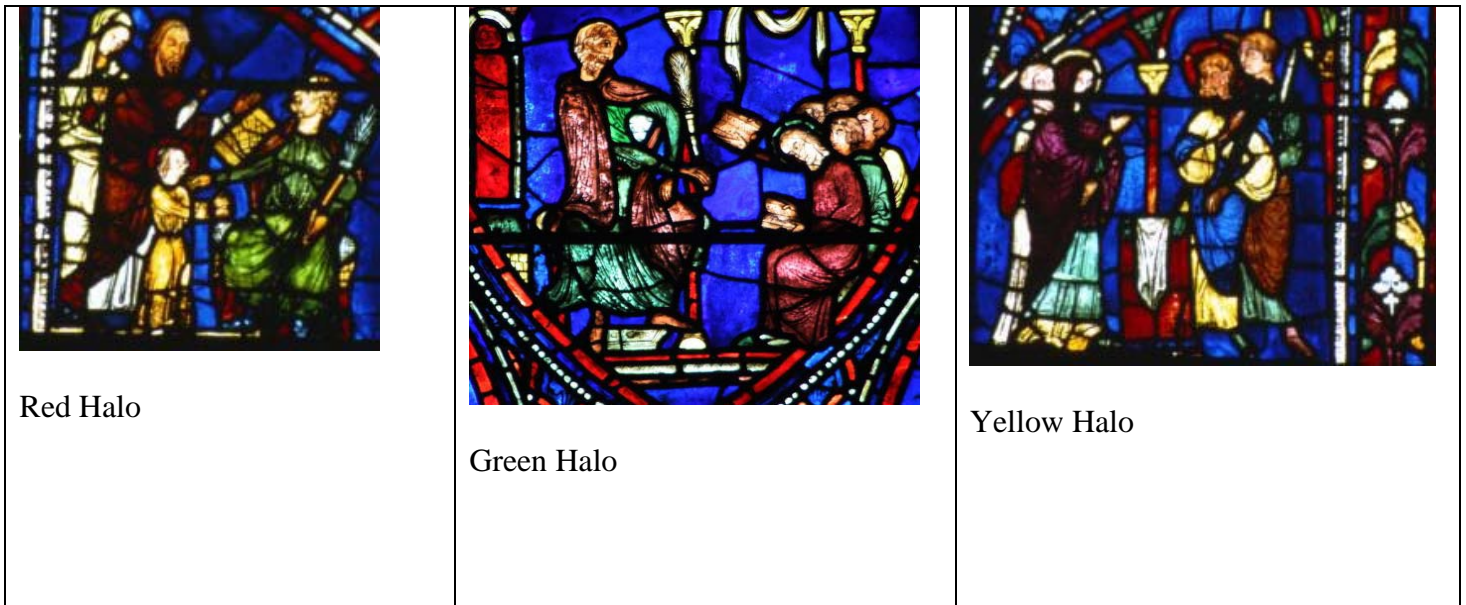


Figure 9: Life of the Virgin Window (red, green, and yellow halos)

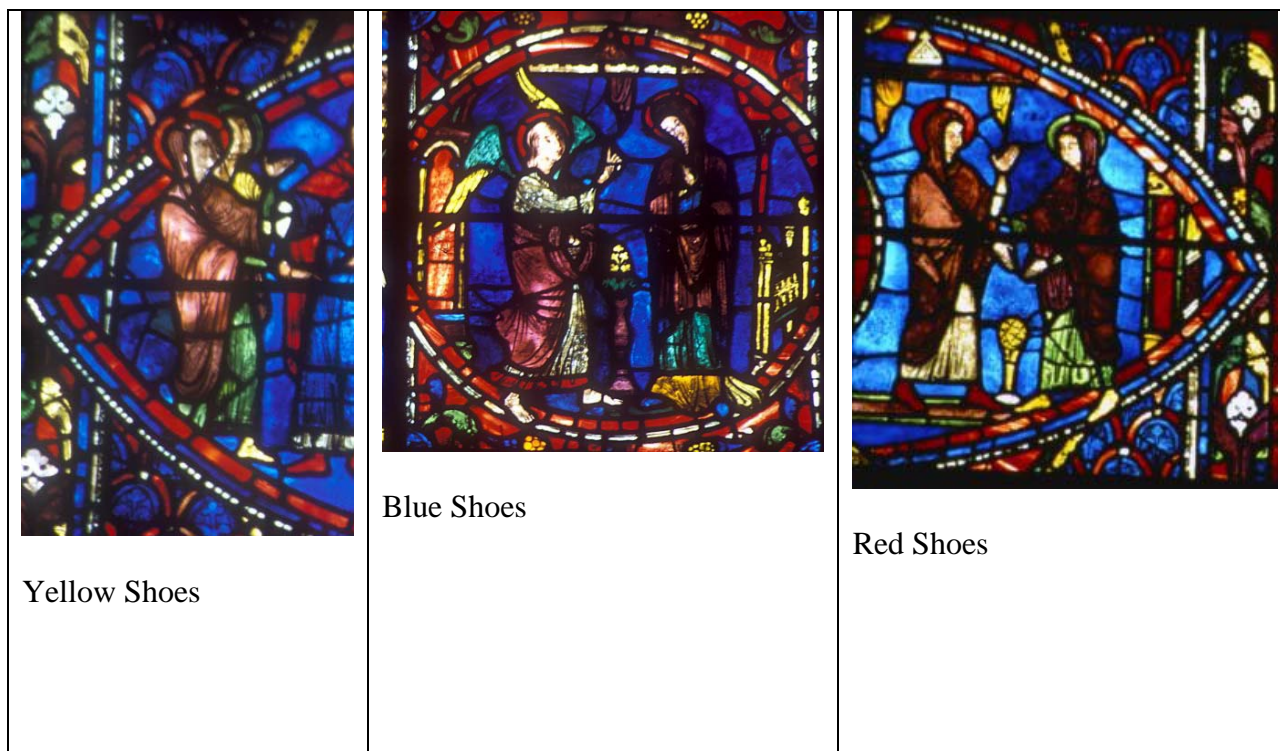


Figure 10: Life of the Virgin Window (yellow, blue, and red shoes)

Again, the elements are so distinguished in the Byrhtferth diagram. This study maintains that the head and feet are body parts that relate to the signifier (head) and the signification (feet) (See Chapter Two). As these parts alternate on the axis of the Chartres plan from apse to transept in the same way as a totem pole would, the quotation of Bernard of Chartres about “dwarfs perched on the shoulders of giants” seems to relate to this schematic.¹⁵⁹ The idea is given graphic form in the South Transept window where four Old Testament Prophets sit on the shoulders of the

¹⁵⁹ "Dicebat Bernardus Carnotensis nos esse quasi nanos, gigantium humeris insidentes, ut possimus plura eis et remotiora videre, non utique proprii visus acumine, aut eminentia corporis, sed quia in altum subvenimur et extollimur magnitudine gigantea." Joannes Saresberiensis, *Metalogicus*, PL 199, col. 900.

Bernard of Chartres used to compare us to [puny] dwarfs perched on the shoulders of giants. He pointed out that we see more and farther than our predecessors, not because we have keener vision or greater height, but because we are lifted up and borne aloft on their gigantic stature. " *The Metalogicon of John of Salisbury: A Twelfth-Century Defense of the Verbal and Logical Arts of the Trivium*. Book 3, Chapter 4, p. 167.

four Evangelists. This implies a new sort of Jesse Tree connection in relation to consanguinity trees.

But also the element of the windows as relayed in the above diagram can interchangeably be related to the element (for example, fire) of any one of the three zodiac signs (Aries, Leo, Sagittarius) in an elemental grouping (fire). This is in the same way as any person in that category of consanguinity is possible or impossible to marry.

Table 4: Organization of the Zodiac and Labors of the Months Window

Zodiac and month ordering according to the Zodiac Window	
June (Water, Air)	Leo (Fire)
July (Fire, Water)	Cancer (Water)
April (Earth, Fire)	Taurus (Earth)
May (Fire, Air)	Gemini (Air)
March (Water, Fire)	Aries (Fire)
February (Air, Water)	Pisces (Water)
January (Earth, Air)	Aquarius (Air)

Using the above table to determine which of the elements can interchangeably be used to suggest the labors of the months on the left (north) and the zodiac signs on the right of the building (south), the table below suggests a hypothetical correlation of windows and elements.

Table 5: Cathedral Window Placements and the Zodiac and Labors of the Months Window

Window Order according to the Zodiac Window	
June (Water—Simon and Jude is a water sign, Air—Apostles is an air sign)	Leo (Fire—Andrew is a fire sign)
July (Fire, Water)—Pantaleon is literally a July date	Cancer (Water)—Paul is literally a Cancer sign
April (Earth, Fire)—Nicholas's translation is an earth sign, Germain of Auxerre is a fire sign	Taurus (Earth—Anthony is an earth sign)
May (Fire—Annunciation/Belle Verrière, Air—Paul)	Gemini (Air—Paul is an air sign)
March (Water, Fire)—no known corollary	Aries (Fire—Lawrence is a fire sign)
February (Air—Blaise, Water—Prodigal Son)	Pisces (Water)—Apollinare has a July date that in the window is associated with Cancer and water

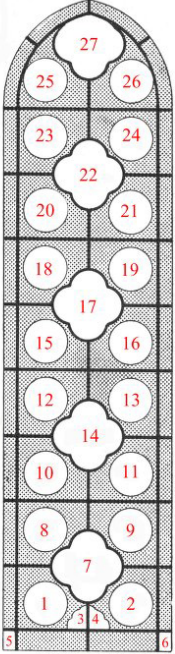
January (Earth, Air)—Veneration of the Cross and ember days	Aquarius (Air)—Unknown corollary
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As illustrated in Table 3 below, if the feast days of the windows' saints on the North (left) side of the church are recorded, the multiplicity of dates or observances of these days create months and days that in their zodiac categories represent a grouping of combined elements. On the South (right) side of the church, the feast days are universal and only occur on days within one element. Thus, they represent William's heavenly elements—those that are single and pure—on single dates and with single elements, with one exception.

Table 6: The Left (North) Side of the Cathedral--Left Side of the Zodiac Window

Months Represented	Zodiac Span	Elements	Window	Feast Day	Zodiac Signs	Elements
June	Gemini/Cancer	Air/Water	Simon and Jude	October 28	Scorpio	Water
			Apostles/Pentecost	May 18, 1220	Gemini	Air
July	Cancer/Leo	Water/Fire	Panteleon	July 27, 28, February 18	Leo, Pisces	Fire, Water
April	Aries/Taurus	Fire/Earth	Nicholas (polemical) and Germain of Auxerre	May 9, December 6, July 31	Taurus, Sagittarius, Leo	Earth, Fire
March	Pisces/Aries	Water/Fire	Unknown			
February	Aquarius/Pisces	Air/Water	Prodigal Son (based on lectionary reading for Quadragesima)	January-February	Pisces	Water
			Blaise	February 3	Aquarius	Air
January	Capricorn/Aquarius	Earth/Air	Passion/Typo (Feast of the Veneration of Cross)	May 3, September 14 and Ember Days	Virgo plus Libra	Earth, Air

Chartres Cathedral: Zodiac Window
Mahnnes-Dereemble number 28a, Delaporte number 17.



- 27 Christ between Alpha and Omega
- 26 Sign of Capricorn
- 25 Labor of December - Feasting
- 24 Sign of Sagittarius
- 23 Labor of December - Butchering Pig
- 22 Labor of October - Pouring Wine / Sign of Scorpio
- 21 Sign of Libra
- 20 Labor of September - Wine Making
- 19 Sign of Virgo
- 18 Labor of August - Threshing Grain
- 17 Labor of June - Harvesting Grain / Sign of Leo
- 16 Sign of Cancer
- 15 Labor of July - Mowing
- 14 Labor of May - Hunting? / Sign of Gemini
- 13 Sign of Taurus
- 12 Labor of April - Flowers
- 11 Sign of Aries
- 10 Labor of March - Pruning Vines
- 9 Sign of Pisces
- 8 Labor of February - Warming in front of a Fire
- 7 Symbol of January - Man with Three Faces / Sign of Aquarius
- 4-6 Donors: Vintners
- 3 Donor: Bell Ringer
- 2 Donor: Count Theobald
- 1 Donors: Vintners

After Delaporte Vitruvius, p. 227. Copyright Jane Vadrul

Table 7: Right (South) Side of Cathedral-Universal Elements on the Right of the Zodiac Window

Zodiac Sign	Element	Window	Feast Days	Zodiac Signs	Elements
Leo	Fire	Andrew	November 30	Sagittarius	Fire
Cancer	Water	Paul	June 29	Cancer	Water
Taurus	Earth	Anthony	September 2 nd	Taurus	Earth
May/ Gemini	Air/Fire	Anthony and Paul/Belle Verrière— Annunciation of the Virgin	September 2 nd , January 15 March 25	Aquarius	Air
Aries	Fire	Lawrence (now lost)	August 10	Leo	Fire
Pisces	Water	Apollinaire	July 23	Cancer	Water
Unknown					

Table 8: The Nave of Chartres Cathedral

Zodiac Sign/Month	Elements/Symbol	Windows	Feast Day	Zodiac Sign	Element
Sagittarius	Fire	Life of Nicholas	December 6	Sagittarius	Fire
		Vendome Chapel			
Leo	Fire	Glorification of the Virgin	August 15	Leo	Fire
		Joseph			
Libra	Air	Eustace	September 20	Virgo	Earth
Libra	Air, Scales	Creation/Good Samaritan	Judgment/Mercy	Libra	Scales
Pisces, Virgo	Earth, Water	Lubin	September 16, March 14	Virgo, Pisces	Earth, Water

If the elements associated with months and zodiac signs are compared to the elements assigned to the feast days of these windows according to their occurrence in the calendar, it is the elements that allow the Zodiac Window to parallel the ordering of the lower window program in the cathedral as a whole. Thus, the North (left) side of the cathedral corresponds to the labors of the months on the left side of the Zodiac Window with more than one element and the South (right) side of the cathedral corresponds to the right of the Zodiac Window that represents the zodiac signs or only one element. It is not the particular or specific months or signs that allow the parallel of window and cathedral stained glass plan, but the elements that each window location and representative panel signify through the saint's feast day or astrological (zodiacal) association. Thus, if the hypostasis is associated with the zodiac sign's personification, the windows in the choir and their diagrammatic structure can be seen as a shifting signifier or hypostasis, but a singular substance (for example a zodiac sign that has a fire sign like Aries can be considered interchangeably with the other two zodiac signs that are fire signs like Sagittarius and Leo because like the Father, Son, and Holy Spirit, they are all of the same substance. In the case of the zodiac signs, this substance is fire.). In the choir, one hypostasis can represent all three personifications in only one example.

The Ordinary of Chartres from the early thirteenth century gives a listing of Chartrain feast days. Of the saints' feast days in the diagramming appear in the Ordinary (Simon and Jude, Paul the Apostle, Pantaleon, Remigius, Germain of Auxerre, Cheron, Nicholas, Blaise, Lubin, Andrew, Anthony, Lawrence, Apollinare, the Assumption of the Virgin, the Annunciation of the Virgin, Mary Magdalen, John the Evangelist).¹⁶⁰ These dates are the primary data for diagrammatic determinations.

¹⁶⁰ One of the saints (Nicholas) is repeated three times in the structure.

Based on William's comments, I will propose that the building of Chartres was intended to illustrate the meeting of Cornifician methods with the ideas of William of Conches. Figure 10 and the table below show the order of the Zodiac Window panels imposed on the plan of the cathedral. Table 7 consolidates this information to show the left side of the cathedral and the parallel of the months and their elements with the feast days and their elements. The elements are in bold to express the commonality between them. Next to the table is a schematic of the Zodiac Window showing the correlation of the cathedral's North (left) side to the left side of the window and the correlation of the cathedral's South (right) side to the right side of the window. Figure 7 shows the windows and their feast days charted on the plan of the cathedral.

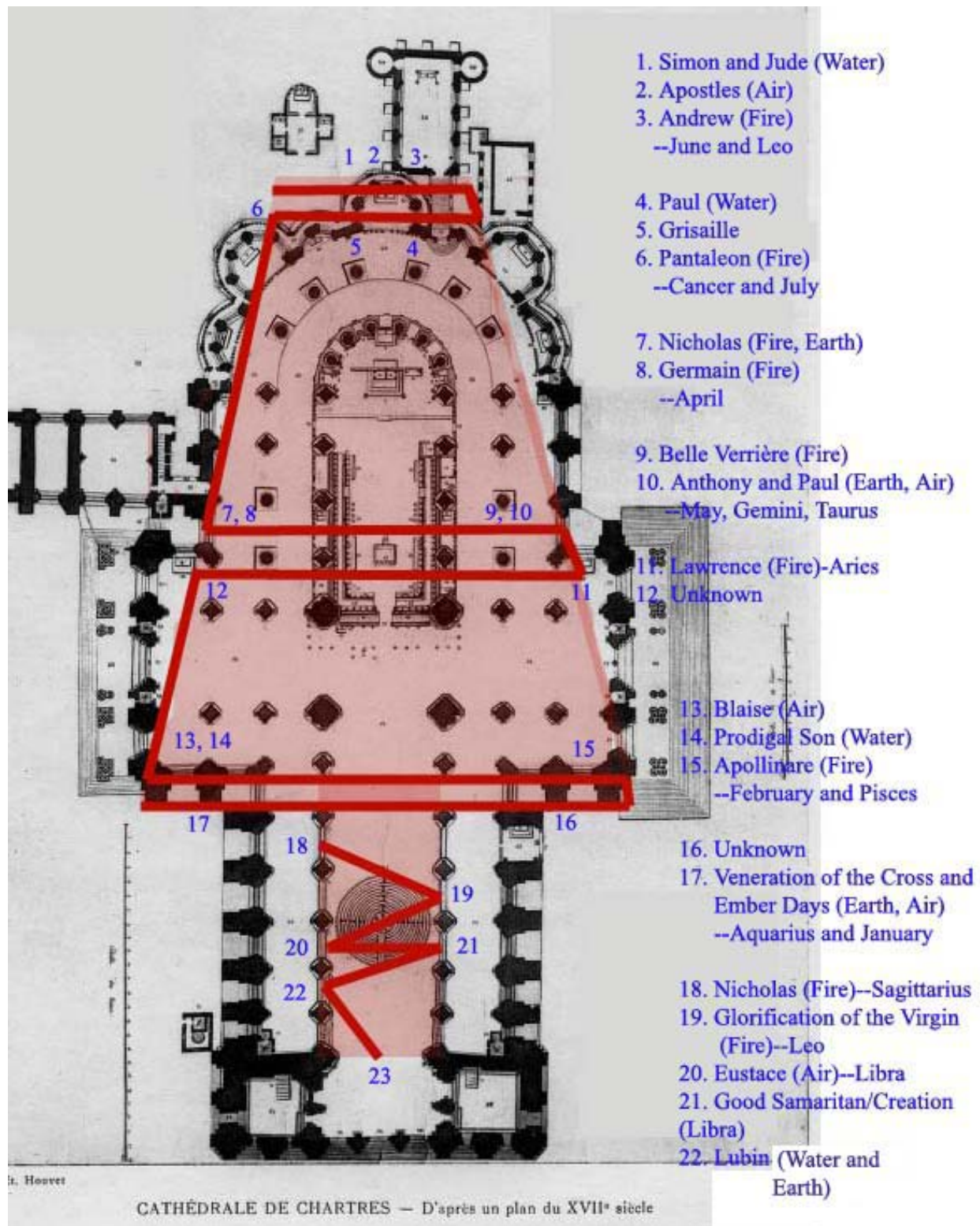


Figure 11: Diagramming of Chartres

3.2 NORTH (LEFT) SIDE OF THE CATHEDRAL

If the left side of the cathedral is examined by juxtaposing the table and a ground plan, the relationship of the Zodiac Window and cathedral as a whole can be read as based on a correlation of elements. If only the Chartrain dates from the Ordinal are considered, the left side of the cathedral represents the zodiac signs' universal elements in a chiasmic alternation of water and fire elements. When the wider context of western dates—in addition to Chartrain date—is considered, the left side of the cathedral represents combined elements of the labors of the months.

3.2.1 The Month of June.

The month of June on the Zodiac Window appears next to Leo. June is not Leo's correct month and June is a month that halves itself with the element of air during the Gemini days and water on the Cancer days. If this month were to be placed on the cathedral plan, where would it go? I considered multiple possibilities, but the soundest agreement was with the Simon and Jude window and the Apostles Window as shown below.¹⁶¹ Like June, all the months share their time between two different zodiac signs and thus, two different elements. So what are the elements ascribed to the days of feasting for the saints depicted in Chartres's windows?

The feast day for the window depicting Simon and Jude is celebrated at Chartres in October. October 28th, the date of Simon and Jude's feast in the west—occurs in Scorpio, a

¹⁶¹ Simon and Jude appear in the thirteenth-century Chartres Ordinary on October 28th. *L'Ordinaire chartrain de XIIIe siècle*, ed. Yves Delaporte, vol. XIX, 1952 – 1953, *Société Archéologique d'Eure-et-Loir Memoires* (Chartres: Société Archéologique d'Eure-et-Loir, 1953). See pp. 184, 272. Bonnie Blackburn and Leofranc Holford-Strevens, *The Oxford Companion to the Year* (Oxford: Oxford University Press, 1999). See pp. 431 – 433.

water sign.¹⁶² Thus, the only provable observance for Simon and Jude at Chartres is October 28th which can be associated with Cancer due to the common elements of water. However, hypothetically, if Chartres is a pilgrimage church and site of learning, they may not have celebrated other feast days, but may have known them.

So I will begin each section of *loci* in the building with the only established Chartrain date and then mention other dates towards the end of each section that suggest the wider connotations for the church by people from a larger community.

However, the beginning of the diagramming in the apse moves across to the Apostles' Window in which Pentecost, May 18th in 1220, serves as a union point between the north and the south of the cathedral.¹⁶³ With this preliminary speculation, I will allude to a connection between the window of Simon and Jude and the Apostles Window as identified in their placement and associations with the month of June, a water and air month, but remain hindered by the evidence to state that only October 28th can be firmly attached to this *locus*.

3.2.2 The Month of July.

The month of July is on a lower level beneath June in the Zodiac Window and it is west/northwest of the Simon and Jude window. It is also across from or paired with the zodiac sign of Cancer in the Zodiac Window. July is a month that shares its time between water (Cancer) and fire (Leo). The window to the symbolic west of Simon and Jude is a grisaille

¹⁶² Scorpio spans from October 18th to November 16th.

May 10th—the feast day for the Coptic Church of Simon, occurs in Taurus, an earth sign and is not included in this diagramming.

¹⁶³ Gemini spans from May 18th to June 16th.

window and thus, is not representative of a feast day or month. Looking for a possible July window, diagonally from Simon and Jude is the Pantaleon Window.¹⁶⁴ (see the Cathedral Plan, Figure 7) Thus, if the feast days for Pantaleon are fire and water signs, they may be representative of July's placement in the cathedral and the artificial memory presented in the Zodiac Window. Pantaleon's feast date is celebrated on July 28th which is a Leo or fire sign. This is the date used in the Ordinal and the only provable observance.

Another Pantaleon feast day is July 27th, another Leo or fire-based sign.¹⁶⁵ This wider context would assist in the elements of fire to be represented in the Pantaleon Window and in their mapping of July which is literally accomplished due to Pantaleon's feast day occurring specifically in that month. The same is true with the zodiac sign it is paired with, Cancer in the Paul Window—see below.

3.2.3 The Month of April.

The month of April contains the zodiac signs of Aries and Taurus. Aries is represented by the element fire and Taurus is represented by the element earth. Reasonably, the April month that in the order of the Zodiac Window follows beneath July should be represented by a window located in a direction of symbolic west of Pantaleon to fulfill the requirements of the Zodiac Window's mapping onto the cathedral. Perhaps this position is in the choir of the cathedral that contains two windows per bay at the Nicholas Window and the Germain of Auxerre Window.

¹⁶⁴ Pantaleon appears in the thirteenth-century Chartres Ordinary as the 28th of July. *L'Ordinaire chartrain de XIIIe siècle*. See pp. 167, 271.

¹⁶⁵ Feast days from: Blackburn and Holford-Strevens, *The Oxford Companion to the Year*. See pp. 309 – 310. Leo's dates range from July 18th to August 16th. Aquarius's dates span from January 17th to February 14th.

There are three Nicholas Windows in the cathedral of Chartres. This particular Nicholas Window is commonly known as the Polemical Window.¹⁶⁶ The day that represent the feasts of Nicholas is December 6th, a Sagittarius or fire sign day.

Germain of Auxerre—whose window is also present—has a feast day of July 31st. This is a Leo or fire sign date.¹⁶⁷ Thus, Nicholas and Germain represent fire signs in Chartrain thinking.

However, Nicholas's translation which is consistently observed in the west is May 9th, a Taurus or earth date and the window deals specifically with Nicholas's post-life miracles, e.g. relics. Thus, the elements of the feast days of fire and earth correspond with the month's elemental assignment of fire and earth through the Nicholas and Germain *loci* or placemarkers. However, the recognition of this at Chartres remains beyond proof.

3.2.4 The Month of May.

The month of May will be revisited below.

3.2.5 The Month of March.

It is unknown what would be in this position. The month of March which contains Pisces to agree with the Chartrain universals would need to be a water sign in the west observed at Chartres while the eastern zodiac sign would need to be a fire sign.

¹⁶⁶ Delaporte does not call the window by this name. Delaporte names it the “Miracles of St. Nicholas Window” while he calls the other two Nicholas windows by a similar name: “the History and Miracles of St. Nicholas Window.” Nicholas appears in the thirteenth-century Chartres Ordinary. *L’Ordinaire chartrain de XIIIe siècle* on July 31, pp. 83, 144, 191, 192, 271. Blackburn and Holford-Strevens, *The Oxford Companion to the Year*. See pp. 201 – 202, 312 – 313, 486 – 489.

¹⁶⁷ Leo's dates range from July 18th to August 16th.

3.2.6 The Month of February.

To the west of the missing window, in the position of February which represents Aquarius, an air sign and Pisces, a water sign, is the Window of the Prodigal Son and at one time the St. Lawrence Window. Up until 1259, Chartrain concerns were prevalent at Chartres seeing as the church had not been consecrated. In 1259, in preparation for the consecration of the church in 1260 and the visit of Louis IX (the future St. Louis's), the Lawrence Window was moved.

Nothing concrete for these reasons can be determined about this *locus*. The reading of the verses of the Prodigal Son parable in the lectionary occurs on the Second Saturday of Quadragesima in Paris or three Sundays and a few days before Palm Sunday. Thus, it is a movable feast. Based on the calculation of Easter in Cheney's Book of Dates, Easter falls on March 29 in the year 1220.¹⁶⁸ Calculating Palm Sunday as March 22 and moving back three Sundays from that, the date is March 1st. This is a Pisces or water-based sign.

Though Chartrain dates occur for Blaise's Window, it is unknown what the window's original position was. If the Prodigal Son Window when seen in tandem with Parisian observances were accompanied by the St. Blaise Window that was in the moved transept windows in its feast day of February 3rd, this is an air sign or Aquarius.¹⁶⁹ The air and water fulfill the needs for February which is split between Aquarius and Pisces.¹⁷⁰ Again, this is not a provable supposition because it is unknown if anything other than Chartrain dates would have been known and the positions remain unknown.

¹⁶⁸ C. R. Cheney, *Handbook of Dates for Students of English History* (London: Royal Historical Society, 1970). See pp. 98 – 99.

¹⁶⁹ Blackburn and Holford-Strevens, *The Oxford Companion to the Year*. See pp. 65 – 66.

¹⁷⁰ St. Blaise appears in the thirteenth-century Chartres Ordinary. *L'Ordinaire chartrain de XIIIe siècle*, See pp. 145, 150, 267.

3.2.7 The Month of January

The month of January that includes earth (Capricorn) and air (Aquarius) elements occurs at the Passion/Typological Window to the west/southwest of the Prodigal Son. This window may relate to the importance of the cross as the crucifixion is depicted in this window. The feast of the Veneration of the Cross was not celebrated in the Chartres Ordinal, but it occurs on September 14th in Virgo an earth sign in the Julian calendar.¹⁷¹ In the middle ages, in conjunction with this feast, ember days were celebrated that extend the feast through the following Wednesday, Thursday, and Friday. This extends the celebration into Libra, an air sign. January is air and earth, and this feast fulfills both of these requirements. The use of the Veneration date or the discovery by St. Helena is a better choice for the combined side due to its use of ember days that mark the observation of the cross for multiple days.¹⁷² But it should be emphasized that my methodology for the wider context of the cathedral is that I am looking to the *loci* of the church and all their hypothetical feast observances and trying to see if there are any feast dates that fit these positions that also replicate the Zodiac Window. In the latter parts of these months and zodiac sign sections, I am letting the diagram of the Zodiac Window dictate the feast choices and thus, these choices remain without proof.

¹⁷¹ This sign is Virgo from August 17th to September 16th.

¹⁷² Francis Mershman, "Ember Days," in *The Catholic Encyclopedia* (New York: Robert Appleton Company, 1909).

3.3 THE SOUTH (RIGHT) SIDE OF THE CATHEDRAL

On the Right Side of the Cathedral is the succession of element-based feast days that correspond to the zodiac signs in the Zodiac Window. These are the universal elements that have only one element in which their feast day falls within.

3.3.1 The Sign of Leo.

The sign of Leo is a fire sign. It appears next to June in the Zodiac Window. As stated before, this is an atypical pairing. Parallel and south to June's Window of Simon and Jude is the Andrew Window. Andrew's feast day is November 30th that occurs in Sagittarius.¹⁷³ This date is the universal date and the Chartrain date. Sagittarius is a fire sign and thus, would relate to Leo as a fire sign.

3.3.2 The Sign of Cancer.

The sign of Cancer is a water sign. It occurs in placement to the west of Leo at the point of the Paul Window. Paul's window is parallel with the grisaille window mentioned under the heading of July. Paul's feast day is June 29th. Like Pantaleon's July date is literally representative of the month July across from it, Paul's date is literally a Cancer date; this is the universal date and the Chartrain date.¹⁷⁴ So in this instance the sign of the feast day is the same as the sign of the

¹⁷³ Blackburn and Holford-Strevens, *The Oxford Companion to the Year*. See pp. 478 – 479. Sagittarius spans from November 23rd to December 21st. Andrew appears in the thirteenth-century Chartres Ordinary. *L'Ordinaire chartrain de XIIIe siècle*, See pp. 190, 192, 267.

¹⁷⁴ Blackburn and Holford-Strevens, *The Oxford Companion to the Year*. See pp. 270 – 272. Cancer spans from June 17th to July 17th.

mnemonic zodiac panel so they both represent the element of water. Thus, signifier and signification are united.

3.3.3 The Sign of Gemini, Taurus, and the Month of May.

The next juncture in the window associations is that of Taurus in the choir's double window bay arrangement. Taurus (south) would be across from April (north) in which the placement was seen to correspond with the Nicholas and Germain of Auxerre Windows. Across from this double window bay is another double window bay containing the Belle Verrière and the Anthony and Paul the Hermit Window. The Belle Verrière represents Mary as Theotokos or crowned Queen of Heaven with the Christ child in her lap. Thus, a date like the Annunciation of the Theotokos would be appropriate, namely March 25th an Aries or fire date

Like the “displaced” July mentioned at the opening of the Left or North Side of the Cathedral section, the relocated zodiac sign of Gemini and its element of air are added to the *locus* of the Belle Verrière and Anthony and Paul Window. This marks a triple element combination for the month of May due to its reordering of the chronology of the signs and months in the Zodiac Window. The missing element of air is also added to the zodiac sign of earth or Capricorn and Aquarius or air sign because the Anthony and Paul the Hermit Window furthers the diagramming having two days of feast celebration on September 2nd at Chartres for Anthony and January 17th only universally acknowledged for Paul the Hermit.¹⁷⁵ With the

¹⁷⁵ Anthony appears in the Chartres Ordinal as September 2nd. *L'Ordinaire chartrain du XIIIe siècle*, ed. Yves Delaporte, vol. XIX, 1952 - 1953, *Société Archéologique d'Eure-et-Loir Memoires* (Chartres: Société Archéologique d'Eure-et-Loir, 1953). See p. 174. He appears in other places as January 17th. Blackburn and Holford-Strevens, *The Oxford Companion to the Year*. See pp. 39 – 40 (for Anthony) and January 15th for Paul the Hermit on p. 37.

addition of the missing Gemini, the two zodiac signs are linked by two elements, earth and air, along with the fire sign in the Belle Verrière.

3.3.3.1 The Explanation for the Combining of Taurus and Gemini.

The sign of Gemini in the Cathedral of Chartres is of particular importance as it appears on the west façade segregated from the rest of the zodiac along with the sign of Pisces. The sign of Gemini has a correlation with the element air and the sign of Taurus is an earth sign while the month of May is an earth and air month. Gemini, however, is switched in position with Taurus in the Zodiac Window and abuts Aries which is a fire sign. This creates a triad of the elements fire, air, and earth when the window is juxtaposed with the plan of the cathedral at the point of the Belle Verrière and the Anthony and Paul Window.

3.3.4 The Sign of Aries.

Continuing with the universal elements, the missing St. Lawrence window that may have been located on the transept to the west of the choir bay just discussed has a feast day of August 10th.¹⁷⁶ This date occurs in the fire sign of Leo. Aries also being a fire sign would be a possibility for this position; however, Lawrence's exact position remains uncertain.

¹⁷⁶ St. Lawrence appears in the universal calendar and in the thirteenth-century Chartres Ordinary as being celebrated on August 10th. *L'Ordinaire chartrain de XIIIe siècle*, See pp. 169, 269. Blackburn and Holford-Strevens, *The Oxford Companion to the Year*. See pp. 327 – 328.

3.3.5 The Sign of Pisces.

The St. Apollinare window on the lower transept wall has a feast day of July 23rd. This date is a Leo month in reality but it is paired with Cancer's month on the Zodiac Window. This relates it on the one hand to the water sign of Pisces represented in the month of February that it counterbalances, accounting for this placement in relationship to the Zodiac Window. And on the other hand, it relates it to fire and Leo.¹⁷⁷

3.3.6 The Sign of Aquarius

The Miracles of the Virgin window remains a source of uncertainty because of the massive restoration that it has undergone.

Table 9: Combined Feast Days

Saint/Window	Feast Day in 1220	Medieval Zodiac Span for Julian date	Julian Zodiac Sign	Zodiac Element	Relationship of the Feast Days according to the Elements of the Zodiac Window
	March 29 (Easter)	—	—		
Simon and Jude	October 28, June 19	October 18 – November 16, June 17 – July 17	Scorpio, Cancer	Water	June (Water, Air)
	May 18 (Pentecost)	May 18 – June 16	Gemini (Air)	Air	
Pantaleon	July 27, July 28, February 18	July 18 – August 16	Leo (Fire), Leo (Fire), Pisces (Water)	Fire, Water	July (Fire, Water)

¹⁷⁷ In June, his feast day is on the summer solstice, which literally means “Sun stands still.” In Chapter Three, this can be related to the perpetual standing posture of air or the color yellow.

					May (See next chart)
Nicholas	December 6, May 9 (translation)	November 17 – December 17, April 17 – May 17	Sagittarius (Fire), Taurus (Earth)	Fire, Earth	April (Fire (because located in the Zodiac Window next to July), Earth)
Germain of Auxerre	July 31	July 18 – August 16	Leo (Fire)	Fire	
					March(Unknown)
Prodigal Son	March 6 Lectionary Reading	February 15 – March 18	Pisces (Water)	Water	February (Water, Air)
Blaise	February 3	January 17 – February 14	Aquarius (Air)	Air	
Passion/ Typological Window	September 14 plus Ember Days (Veneration of the Cross)	August 17 – September 16, September 17 – October 17	Virgo (Earth), plus Libra (Air)	Earth, Air	January (Earth, Air)

Table 10: Universal Feast Days

Saint	Julian Feast Date in 1220	Medieval Zodiac Span for Julian Calendar	Julian Zodiac Sign for Feast Days	Zodiac Sign with the Element needed for diagramming
Andrew	November 30	November 17 – December 17	Sagittarius (Fire)	Leo (Fire)
Paul	June 29	June 17 – July 17	Cancer (Water)	Cancer (Water)
Annunciation of the Virgin	March 25	March 18 – April 16	Aries (Fire)	Taurus, Gemini, and May (Earth, Air, Fire — b/c Gemini is next to Aries)
Anthony and Paul the	September 2, January	January 17 – February	Aquarius (Air),	

Hermit	17	14, August 17 – September 16	Capricorn (Earth)	
Lawrence	August 10	July 18 – August 16	Leo (Fire)	Aries (Fire)
Month → Zodiac, July → Cancer				
Apollinare	July 23	July 18 – August 16	Leo/ June (Water/Air)	Pisces (Air/Water)
Unknown				

3.4 NAVE DIAGRAMMING

A question arises as to the importance of the nave in this diagramming. At the point where diagramming of the earthly-combined elements cease, there is a picture of the starry sky cosmos in the Joseph window which may be a clue to how the nave is organized.



Figure 12: Joseph Dreaming and Night Sky



Figure 13: Joseph Dreaming and Night Sky with Nave Diagramming and Sign of Scorpio

The nave contains the actual diagram of the labyrinth, the most overt diagram in the building. Furthermore, the nave is an area filled with window placements of relevance and irrelevance and the search for order is like the search for order in the night sky similar to the sky represented in the Joseph Window. There are stars that are found in certain constellation patterns, but they are also among stars that are not in that pattern. The nave of the cathedral may be read as a diagram that will be discussed in relation to motion back and forth across the nave. While some windows are included in the diagram, others are excluded. Inclusion and omission depend on the rest of the ordering and chronology of the Zodiac Window.

It is fitting that the month of December is represented at the Life of Nicholas Window.¹⁷⁸ This window is beneath the diagramming of the January Passion/Typological Window. This

¹⁷⁸ St. Nicholas is a repeat, but appears in the Chartres Ordinary. *L'Ordinaire chartrain de XIIIe siècle*, See pp. 83, 144, 191, 192, 271.

signifies Sagittarius for December 6th. It is unknown if there was a narrative window in the Vendôme Chapel (a later addition and alteration to the cathedral) to the west of the Miracles of the Virgin Window. Nicholas has a feast day so it is included while Vendôme is discounted. Sagittarius, the fire sign, corresponds with the Leo fire sign of the Glorification of the Virgin Window for Mary's Assumption, and Coronation (August 15th, Leo);¹⁷⁹ this window is the next stop from Nicholas and it is the position to the west of the Vendôme Chapel. To move from Sagittarius to Leo, the diagramming of the structure intersects with the labyrinth. This will be important to the meaning of the overall nave diagramming.

While considering Joseph as a possible next stop after Sagittarius and Leo, it is skipped because, as an Old Testament figure, he does not have a feast day and the diagramming moves to Libra, an air sign, represented in the Eustace Window by the feast date of September 20th and thus, an air sign.¹⁸⁰ At the Creation and Good Samaritan Window, the scales of judgment can be interpreted in this unusual pairing of iconography. The Creation of Adam and Eve scene includes the Fall and judgment of the figures while the parable of the Good Samaritan ends with the statement: "Now which of these three do you think seemed to be a neighbor to him who fell among the robbers?" He said, "He who showed mercy on him." Then Jesus said to him, "Go and do likewise." Thus, the forces of judgment and mercy or the balance/scales are present in this window. The Lubin Window represents Pisces and also Virgo.¹⁸¹ This leaves the half bay of the cathedral that represents Noah and John the Evangelist. The diagramming of the structure justifies the use of a half bay in the fact that if the diagramming line is left halved as well, the

¹⁷⁹ The Virgin Mary's Assumption was celebrated on August 15th at Chartres. *L'Ordinaire chartrain du XIIIe siècle*. See p. 170.

¹⁸⁰ Like Joseph, the other Old Testament window associated with Noah does not fit into diagramming.

¹⁸¹ Lubin's feast day is March 14th and the feast of his translation is September 16th. *L'Ordinaire chartrain du XIIIe siècle*. See pp. 144 – 145, 151 – 152, 177.

diagram form takes on another diagram. The diagram is the astrological sign of Scorpio which in renderings of the Zodiac Man represents the genitals of man. The astrological sign of Scorpio (♏) even insinuates itself into Joseph's window's night sky. Furthermore, the overall cathedral with this diagramming explained in this chapter takes the nail-shaped or arrow-shaped form often used as a framework for the Zodiac Man.

Table 11: Nave Feast Days

Saint	Julian Date in 1220	Zodiac Span for Julian date	Julian Zodiac Sign
Nicholas	December 6	November 17 – December 17	Sagittarius—Fire
Glorification of the Virgin	August 15	July 18 – August 16	Leo—Fire
Eustace	September 20	September 17 – October 17	Libra
Creation/Good Samaritan			
Lubin	March 14, September 16	August 17 – September 16	Pisces—Water Virgo

Can the next step be taken, in which the diagram of the windows as a whole may be related to Zodiac Man diagrams? Largely, the representations of the Zodiac Man emerge late in the middle ages, for instance in the fourteenth-century English example in Oxford Bodleian Library MS Ashmole 391, folio 9r. However, there is an example—the earliest known extant example from the eleventh century—that Fulbert of Chartres may have known. Fulbert of Chartres was educated at Reims under Gerbert of Aurillac and Gerbert was later to become Pope Sylvester II. Gerbert was interested in astrology and may have impacted Fulbert's concerns and

interests. The manuscript now held in the Bibliothèque Nationale de France, Lat. 7028, folio 154, is a wheel shape with the names of the body parts written below the personification of the signs that is different from the nail shape that this argument associates with the form of the building of Chartres. The manuscript at the time that Fulbert was bishop at Chartres was located in the library of St. Hilary of Poitiers. Fulbert had been the treasurer of St. Hilary of Poitiers before his appointment to Chartres.¹⁸² It is likely due to Fulbert's reverence for Hilary and his thirst for knowledge that he looked through the library there. So if Fulbert knew the Zodiac Man, the question is: what provoked the disappearance of the Zodiac Man for so long and why did it reappear in the nail or arrow shape that it takes on in the late medieval examples like MS Ashmole 391?

¹⁸² Michael Ott, "Fulbert of Chartres," in *The Catholic Encyclopaedia* (New York: Robert Appleton Company, 1909).

Fulbert is also a great supporter of St. Hilary of Poitiers as is seen in his letter of 1004 to Abbot Abbo of Fleury. Hilary's writings, however, had been caught up in the Priscillian controversy at certain stages in his career and are included in MS 79 of Chartres from the eleventh to twelfth century. Origenist thought that was also adopted by the Priscillianist (Chadwick, *Priscillian of Avila: The Occult and the Charismatic in the Early Church*. See pp. 70 – 74) is also found at Chartres in MSS 54, 101, and 170. Fulbert also could have learned about the Zodiac Man from Gerbert of Aurillac (Pope Sylvester II) who was Fulbert's teacher.



Figure 14: BNF MS Lat. 7028, folio 154

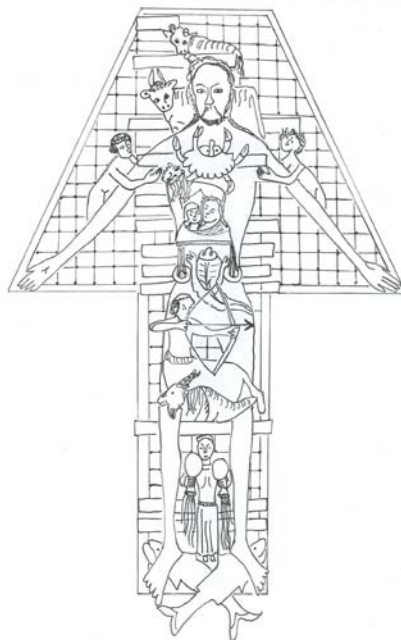


Figure 15: BL MS Ashmole 391, folio 9r

The answer to this question may reside in a confluence of all of these factors. The formal similarities of the late Zodiac Man with Consanguinity Trees are striking. The earliest Consanguinity Trees with a so-called “Presentation Figure” date from the tenth century and are found in the locus of Spain (Madrid, Real. Acad. de la Hist. MS 76, fol. 73v, Escorial dI2, fol. 15r).¹⁸³ These Consanguinity Trees begin to appear with the arrow shape of the consanguinity diagram that shows the steps of relativity between people of the same bloodlines. These Spanish examples have a head drawn at the apex of the tree, hands to either side midway down the diagram and feet at the base of the diagram (see Fig. 7). This is reminiscent of images of the world that appear with Christ’s head, hands and feet appended to the large circle of the earth.

¹⁸³ Hermann Schadt, *Die Darstellung der Arbores Consanguinitatis und der Arbores Affinitatis* (Tübingen: Verlag Ernst Wasmuth, 1982). See pp. 90 – 92.

The later progression of the images has images of a fully drawn male figure standing behind the arrow/consanguinity diagram.¹⁸⁴ Earlier Consanguinity Tables are represented in wheels like the Zodiac Man from Hilary of Poitiers. But these later examples (tenth to eleventh centuries) suggest relations to the dominant figure of the man that appears in the Ashmole example.

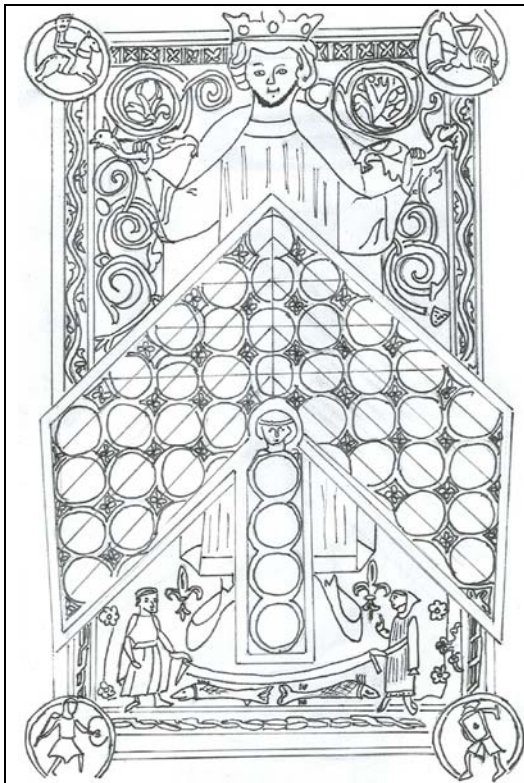


Figure 16: Morgan Library MS G.37

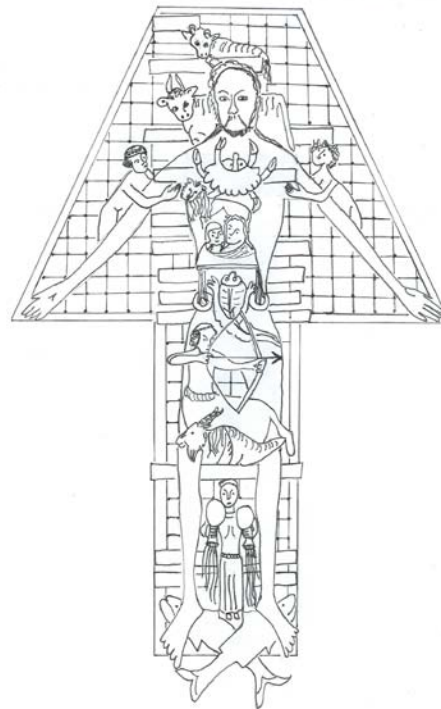


Figure 17: BL MS Ashmole 391, folio 9r

The early thirteenth-century Parisian example at the Pierpont Morgan Library, MS G.37, folio 1r, begins an associative visual development of signifiers that may relate to the production of the fuller Zodiac Figure. MS G.37 is an ornate Consanguinity Tree with a Presentation Figure that is a king holding on to two griffins to the sides of his head with tendrils of vines filling the

¹⁸⁴ Schadt, *Die Darstellung der Arbores Consanguinitatis und der Arbores Affinitatis*.pp. 90 – 100.

intermediary space. Below the feet of the Presentation Figure is a picture of two inexplicable fish with their tails toward the center of the image and one facing left and one facing right.

There is a frame surrounding the consanguinity image with four roundels, one in each corner. The left roundels have in the upper roundel, a knight on horseback with shield seen in the offensive from behind, e.g. the backside of the shield and the lance in the hand of the knight is visible. In the bottom left roundel is a figure with ax and shield visible from the backside. On the right roundels, the opposite is shown. The shield in its defensive positions on the upper horseman and the fighter on the bottom right present the reverse position from the left side. On the left at the base of the Consanguinity Tree is a uncovered (tonsure showing and cloak open) monk holding one side of a banner and on the other side of the banner is possibly a lay figure with hood over his head and cloak hiding him. The banner states: “Gavtier Lebavbe fit Labre,” giving the name of possibly the artist and atelier of the work. Gautier Lebaube’s atelier was located in Paris. The estimated date of this folio is c. 1230 to 1260.¹⁸⁵

The fish alluded to at the feet of the figure may suggest what is seen in the Ashmole example of the Zodiac Man—an allusion to the association of Pisces with the feet in the Zodiac Man’s written and limited visual tradition. The importance of the feet may be underscored in this image. For example, astronomically, the zodiac sign of Pisces was related to the astronomical Age of Pisces that the middle ages occur within.¹⁸⁶ Astrologically, there may be another interpretation in tandem with the Zodiac Man.

¹⁸⁵ Robert Branner, *Manuscript Painting in Paris during the Reign of Saint Louis* (Berkeley: University of California Press, 1977). See pp. 72 – 75.

¹⁸⁶ Thanks to Marion Dolan, who made me aware of this fact.

The confluence spoken of earlier is one that involves the location of the earliest visual image of the Zodiac Man in the *rota* form, the survival of the Zodiac Man tradition in the middle ages and its origins in heresy. Isidore of Seville in his *Etymologies* states:

Inter astronomiam et astrologiam aliquid differt. Nam astronomia conversionem coeli, ortus, obitus, motusque siderum continet, vel qua ex causa ita vocentur. Astrologia vero partim naturalis, partim superstitiosa est. 2. Naturalis, dum exsequitur solis et lunae cursus, vel stellarum, certasque temporum stationes. Superstitiosa vero est illa quam mathematici sequuntur, qui in stellis augurantur, quique etiam duodecim signa [col. 170B] per singula animae vel corporis membra disponunt, siderumque cursu natiuitates hominum et mores praedicere conantur.¹⁸⁷

[Astrology] is natural as long as it investigates the courses of the sun and the moon, or the specific positions of the stars according to the seasons; but it is a superstitious belief that the astrologers follow when they practice augury by the stars, or *when they associate the twelve signs of the zodiac with specific parts of the soul or body*, or when they attempt to predict the natiuities and characters of people by the motion of the stars (my emphasis).¹⁸⁸

The Zodiac Man or association of the body parts with zodiac signs was a belief that was held by the Priscillianists in the fourth century.¹⁸⁹ Isidore's statement suggests that the knowledge of astrology was retained and the various proofs of this can be found in an article by Valerie Flint that traces the contextual middle ages for extant undercurrents of astrological thought.¹⁹⁰ Priscillianism was a heresy that began in Spain and had a variety of beliefs, the most offensive to the orthodox Christians was the Priscillianist belief that salvation was denied to married couples.¹⁹¹ The association between the Zodiac Man and the Consanguinity Tree would

¹⁸⁷ Isidore of Seville, *Etymologiae*, printed amongst his other works listed under Isidorus Hispalensis in PL 82, 73 – 728.

¹⁸⁸ Isidore of Seville, *The Etymologies of Isidore of Seville*. Trans. Stephen A. Barney and Muriel Hall. (Cambridge: Cambridge University Press, 2006). Book III, 27, p. 99

¹⁸⁹ This is confirmed by a tract written by Orosius. Orosius, *Commonitorium Orosii et Sancti Avrelii Avgvstini Contra Priscillianistas et Origenistas*. Ed. Klaus-D. Daur., CChr XLIX. (Turnholt: Brepols, 1985). Chadwick, *Priscillian of Avila: The Occult and the Charismatic in the Early Church*. See p. 198.

¹⁹⁰ Valerie I. J. Flint, "The Transmission of Astrology in the Early Middle Ages," *Viator: Medieval and Renaissance Studies* 21 (1990):1 - 27.

¹⁹¹ This is confirmed by a tract written by Orosius. Orosius, *Commonitorium Orosii et Sancti Avrelii Avgvstini Contra Priscillianistas et Origenistas*. Ed. Klaus-D. Daur., CChr XLIX. (Turnholt: Brepols, 1985).

seem to be to unite two divergent theological standpoints: the anti-marriage standpoint of the Priscillianists and the anti-Zodiac Man tradition of the orthodox Christians.

These diverging standpoints are suggested in the two sides of the folio: the clothed and the bare. In the case of Priscillianism, this is related to the shod and the unshod.¹⁹² Orthodox Christians in the early fourth century condemned the practice of the Priscillianist observance of rites without shoes.

The other two viewpoints that suggest themselves are the figure in the roundel in the center of the Consanguinity Tree and the Presentation Figure behind the consanguinity diagram. The idea of being above a diagram like looking at a plan of a cathedral as the Presentation Figure does and the idea of being within the diagram is suggested by the two vantage points relayed by these two figures. Priscillianism understood the orthodox Christian stance of the mixing of earthly and heavenly in the human body; however, after baptism, the Priscillianists considered post-baptismal behavior to be conducted by all individuals who had renounced their sinful lives and any mixed condition.¹⁹³

Like the Zodiac Man of Ashmole 391 and its cognates, Chartres Cathedral in its possible adoption of the philosophy of William of Conches in regard to mixed and universal elements plays out as a middle of the road defense of orthodox and heretical ways. Chartres is the peaceweaver of architecture: permitting appropriate marriage beyond the set degrees of Consanguinity and observing zodiacal meanings.¹⁹⁴

Chadwick, *Priscillian of Avila: The Occult and the Charismatic in the Early Church*. See p. 35.

¹⁹² Chadwick, *Priscillian of Avila: The Occult and the Charismatic in the Early Church*. p. 18.

¹⁹³ Chadwick, *Priscillian of Avila: The Occult and the Charismatic in the Early Church*.

¹⁹⁴ It also takes on meanings of signifier and signification and the taboos of the Fall. See Chapter Three.

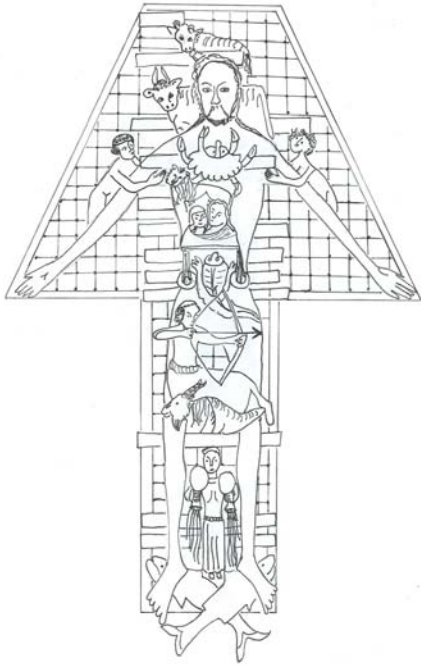


Figure 18: BL MS Ashmole 391, folio 9r

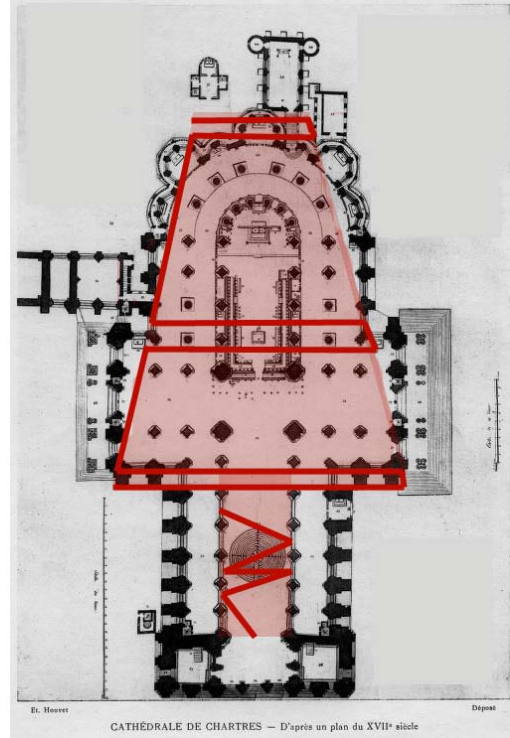


Figure 19: Diagramming of Chartres Cathedral

3.5 CONCLUSION

By juxtaposing windows and cathedral layout as my preliminary data, I hope to begin to investigate the building as an integrated whole. This chapter established the likelihood that the feast days of the cathedral's windows represent zodiac signs with elemental significance. The theological and scientific writings of the Chartrain masters are used to support the argument that this arrangement is a dialogue among the differing schools and approaches in pedagogy during the rebuilding of the cathedral after 1194. In the next chapter, the stage is set for the windows to

be examined individually in Chapter Five. Elements in windows are discussed that in Chapter Three can be used as a pattern based on methods of reading the narratives.

4.0 INTELLECTUAL CONTEXT: COLORS AND POSTURES

As stated in Chapter One and Chapter Three, the diagrammatic properties that this study is attempting to concentrate upon are being related to the incorporeal or the soul-based. If the proposed diagrammatic possibilities of Chartres are indeed present in the structure, there may be some subtle allusions to these things and their relationship to the soul in the writings of John of Salisbury in his *Metalogicon*.

The following passage is presented as a written statement that may shed light on the observations and data that follows about color and incorporeal and diagrammatic postures. The Zeno who is referred to in the passage is discussed in Jerome's Commentary on Daniel.

Et haec quidem sic multiplicata sunt, quoniam apud philosophos maxime vigeat speculatio corporalium, cum ante Zenonem, aut nullus, [col. 896C] aut pauci admodum, aliquid de anima, aut spiritibus incorporeis recte senserint. Hic enim est, sicut Hieronymus auctor est, qui immortalitatem tradidit, animarum. Utique situm esse, et quaedam alia, vix congrue poterunt spiritibus applicari, quoniam haec praedicamenta, pro parte corporibus praecipue addicta sunt. Prima itaque contemplatio, et quodammodo naturaliter philosophantium, versatur in speculatione substantiarum . . . sive formam a materia abstraxeris, sive materiam subduxeris formae, superfluum erit exinde labor, aut circumstantiis et proprietatibus, quas non admittit, vestire formam, aut quas illa non habet, spoliare materiam. Ergo quidquid ultra tentatur, non constitutio naturae . . . Cum enim [col. 897A] quaeritur quid est *albedo*, et respondetur color talis, quidquid ei ad subsistentiae discretionem adjicitur, aut effectum redolet, et sic substantiae obnoxium est, aut potestatem sapit, cujus forte operatio nondum est. Quod si processerit inquisitio, ut quaeratur quanta, aut ubi sit ad corporalium diverticula fugiendum est.¹⁹⁵

¹⁹⁵ John of Salisbury, *Metalogicus*, printed amongst his other works listed under Joannes Saresberiensis in PL 199, 823 – 946. See col. 896 – 897.

Before Zeno, no one or very few persons had any correct concept of the soul or incorporeal spirits. Zeno it was who, according to Jerome, taught the immortality of the soul. As a result, position (or posture) and certain other categories are hardly suitable to spirits, since they primarily refer to bodies. The first consideration, and one which in a way belongs to those who philosophize about nature, concerns substances. . . . After form has been abstracted from matter, or matter from form, it is futile to try to attire form with circumstances or properties which it cannot bear, or to divest matter of clothing that it does not possess. Anyone who presumes to exceed this limitation is no longer considering the constitution of nature. . . . For after the question: “What is ‘whiteness’?” is asked, and the reply that “It is such and such a color” has been made, whatever is added in order to determine a subsistence, either smacks of an effect, and is thus dependent on a substance, or scents of a power, which is perhaps not yet in operation. And if investigation persists to the point of inquiring as to “how great” or “where” whiteness is, one is compelled to digress to corporeal things.¹⁹⁶

In this tract and in this statement, John of Salisbury addresses the thinker that he also names, Cornificius. The above quotation discusses: soul, substance, posture, and color. All of these things are addressed in this chapter (four) and the next (five). The importance of substance to the diagramming of Chartres has already been seen in Chapter Three. In that chapter, the substance of the elemental designations of the church windows’ zodiacal feast days enables this study’s conclusion about a diagrammatic *figura* or soul. John of Salisbury seems to be attempting to counter such interpretations and argues against any taint of Cornifician presence. So the following chapter presents color and posture as two visual examples of diagrammatic soul, which is what John of Salisbury is attempting to refute. Color is finalized in John’s words as corporeal when used as a positional or “where” association and posture is said to refer to bodies. In the in-part Cornifician or architectural argument of this study, color as positional and posture as diagrammatic are instrumental to the building’s soul.

Not only does this study advocate looking at the Cathedral of Chartres as a structure conceived to balance Cornifician and Chartrain (more specifically William of Conches) methods

¹⁹⁶ The Metalogicon of John of Salisbury: A Twelfth-Century Defense of the Verbal and Logical Arts of the Trivium. Ed. and Trans. Daniel D. McGarry. (Berkeley: University of California Press, 1962). Book III, Chapter Three, See pp. 158 – 159.

as discussed in Chapter Two, it also suggests that the structure balances the values of these two groups while the complete eradication of Cornifician thought is in the forefront of John of Salisbury's tract. The object of this chapter is to explain these values and then demonstrate how they may be manifested in visual ways.

William of Conches speaks in his *Dragmaticon* of the difference between *nomos* (law) and *logos* (appearance). The written word is one method by which these values are formed or denied and would be a method used by the law-abiding Chartrains while the eloquence-denying Cornificians as defined in John of Salisbury's *Metalogicon* do not utilize verbal linguistics as a primary means of instruction. For example, John states:

sic et sapientia, quae usu verbi non proficit, non modo debilis est, sed quodam modo manca: licet enim quandoque aliquatenus sibi prodesse possit sapientia elinguis ad solatium conscientiae; raro tamen, et parum confert ad usum societatis humanae. Nam ratio, scientiae virtutumque parens, altrix et custos, quae de verbo frequentius concipit, et per verbum numerosius et fructuosius parit . . . Non est ergo ex ejus sententia (si tamen falsa opinio sententia dicenda est) studendum praeceptis eloquentiae, quoniam eam cunctis natura ministrat, aut negat. Si ultro ministrat, aut sponte, opera superfluit et diligentia; si vero negat, inefficax est et inanis. Nam plerumque ad maximarum propositionum robur accedit: "Tantum quemque posse, quantum natura permiserit." Adeo quidem, ut apud serietatem fidelium historicorum constet, Daedalum non volasse, quoniam ei natura alas negaverat, sed tyrannicam rabiem subito evasisse navigio. Praeterea ratio praeceptorum, quod pollicetur, non efficit: et omnino impossibile est, ut quis eloquens sit. . . .¹⁹⁷

Speechless wisdom may sometimes increase one's personal satisfaction, but it rarely and only slightly contributes to the welfare of human society. Reason, the mother, nurse, and guardian of knowledge, as well as of virtue, frequently conceives from speech and by this same means bears more abundant and richer fruit. . . . In the judgment of Cornificius . . . there is *no point in studying the rules of eloquence*, which is a gift that is either conceded or denied to each individual by *nature*. Work and diligence are superfluous where nature has spontaneously and gratuitously bestowed eloquence, whereas they are futile and silly where she has refused to grant it. Generally the maxim that "A person can do just as much as nature allows," is sure that Daedalus did not really fly, for nature had denied him wings, but say, rather, that he evaded the wrath of the tyrant by quickly departing aboard a ship. The device of learning precepts in order to become eloquent fails to accomplish

¹⁹⁷ John of Salisbury, *Metalogicus*, printed amongst his other works listed under Joannes Saresberiensis in PL 199, 823 – 946. See col. 827 – 833.

its object. Even the most diligent study of rules cannot possibly make one eloquent. The use of language and speech suffices for intercourse among fellow countrymen . . . Even though rules may be of some help in acquiring eloquence, still they involve more trouble than they are worth.¹⁹⁸

Thus, the above quotation serves as negative evidence of the theory that this study is attempting to demonstrate. John even may be referring to the cathedral in the example of Daedalus in his interpretation due to Daedalus's importance as an architect and in the mythology of the labyrinth.

The dichotomy between the Chartrains and the Cornificians can be understood in terms of "rules" and "nature." I suggest that the choice of the identification of John's foe with the name Cornificius has to do with the philosophy of this antique figure on 'freedom of speech.' Little is known about the historical Cornificius except from authors other than himself. It is known through Quintillian that though Cicero and Cornificius were correspondents, they did disagree on certain issues. For example, the word *libertas* was used to refer to governing, social privilege, and language. Cicero advocated *libertas* that was related to the practice of constitutional law before the Gracchan period.¹⁹⁹ This *libertas* was akin to *servitus* translated as slavery or political subjugation. However, the *libertas* of the Late Republic took on a meaning that for Cicero and his followers could only be acquainted with *licentia* or lawlessness.²⁰⁰ Cornificius and the Cornificii (as I refer to the followers of the historical Cornificius) took *licentia* as a right and considered it a synonym for 'freedom of speech' or in Greek *parrhesia*.²⁰¹

¹⁹⁸ John of Salisbury, *Metalogicon*. Book I, Chapter One, Chapter Six, pp. 10-11, 25

¹⁹⁹ See Cicero, *De Legibus*. Ed. G. P. Goold. Trans. Clinton Walker Keyes. (Cambridge: Harvard University Press, 1977), Volume 16, Book II, 23. Cicero, *De Republica* Ed. G. P. Goold. Trans. Clinton Walker Keyes. (Cambridge: Harvard University Press, 1977), Volume 16. See Book II, 53, 66.

²⁰⁰ Cicero, *Republic*, Ed. G. P. Goold. Trans. Clinton Walker Keyes. (Cambridge: Harvard University Press, 1977), Volume 16. Book III, 23, p. 210: "si vero populus plurimum potest, omniaque eius arbitrio geruntur, dicitur illa libertas est vero licentia."

²⁰¹ *The Institutio oratoria of Quintilian*. Trans. H. E. Butler. (Cambridge: Harvard University Press, 1920 -22). IX ii.27; cf VIII G. E. M. de Ste. Croix, *The Class Struggle in the Ancient Greek World from the Archaic Age to the Arab Conquests* (Ithaca, New York: Cornell University Press, 1981). See p. 368.

Thus, the medieval Cornificius may have been an early proponent of thought akin to a form of expression that did not shackle the author to inflexible and subjugating rules.

The history of confusion between *nomos* and *logos* may have been a deliberate means of interchanging the idea of rules and the idea of appearances and how each informs the other. The debate goes as far back as Cicero who refers to *nomos* as judicial ‘law’ (*lex*) and *logos* as Nature. Cicero advocated a mixing of law and Nature and stated: “Est quidem vera lex recta ratio naturae congruens, diffusa in omnes, constans, sempiterna, quae vocet ad officium iubendo, vetando a fraude deterreat.” “True law is right reason in agreement with nature; it is of universal application, unchanging and everlasting.”²⁰² Just as Plato’s definition of the ‘good’ can be related to Chartres, the union of Chartrain and Cornifician values of law and nature might mean that Cicero’s definition of “true law” also applies to the structure of Chartres Cathedral.

To get to the importance of this discussion, this study suggests the use of color to be related to *logos* or appearances while the use of text could be related to *nomos* or rules. One of the sources that this study draws upon as a derivation for its claims is the diagram in Oxford St. John’s College MS 17, folio 7v, the multi-colored Byrhtferth diagram.

²⁰² See Cicero, *De Republica* Ed. G. P. Goold. Trans. Clinton Walker Keyes. (Cambridge: Harvard University Press, 1977), Volume 16. Book III, 21, 33, p. 210 – 211.

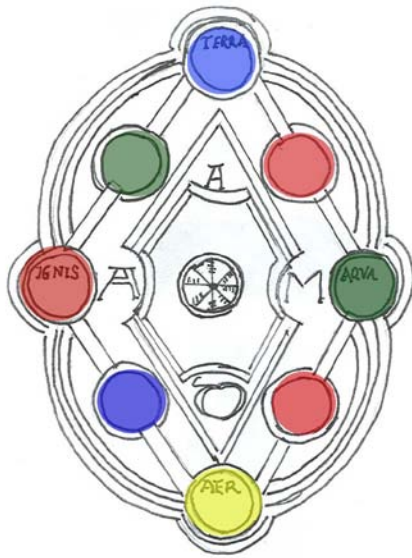


Figure 20: Oxford, St. John's College 17, folio 7v, Byrhtferth Diagram

This diagram was likely known to the Chartrains due to Byrhtferth of Ramsey's tutelage being by Abbo of Fleury. Manuscript recension evidence of Chartres MS 214 indicates that the abbeys of Fleury and Micy were most likely exchanging manuscripts with Chartres.²⁰³ The use of color schemes for the elements are used in this diagram that assigns red to the Latin word for fire (*ignis*), yellow to air (*aer*), green to water (*aqua*), and blue to earth (*terra*).

If these colors are organized in this order in a clockwise position beginning on the right of the folio, the position is the same as on folio 7v in the manuscript version of this diagram in St. John's College, Oxford MS 17. The colored circles are organized in a diamond and on the interior of this diamond are impressions of semicircles further within as if the circles of color are

²⁰³ Micy is not a dependency of Fleury. *Byrhtferth's Enchiridion*. Ed. Peter S. Baker and Michael Lapidge. (Oxford: Oxford University Press, 1995). See p. xlii. Pierre Riché, *Abbon de Fleury: Un moine savant et combatif (vers 950 - 1004)* (Turnhout: Brepols, 2004), Burnett, "King Ptolemy and Alchandreus the Philosopher: The Earliest Texts on the Astrolabe and Arabic Astrology at Fleury, Micy, and Chartres".

mobile and that they represent a mental imprint of the motion that can be envisioned for the components of the diagram. The center of the diamond contains a circle of like size to the elemental circles with an asterisk of lines connecting it.

If the circles were to move as the implied lines suggest and the centralized circle suggests, they would create the diagram of William of Conches from the mason's mark under the Eustace Window.



Figure 21: William of Conches Diagram and the Byrhtferth

Based on the organization of that diagram, the color would represent the blue as moist, the green as cold, the yellow as dry and the red as hot. The four petal flower that emerges from the interpenetration of these circles makes the tips, which do not appear on the mason's mark, the elements that William of Conches ascribes to them. Red and yellow or hot and dry (orange) create fire, red and blue (purple) or hot and moist create air, blue and green (blue-green) or moist and cold create water, and green and yellow (yellow-green) or cold and dry create earth. Fire is made of primary colors, air is also made of primary colors, water is made of analogous colors and earth is made of analogous colors. The primary versus analogous distinction may also play into the ascribing of these elements with masculine and feminine associations. Based on color combinations, green is earth and blue is water, but based on text, earth is blue and water is green.

This idea is suggested in the text of the Cambrai Homily, that appears in MS 679, folios 37rb – 38rb in the Cambrai Bibliothèque Municipale in which the word, *glas*, that is an Old Irish word that can mean green or blue, is integral to the part Latin part Old Irish text. It is likely that the Chartrains knew the Byrhtferth, but it is unknown if they knew the Cambrai Homily, see below.

There are also other colors and points in the diagram of Byrhtferth. If the circles are considered permeable and interpenetrating, the yellow circle below penetrates through the blue circle above and the two circles switch positions. The red circle on the left moves through and exchanges positions with the green position on the right. The inversion of these circles and consequently their new points of contact can be related to the blue point on the bottom left, the green circle on the upper left, and the red circles on the upper right and lower right in the rectangle that appears within and as part of the diamond. These four circles are the seasons and ages of man.

The point of differentiation between textual associations and color associations are related to signifier and signification. Anachronistically, in psychology, there is a test that demonstrates what is known as the stroop effect. If a color is written in that color and in other examples different colors are written in a color that they do not mean, the first thing the viewer reads if they are illiterate is the color of the word and not the word itself. People who are literate have 75% times the delay in reading the color than those that do not recognize the word.²⁰⁴ The signification (the color) of the word (the signifier) takes precedence for the students who do not study grammar. The signification becomes the signifier and represents something that is outwardly understood.

²⁰⁴ Andrew M. Colman, *Oxford Dictionary of Psychology*, 3rd ed. (Oxford: Oxford University Press, 2009). See pp. 736 – 737.

As stated earlier, the Cambrai Homily relates to the Byrhtferth in relationship to the colors green and blue. The Cambrai Homily is one of the oldest if not the oldest text in Old Irish from the late sixth or early seventh century. It was a single and incomplete text inserted as a stray leaf into a *Collectio Canonum Hibernensis* copied by a monk in Cambrai for the bishop of Cambrai and Arras, Alberic. If Fulbert visited the library of Cambrai in order to write the *vitae* of the Cambrai saints according to the thesis of Père Ghesquière from the eighteenth-century, he could have seen the homily. Père Ghesquière maintains that the author of a *vita* of the Cambrai saint, Aubert, is Fulbert of Chartres. The name of the unidentified Fulbert is mentioned in the fourth and last chapter of the *vita* as being asked/ordered by Otto I to write the saint's life of the Cambrai saints, Géry and Aubert.²⁰⁵ This demand is recorded as occurring in 1024, the same year as a letter from Fulbert mentioning another text which is known to discuss the colors of martyrdom by Bacharius, discussed below.²⁰⁶

Even more importantly, the text of the Cambrai Homily may also have gotten to Chartres through an Irishman who is believed to have been present there in the twelfth century. The suggestion by Padrig O'Neill that the scribe Tuilecnad was educated by Bernard of Chartres and William of Conches based on the types of annotations he made to a text of Bernard's glosses on Chalcidius's Commentary on the Timaeus now found in the Oxford, Bodleian Library, MS Auct.

²⁰⁵ J. Ghesquière, *Acta sanctorum Belgii selecta. Tomes I - V* (Bruxelles: 1783 - 1789).

²⁰⁶ One concept that is documented in the letters of Fulbert of Chartres as being known by him in regard to color is the tract from Bacharius on the color of martyrdom. Clare Stancliffe suggests that Bacharius's *De reparatione lapsi* addressed to Januarius in the late fourth and early fifth century inspired later more overt statements on martyrdom and color. Clare Stancliffe, "Red, White, and Blue Martyrdom," in *Ireland in Early Medieval Europe*, ed. Dorothy Whitelock, Rosamund McKitterick, and David Dumville (Cambridge: 1982), 21 - 46. The Bacharius text was accessible to Fulbert of Chartres, possibly held in the Chartrain library or at least, Fulbert was able to obtain a copy of it because he had an excerpt copied and sent to William of Aquitaine to use to convince the Archbishop of Bourges to make peace with the duke. He states in this correspondence from the summer of 1024, that texts relating to the salvation of Solomon from Bacharius, Rhabanus Maurus and Bede are mentioned in the correspondence with his letter; this is what allows the conclusion that it is *De reparatione lapsi* that was sent. Fulbert of Chartres, *The Letters and Poems of Fulbert of Chartres*. Ed. and Trans. Frederick Behrends. (Oxford: Clarendon Press, 1976). (Latin and English). Letter 92 p. 167

F. III. 15, would place him at Chartres during what this study considers the cathedral's formative period.²⁰⁷ The Cambrai Homily discusses red, green/blue, and white martyrdom. O'Neill also studies the Cambrai Homily and suggests that the text is derived from the Homilies 32 and 37 of Gregory the Great, which were contained in the Chartres library.²⁰⁸ The Cambrai Homily is incomplete and its function unclear. In the homily, the translation of the word, green, is questionable and could be also interpreted as blue, the quotation is as follows and I suggest a relation of these colors to the elements and halos:

Now there are three kinds of martyrdom which are counted as a cross to man, that is to say, white martyrdom, and green martyrdom and red martyrdom.

This is the white martyrdom to man, when he separates for sake of God from everything he loves, although he suffers fasting or labour thereat.

This is the green martyrdom to him, when by means of them, [i.e., Fasting and labour] he separates from his desires, or suffers toil in penance and repentance.

This is red martyrdom to him, endurance of a cross or destruction for Christ's sake as happened to the apostles in the persecution of the wicked and in teaching the law of God.

These three kinds of martyrdoms are comprised in the carnal ones who resort to good repentance, who pour forth their blood in fasting and in labour for Christ's sake.

One concept that is documented in the letters of Fulbert of Chartres as being known by him in regard to color is the tract from Bacharius on the color of martyrdom. Clare Stancliffe suggests that Bacharius's *De reparatione lapsi* addressed to Januarius in the late fourth and early fifth century inspired later more overt statements on martyrdom and color.²⁰⁹ The Bacharius text was accessible to Fulbert of Chartres, possibly held in the Chartrain library or at least, Fulbert was able to obtain a copy of it because he had an excerpt copied and sent to William of Aquitaine to use to convince the Archbishop of Bourges to make peace with the duke. He states

²⁰⁷ Pádrig Ó'Neill, "An Irishman at Chartres in the Twelfth Century-the Evidence of Oxford, Bodleian Library, MS Auct. F. III. 15," *Ériu* 48 (1997):1 - 36.

²⁰⁸ Pádrig Ó'Neill, "The background to the Cambrai Homily," *Ériu* 32 (1981):137 - 48.

²⁰⁹ Stancliffe, "Red, White, and Blue Martyrdom."

in this correspondence from the summer of 1024, that texts relating to the salvation of Solomon from Bacharius, Rhabanus Maurus and Bede are mentioned in the correspondence with his letter; this is what allows the conclusion that it is *De reparatione lapsi* that was sent.²¹⁰ The text is one that Stancliffe relates to the Cambrai Homily in which Bacharius addresses Januarius who is being urged to repent. The text on color glosses Revelations 7: 9 -17 and is as follows:

Et in priore parte libri innumerum populum uidisse se dicit, qui in tribulatione lauerunt stolas suas, et candidas eas fecerunt in sanguine Agni . . . Quem tamen nos numerum poenitentium esse sentimus, quia non nisi per tribulationem planctumque saluati sunt.

Et tu ergo laua stolam tuam in fonte lacrymarum: fortasse poteris byseeum castitatis imitari. Quid si donauerit tibi purpuram, et tu pro nomine eius succum tui cruoris effundas? Coccum autem abundare tibi poterit, si erubueris in iis quae antea gessisti. Nex deerit hyacinthus, si liuore obcalueris corpus tuum, et in seruitutem redegeris. Ac sic cum his coloribus fortasse poteris in tabernaculum Domini misceri quandoque.²¹¹

And in earlier part of his book he says that he has seen a countless throng, who have washed their robes in tribulation, and made them white in the blood of the Lamb . . . I, however, think that these are the company of penitents, because it is only through tribulation and wailing that they have been saved. And for your part, therefore wash your robe in the well-spring of tears. Perhaps you will be able to match the gleaming white garment of chastity. *What if he should have given you the purple, and you are to pour out the sap of your blood for his name's sake?* Yet you will be able to have scarlet in plenty, if you blush for your past deeds. And there will be no lack of blue, if you warm your body with bruises, and bring it into subjection. And so, with these colours, perhaps you will one day be able to join the throng in the tabernacle of the Lord.²¹²

In this excerpt, Revelations written by John the Evangelist claims that the people of the throng are saints and that through the shedding of blood, they have obtained the robes of white. The second half of the excerpt claims when the sequence of sacrifice is reversed and after an individual's misdeeds and once one is offered the purple, then the penitent sheds blood, blushes

²¹⁰ Fulbert of Chartres, *The Letters and Poems of Fulbert of Chartres*. Ed. and Trans. Frederick Behrends. (Oxford: Clarendon Press, 1976). (Latin and English). Letter 92 p. 167

²¹¹ Bacharius Hispaniae, *De reparatione lapsi*, PL 20, cols. 1061 – 1062. A twelfth-century copy of Bacharius's *De reparatione lapsi* is housed at the Österreichische Nationalbibliothek in Codex Vindobonensis Palatinus 967 on folios 72b – 82b.

²¹² Stancliffe, "Red, White, and Blue Martyrdom." See p. 33 fn. 55.

for his or her bad actions, and flagellates himself or herself with blue bruises. Thus, in the first part of the excerpt, the signification of the blood comes first and the signifier of the robes comes second while in the second half, the robe of purple is offered (signifier) and then the blood is shed (signification). Thus, the penitent sees what can be obtained (signifier) and repents while the saint undergoes sacrifices (signification or color) without the object of sanctity before them. For the saints, the recognition of color before signifier is a natural and instinctual reaction like the illiterate's shielding from the stroop effect. Thus, John of Salisbury relates the Cornificians who are visually governed by instinct or nature to people that in a proud and self-important manner consider themselves to be taking the role of martyrdom or signification through color instead of penitence through the word or signifier. And similar to this reason, they deny grammar.

In the middle ages, the poets speak of poetic license, but this license is always governed by a method of practicing variations on a theme of something that came before.²¹³ It is a creative mixing of fiction with a pre-existent structure. Thus, poetic license of the medieval period is a middle ground between *servitus* and *licentia*—slavery and lawlessness.²¹⁴ If the historical Cornificius was an advocate of a purer form of lawlessness in writing or oratory, it would seem that the same spirit might have inspired the Cornificians of the middle ages.

In the examples of windows in Chartres, the colors of the halos in the panes are the first thing that can be noted from a cursory glance. They highlight the main characters and perhaps this may be their primary function. However, I suggest that the color of the halo that frequently

²¹³ Nicolette Zeeman, "The schools give a license to poets," in *Criticism and Dissent in the Middle Ages* (Cambridge: Cambridge University Press, 1996), 151 - 80.

²¹⁴ Cicero, *Republic*, Ed. G. P. Goold. Trans. Clinton Walker Keyes. (Cambridge: Harvard University Press, 1977), Volume 16. Book III, 23, p. 210: "si vero populus plurimum potest, omniaque eius arbitrio geruntur, dicitur illa libertas est vero licentia." See above.

changes in the Chartres's windows may be read as a preliminary guide to drawing mental lines which become an abstracted form of "hieroglyphics" that can be used to interpret and group the windows' narrative chronologies. These chronologies may be made up of angles and lines that in turn are suggestive of geometric abstractions of human body postures. As each window in this study may act as its own memory room, when the themes of the windows change, these postures undergo a set of permutations and can be interpreted as outlined in this chapter in terms of the postures related to those described by Marcus Manilius. I further explore the postures in the next chapter, but the first and initial step to their comprehension is to understand what color in the windows may mean.

Peter of Celle states in his *De afflictione et lectione*:

Est quidem biformis cella iuxta cellensium mores, dura sed carnalibus, amoena sed spiritualibus. Career est carnis, mentis paradisus. Macellum est ubi carnifex sui corporis nummatas et dimidiatas de carne sua largas emptori Deo uendit et quo plus de carne uendiderit, eo magis pretium acceptum cumulatus reponit. Augeant igitur lucrum et impleant marsupium de sanguine suo et carne uendita quia carne et sanguis regnum Dei non possidebunt.²¹⁵

A room (cella) has one of two qualities, depending on the way of life of those who dwell in it. It is a hard place for carnal people, but a pleasant one for spiritual people. It is a prison for the flesh, a paradise for the mind. It is a market where the butcher sells small and large amounts of his flesh to God, who comes as a customer. The more of his flesh he sells, the greater grows the sum of money he sets aside. Let them therefore increase their wealth and fill their purse by selling their own blood and flesh, for flesh and blood will not possess the kingdom of God. (1 Cor. 15:50)²¹⁶

In this quotation, Peter of Celle compares the meditative process as either a paradise or a prison and as will be shown, the idea of physical position or postures in this statement is present in the posture of Peter's words (the chiasmus of ". . . blood and flesh, for flesh and blood . . .").

²¹⁵ Peter of Celle, *La spiritualité de Pierre de Celle, 1115 – 1183*. Ed. Jean Leclercq. (J. Vrin, 1946), (Latin), See 238.35-239.4.

²¹⁶ Peter of Celle, *On Affliction and Reading in Peter of Celle: Selected Works*. Trans. Hugh Feiss, OSB. (Kalamazoo: Cistercian Publications, 1987), See p. 140.

Blood's position as the first and last word may be in terms of blood's role as signification or meaning that precedes and encases the signifier of flesh. In the *cella* that Peter of Celle describes, the artisan, specifically the butcher, is presented as selling flesh that takes on the meaning of his own flesh and blood. Notably, the butchers are specific artisans referred to in the base of the window of the Miracles of the Virgin and are alluded to in the sculpture at the center of the west façade capital frieze.

The writings of the Chartrain master, Peter of Celle, were used as a medieval reference in the scholarship of Jane Welch Williams to explain the bread and wine references throughout the windows and sculpture of the cathedral. In this excellent study, Williams misses this reference which is not part of the tract she discusses. Her concern is with *De panibus* which discusses bread specifically.²¹⁷ However, her findings in tandem with this excerpt further establish the importance of Peter of Celle to the structure of Chartres. The sequence of *De reparatione lapsi* echoes the chiasmic point made about Peter of Celle's meditational *cella* in which it was argued earlier that signifier and signified are implied in the order of meat and blood. While the evidence of Fulbert knowing *De reparatione lapsi* can be firmly determined, it can be deduced from historical evidence that he may have, but more likely not, knew the Cambrai Homily. A responsible scholar looking into the Cambrai Homily like Fulbert's possible ecclesiastical and historical investigation into the background of the Cambrai Homily's origins may be found in *De reparatione lapsi*. The Cambrai Homily mentions green, red, and white while *De reparatione lapsi* mentions red, purple, blue, and white. Notably, the colors in *De reparatione lapsi* include purple or a combination of colors. This suggests the universal and combined elements.

²¹⁷ Williams, *Bread, wine & money : the windows of the trades at Chartres Cathedral* See pp. 62 – 63, 70 – 71.

Though it cannot be proven that the Chartrains knew the Cambrai Homily, importantly, during the 1194 rebuilding of Chartres, Innocent III reiterated in *De sacro altaris mysterio*, Book III, Chapter LXV, the distinction of liturgical colors in the Roman Rite.²¹⁸ He declared that there were four main colors: white, red, green, black, and sometimes purple. White is considered the color of light and it could be argued that the yellow haloes represent the color white or a hue that is intended to evoke the gold leaf haloes found in manuscripts and icons.

Colors as signification melds with signifiers in the form of postures in the Greek text by Asterius of Amaseia (c. 400) in which he discusses the wall paintings about St. Euphemia, the virgin saint is brutally tortured and then martyred.²¹⁹ Asterius takes a break from his instruction in Demosthenes—notably an author associated with grammar and signifiers—to describe the painting. He remarks in a seemingly meaning-laden statement juxtaposed with his studying “[f]or we, men of letters, can use colors no worse than painters do.”²²⁰ The emphasis on color here is to be noted. Asterius further relates that this painting is in proximity of Euphemia’s tomb. In the description of the narrative that Asterius describes, the judge *sits* to convict Euphemia, Euphemia *stands*, guards *walk* as they drag her away, and Euphemia is seized while the guards *lay her down*. Asterius brings up color again as he describes the torture and is particularly fascinated by the color of the blood that he states looks as if it were “. . . trickling down from her very lips, and so you might depart weeping.” The postures emphasized in this description are forced upon Euphemia except for her standing. This emphasis on color and postures as signifiers suggests that Asterius held some opinion on the importance of color and its

²¹⁸ Innocent III, *De sacro altaris mysterio*, PL 217, col. 799 – 802.

²¹⁹ Notably, Asterius states that he has just concluded a session of reading Demosthenes, an author that Gerbert d’Aurillac orders in tandem with a copy of Marcus Manilius from Bobbio. Asterius of Amaseia, "Description of a painting of the martyrdom of St. Euphemia," in *The Art of the Byzantine Empire, 312 - 1453: Sources and Documents*, ed. Cyril Mango (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1972): 37 – 39.

²²⁰ Asterius of Amaseia, "Description of a painting of the martyrdom of St. Euphemia," See pp. 37 – 39.

importance to Euphemia's martyrdom above and beyond the postures—and color's affective qualities. Asterius's text may be a rudimentary discussion of the color's effect upon the viewer and the color as more important than reading images based on the forced signifiers or bodily poses of the executioners.

4.1 THE WINDOWS AS *CELLAE*

While the act of mapping the Zodiac Window onto the cathedral plan of Chartres is an act of both reading and writing, consuming and making, the trades at the base of the windows at Chartres too, are related to the act of reading and writing, consuming and making, astronomy and astrology. These windows have been evaluated as a group in studies that treat them separately from the rest of the window that they are contained within. In most cases, including the other churches that use the trades as representations (e.g. Amiens, Le Mans, St. Quentin, Bourges, Rouen, Beauvais), the trades mark the beginning of each of the windows' narrative readings which in most cases, begin at the base and move from the bottom to the top of the window. These windows and their trades have been analyzed in terms of the trades as donor portraits and also as trades that were controlled by the church;²²¹ however, they have never been considered signals to treat the windows as sites of meditation. As was demonstrated in Chapter Three, the Chartres windows can be interpreted in a way that allows them to act as markers or *loci* in the overall building. Chapter Five examines them as also acting in their own individual

²²¹ Williams, *Bread, wine & money : the windows of the trades at Chartres Cathedral* , Jane Welch Williams, "The windows of the trades at Chartres Cathedral " (University of California, Los Angeles, 1987), Malcolm Miller, *Chartres Cathedral* (New York, NY: Riverside Book Co, 1985), Malcolm Miller, *Chartres : the cathedral and the old town* (London: Pitkin Pictorials Ltd, 1981), Delaporte, *Les Vitraux de la Cathédrale de Chartres: histoire et description*.

diagrammatic orderings as a *cella* that contain their own *loci* that microcosmically replicate the diagrammatic idea that I outlined for the entire building in Chapter Three. One of the factors that enable this is the trade at the base of the window and the unusual arrangement of the visual readings of the narratives of the windows.

I suggest that by combining the allusions to meditation and prayer in the writings of the Chartrain master, Peter of Celle (1115 - 1183), bishop of Chartres, and the Parisian theologian, Peter the Chanter (d. 1197), that the trades in the windows may also act as a trigger to look upon the windows as meditational and in this meditation as related to diagrammatic posture.

4.2 TRADES OF MEDITATION

I aim to elucidate the relationship between artisans and their trades with meditative states, basing my interpretation on the combination of Peter of Celle's allusions to meditation as a trade on the one hand and Peter the Chanter's prayer postures as are signifiers that reach salvation on the other. Following this in Chapter Four will be a scholarship review of the literature on methods of reading and then a reading of the Chartres windows.

Penitential postures and rooms of meditation are the subject of the next section of this study. I suggest that, just as the building was considered a macrocosm of the window of the Zodiac, so too the individual windows can be considered a macrocosm of informing and narrative postures. Just as the space of the cathedral or the space of a window can be organized to achieve a symbolic end, the space or *cella* of the body can be arranged and interpreted through postures. Reading saints' lives in a text or in a window presents a penitential signifier before the viewer of how to live their life. Thus, allowing the body to be shaped into a room just as the

window and building are spaces, makes the body into its own sanctuary; hence Paul's words related to the body as a temple (1 Corinthians 6:19—*An nescitis quoniam membra vestra templum sunt Spiritus sancti qui in vobis est, quem habetis a Deo, et non estis vestri?* "Or know you not that your members are the temple of the Holy Ghost which is in you, whom you have of God, and you are not your own?")²²² and Chartres as a consanguinity diagram in the form of the human body and tree as seen in Chapter Three. The analogy that Peter of Celle suggests between the artisan and the *cella* of meditation can be considered to suggest another form of containment. But the artisan is also considered important to the posture guide written by Peter the Chanter who wrote his treatise, *De penitentia et partibus eius* which is part of *De oratione et speciebus illius*, for the illiterate, including the artisan and the literate. It includes descriptions and images of body postures for prayer to be enacted in seven different modes by the penitent. These postures may have diagrammatic significance.

Around the same time that Peter of Celle was active, Peter the Chanter (d. 1197) adopts similar views on the artisan as integral to the idea of prayer.

Item si cerdones, pelliparii, agricole, vinitores et omnes alii homines cuiuscumque sint professionis, elaborant fideliter et diligenter ea que acturi sunt perficere, multo itaque fortius clerici et omnes religiosi debent niti summopere, ut meritorie agant non quod inter cuncta hominum genera, nullum est quod deterius et minus bene opus suum exerceat quam persone ecclesiarum officium suum agunt. Imbecilis quoque sexus mulierum, varium ac mobile et debile genus feminarum procurat agere telas suas diligenter et omnia que eis convenit facere, nec non studet commode atque optime consumare. Econtra clerici quando tenentur orare, conantur potius ad finem orationis perperam et male pervenire quam bene eam inchoaverint.²²³

Moreover, if tanners, pelterers, farmers, vineyard workers and all other men, of whatever profession they are, work honestly and diligently to finish what they are going to do, then

²²² *Vulgate New Testament with the Douay Version of 1582 in Parallel Columns* (London: Samuel Bagster and Sons, 1872). See p. 229.

²²³ Peter the Chanter, *De penitentia et partibus eius* in *The Christian at Prayer: An Illustrated Prayer Manual Attributed to Peter the Chanter (d. 1197)*. Ed. Richard C. Trexler. (Binghamton, New York: Medieval & Renaissance Texts & Studies, 1987). See. pp. 208 – 209, lines 1425 – 1437.

much more energetically clerics and all religious ought to strive with the utmost effort to do meritoriously the work of God to which they are obliged by the contemplation of service and duty. And besides, there is the fact that among all classes of men there is none that does its work more poorly and less well than persons of the churches do their duty. The weak sex of women too, the variable and changeable race of females, takes care to do its weaving diligently and all the tasks which it is appropriate for them to do, and, moreover, strives to complete them skillfully and most satisfactorily. On the other hand, clerics, when they are obliged to pray, aim to reach the end of the prayer incorrectly and badly rather than begin it well. (The translation “persons of the churches” is awkward but literal. I don’t know if *personae* has a technical meaning in connection with the Church.”)²²⁴

Peter celebrates literacy, but in most of the manuscript versions of his work, the illiterate are not excluded from the benefit of the work due to the images interspersed in his text.

The original manuscript of Peter the Chanter is no longer extant and there are only nine manuscript copies that are still known. Only the c. 1400 copy from Munich (MS Bavarian State Library, n. 17458) excludes images. The earliest surviving copies are from 1220 from the areas of Venice (Venetian State Archives, S. Maria della Misericordia in Valverfe, b.1) and Padua (MS Antonine Library, Padua, n. 532, scaff. XXII), followed by the 1246 copy from Ottobeuren (London, BL Add. MS 19767), the 1240 copy from Zwettl (MS Stift Zwettl, n. 71), the 1250 copy from Klosterneuburg (MS Stift Klosterneuburg, n. 572), the 1275 copy from Pegau (MS Leipzig University, n. 432), the 1260 copy from Altzella (MS Leipzig Univ. Library, n. 433), and the 1400 copy from Prague (MS Prague University Library, Latin MS n. 1518).

As early as 1220, there were images included as seen in Appendix A and its contents that illustrate the postures in the manuscript from Ottobeuren. Some postures concentrate on looking upward while others have an emphasis of looking downward and when distilled to their abstract essence, the postures suggest geometric angles and lines. The standing posture in prayer is one that occurs as a completely upward looking and strict linear upright comportment. The next

²²⁴ Translation by Mark Possanza.

posture is in the horizontal plane of this comportment with arms in a right angle from the body. The third posture is in the depth of the posture with both arms straight out in front of the body holding the hands as if with a book in them. These three initial postures suggest the development of the three dimensions and even the geometric angles that I suggest in the reading patterns of the windows.

The next postures suggest first kneeling in a right angle with face lowered and complete humility in the lying posture in a straight horizontal line with face in the ground and arms straight above the head. A standing posture is next with hands in an acute angle from the body with lowered head and finally, a posture of *proskynesis* is the seventh and final posture.²²⁵ It is prostrate on the floor with the head lifted and arms in an acute angle.

These sets of postures suggest two different perspectives: one looking to and connecting with the earth and one looking to and connecting with the heavens. Perhaps this is the orthodox way of addressing the postures, but there may also be a lesser known way of assessing them that is in line with the Priscillian influences expressed earlier in Chapter Three related to astrological knowledge, specifically that of Marcus Manilius.²²⁶

Among his studies relating to the astrolabe and Arabic-influenced subjects, Gerbert of Aurillac—the teacher of Fulbert—requested a copy of M. Manlius from Bobbio in a letter dated September 7, 988.²²⁷ Manlius or Manilius relates information about the Zodiac Man (discussed in Chapter Three) and expresses the zodiac signs as postures. For the most part, running is fire, sitting is earth, standing is air, and reclining is water. During the Priscillianist controversy in a

²²⁵ Trexler, *The Christian at Prayer: An Illustrated Prayer Manual Attributed to Peter the Chanter (d. 1197)*. See p. 58.

²²⁶ William of Malmesbury considers Gerbert a heretical individual.

²²⁷ Gerbert of Aurillac, *Lettres de Gerbert (983 – 997)*. Ed. Julien Havet. See Letter 130. (Paris: A Picard, 1889). *The Letters of Gerbert with his Papal Privileges as Sylvester II*. Trans. Harriet Pratt Lattin. (New York: Columbia University Press, 1961). Letter 138, pp. 168 – 169.

letter from Jerome in response to an inquiry by Ctesiphon, Jerome condemns nine different heresies and funnels them all into the one catchword of Priscillianism.²²⁸ Priscillianism is also believed to have become a catchword for all things astrological.²²⁹ More to the point, towards the end of Jerome's letter, he states:

Audite, quaeso, audite sacrilegium: 'si', inquit, 'uolero curuare digitum, mouere manum, sedere, stare, ambulare, discurre, sputa iacere, duobus digitulis narium purgamenta decutere, releuare aluum, urinam digerere, semper mihi auxilium dei erit necessarium? Audi, ingrate, immo sacrilege, apostolum praedicantem: siue manducatis siue bibitis siue aliud quid agitis, omnia in nomine domini agite.'²³⁰

Listen, only listen, to the blasphemer's profanation. "If," he says, "I want to bend my finger or to move my hand, *to sit, to stand, to walk, to run*, spit or use two little fingers to blow my nose, empty my bowels, or urinate; is it for me to have God's help?" Listen, you blasphemous ingrate, hear the preaching of the apostle: "If you are eating, if you are drinking, or if you are doing anything else, do all in the name of God."²³¹

The allusion to sitting, running, walking, and standing seems significant when looking at the zodiacal connections to these postures in Manilius's *Astronomica*.

4.3 CONCLUSION

As this chapter has demonstrated, color and position are ideas that John of Salisbury mentions but only spuriously in his *Metalogicon*. In the next chapter, the usage of color and posture is

²²⁸ Flint, "The Transmission of Astrology in the Early Middle Ages." See p. 10.

²²⁹ This could be for a number of reasons, but one of them might reflect on the semantics that Priscillianists supported (a tripartite semantic system). If the semantics of triplicity were something intended to be revealed late in the middle ages, the fourth century was an early time for it to be cropping up and it needed to be suppressed. If triplicity is considered divine, subjecting the Priscillianists to a binary fate would be apt. By compressing all the heresies into the vacant term of Priscillianism, heretics became subject to a deconstructionist fate. I realize that deconstruction is not a verifiable theory in the middle ages, but the number dichotomy of two and three is.

²³⁰ Hieronymus, *Epistularum Pars III Epistulae CVVI – CLIV*. "Ad Ctesiphontem," Ed. Isidorus Hilberg. Vol. LVI/1. (Vindobonae: Verlag der Österreichischen Akademie der Wissenschaften, 1996), Letter 133, 7, lines 13 – 20. p. 251.

²³¹ W. A. Jurgens, *The Faith of the Early Fathers*, trans. W. A. Jurgens (Collegeville, Minnesota: The Liturgical Press, 1970). See p. 187.

explored. This chapter established the theoretical data by introducing the Cambrai Homily, Innocent III's colors, the text of Bacharius, the text of Asterius, and further alluding to the Byrhtferth diagram. The postures of running, reclining, sitting, and standing will be important in the following chapter and these postures as related to geometric angles suggest themselves in their organization of colors. Further, the idea of each window as a diagrammatic *cella*—and the postures taken within this room—is elaborated upon and emphasized.

5.0 WINDOW READING PATTERNS

As was demonstrated in Chapter Three, the Chartres windows can be interpreted in a way that allows them to act as markers or *loci* in the overall building. This chapter will examine each one as also acting in its own individual diagrammatic orderings as a *cella* that contains its own *loci* that microcosmically replicates the diagrammatic idea that I outlined for the entire building in Chapter Three. In this chapter, instead of arrangements within the entire building, the arrangements are within each window armature. One of the factors that enables this is the unusual and varied arrangement of the visual readings of the narratives of the windows.

I suggested in Chapter Four that by looking at the allusions to meditation and prayer in the writings of the Chartrain master, Peter of Celle (1115 - 1183), bishop of Chartres, and the Parisian theologian, Peter the Chanter (d. 1197), that the trades in the windows may also act as a trigger to look upon the windows as meditational devices structured according to diagrammatic body posture in the form of running or walking as an acute angle, sitting as a right angle, reclining as a horizontal line, and standing as a vertical line. In turn, these angles may suggest an implied reading system for the narratives of the window. Four aspects to understand these readings are applied to each window: 1) halo color, 2) significance of halo (color, season, age, or type of martyrdom), 3) posture or angle according to color and element, 4) movement or any rotation of color/angle using the concept of Plato's world soul and the rotation of the planets.

5.1 MARCUS MANILIUS AND THE POSTURES

In this section, the architectural body and the human body can be aligned and fused. The Pauline allusion to the body as a temple presents a Biblical link for this relationship (1 Corinthians 6:19— *An nescitis quoniam membra vestra templum sunt Spiritus sancti qui in vobis est, quem habetis a Deo, et non estis vestri? “Or know you not that your members are the temple of the Holy Ghost which is in you, whom you have of God, and you are not your own?”*).²³² The human body and its postures are zodiacally-related through Marcus Manilius whose text as stated in Chapters Three and Four may have been available to Fulbert of Chartres who was educated at Reims under Gerbert of Aurillac. (Gerbert was later to become Pope Sylvester II.) The Parisian, Peter the Chanter, was also educated at Reims and may have had access to the same sources as

²³² See also 1 Corinthians 12: 12 -26. “Sicut enim corpus unum est, et membra habet multa, omnia autem membra corporis cum sint multa, unum tamen corpus sunt: ita et Christus. Etenim in uno Spiritu omnes nos in unum corpus baptizati sumus, sive Judaei, sive Gentiles, sive servi, sive liberi: et omnes in uno Spiritu potati sumus. Nam et corpus non est unum membrum, sed multa. Si dixerit pes: Quoniam non sum manus, non sum de corpore: num ideo non est de corpore? Et si dixerit auris: Quoniam non sum oculus, non sum de corpore: num ideo non est de corpore? Si totum corpus oculus, ubi auditus? Si totum auditus, ubi odoratus? Nunc autem posuit Deus membra, unumquodque eorum in corpore sicut voluit. Quod si essent omnia unum membrum, ubi corpus? Nunc autem multa quidem membra, unum autem corpus. Non potest autem oculus dicere manui: Opera tua non indigeo: aut iterum caput pedibus: Non estis mihi necessari. Sed multo magis quae videntur membra corporis infirmiora esse, necessaria sunt: et quae putamus ignobiliora membra esse corporis, his honorem abundantiorum circumdamus: et quae inhonesta sunt nostra, abundantiorum honestatem habent. Honestas autem nostra nullius egent: sed Deus temperavit corpus, ei, cui deerat, abundantiorum tribuendo honorem, ut non sit schisma in corpore, sed idipsum pro invicem sollicita sint membra. Et si quid patitur unum membrum, compatiuntur omnia membra: sive gloriatur unum membrum, congaudent omnia membra. Vos autem estis corpus Christi, et membra de membro.

“For as the body is one, and hath many members, and all the members of the body, whereas they be many, yet are one body: so also Christ. For in one Spirit were we all baptized into one, whether Jews or Gentiles, or bondmen or free: and in one Spirit we should say, because I am not the hand, I am not of the body: is it therefore not of the body? And if the ear should say because I am not the eye, I am not of the body: is he therefore not of the body? If the whole body were the eye, where is the hearing? If the whole were the hearing: where is the smelling? But now God hath set the members, every one of the in the body as he would. And if all were one member, where were the body? But now there are many members indeed, yet one body. And the eye cannot say to the hand *I need not thy help: or again the head to the feet. You are not necessary for me.* But much more those that seem to be the more weak members of the body are more necessary: and such as we think to be the baser members of the body, upon them we put more abundant honour: and those that are our dishonest parts, have more abundant honesty. And our honest parts need nothing: but God hath tempered the body, giving to it that wanted the more abundant honour, that there might be no schism in the body, but the members together might be careful one for another. And if one member suffer anything, all the members suffer with it; or if one member do glory, all the members rejoice with it. And you are the body of Christ, and members of member.” *Vulgate New Testament with the Douay Version of 1582 in Parallel Columns* (London: Samuel Bagster and Sons, 1872). See p.236, for 1 Corinthians 6: 19, see p. 229.

Fulbert and Gerbert, namely the copy of the *Astronomica* by Marcus Manilius that is alluded to in the correspondence of Gerbert referred to in Chapter Four.

The importance of the Manilius text, which only survives in two manuscripts from the middle ages—but was known to be held in the Diocese of Liège at the Abbey of Lobbes—has possible relation to the diagrammatic readings of the windows. By imagining bodily postures such as those mentioned in Jerome's letter and as is shown below in the Manilius text, the running, standing, reclining, and sitting poses can be pared down to their geometric forms. I have suggested in Chapters Three and Four that the zodiac informed the fabric of Chartres's makeup. Here I suggest that the texts on postures likewise informed Chartres' makeup and offer in addition a guide to the reading of the windows. The viewer needs to reduce the figures' postures to a set of geometric lines (not the postures of the figural representations, but the postures of implied reading) representing their angular skeletons as in Villard's figure diagrams, discussed below.

The Manilian allusion to postures is as follows:

Nec tu nulla putes in eo commenta locasse naturam rerum, quod sunt currentia quaedam, ut Leo et Arcitenens Ariesque in cornua tortus; ut Virgo et Gemini, fundens et Aquarius undas; vel quae fessa sedent pigras referenda mentes, Taurus depositis collo sopitus aratri, Libra sub emerito considens orbe laborum, tuque tuos, Capricorne, gelu contractus in artus; quaeve iacent, Vancer patulam distentus in alvum, Scorpions incumbens plano sub pectore terrae, in latus obliqui Pisces semperque iacentes.

Nor must you imagine that Nature has wrought a design of no purpose in that certain signs are running, as are the Lion, the Archer, and the Ram that ends in twisted horns; or that some stand erect with their limbs perfectly poised as the Virgin and Twins and Waterman pouring forth his stream; or that some sit fatigued and reflect their weariness of mind, the Bull, slumberous now the plough has left his shoulder, the Balance that sinks down after discharging its round of tasks, and you, Capricorn, whose limbs are shriveled by the frost; or that some lie flat, the Crab sprawling with distended belly, the Scorpion

reposing on the ground beneath its smooth breast, the Fishes swimming sideways for ever horizontal.²³³

Importantly, Manilius addresses this passage to Nature, which has already been connected in Chapter Four with the Cornificians.

The zodiac signs that are connected to the postures also are related to elements. By extension, these elements can be related to these same postures. To substantiate this thesis, there is the necessity of some interpretive source that uses the postures in relation to methods of reading or in terms of geometric angles. If the Sketchbook of Villard de Honnecourt of c. 1250 (preserved in a single manuscript portfolio, MS BNF Fr. 19093) is treated as a medieval reference that interprets the art of Villard's time, the schematics of walking figures, standing figures, and sitting figures that repeat the acute angles, straight lines, and right angles in their geometric makeups constitute a medieval source that interprets angles according to postures. One section of the Villard manuscript, the drawings on ff. 35 and 37 treat a set of human figures depicted in various poses as geometrical diagrams. Additionally, the straight walking stick of the standing figure (folio 35) suggests the linear standing posture of the figure. It is possible that unlike the point that the Villard scholars try to prove (that the schematizations govern the drawings), instead the drawings assist in the abstraction of the figures into schemas. This view is supported by the observations of Robert Walter Scheller who observes from folios 18r, 18v, 19r, and 19v that some of the figures were drawn before the schematizations were imposed on them.²³⁴ M. F. Hearn suggests that the schematization of Villard's sketchbook is in fact stylistic

²³³ Marcus Manilius, *Astronomica*. Trans. G. P. Goold. (Cambridge: Harvard University Press, 1977). (Latin and English), Book II, 244 – 255, See pp. 100 – 103.

²³⁴ Robert Walter Scheller, "Catalog No. 10: Villard de Honnecourt (ca. 1230 - 1240)," in *A Survey of Medieval Model Books* (Haarlem: De Erven F. Bohn N.V., 1963), 88 - 93.

and showing the Gothic penchant for linearity.²³⁵ I would like to go one step further and show that style may also have practicality through theological applications.²³⁶ Notably, these angular forms are found in the tools of the architect: the acute angle in the calipers, the right angle in the T-square, and the straight line in the architect's rod. Not only would the medieval monastics have access to these shapes which are found on tomb slabs like that of Hugh Libergier, architect of Saint-Nicaise de Reims,²³⁷ the rod or straight line could be related to standing or reclining, the T-square or right angle to sitting and the calipers or acute angle to running. Geometric form can be indicative of postures. Body is a form of measurement.²³⁸ This association with architecture would help medieval intellectuals utilize these forms as postures within their constructions and if the group is made up of masons this interpretation might be known.

²³⁵ M. F. Hearn, "Villard de Honnecourt's Perception of Gothic Architecture," in *Medieval Architecture and Its Intellectual Context: Studies in Honour of Peter Kidson* (London: 1990), 127-36. Hearn's work was extremely influential on this dissertation. This includes his ideas of 'intended form' in his article on Canterbury Cathedral and also the notion of the small scale as monumental and thus, my interpretation of the miniature (the window) and the large scale (the building) as related. M. F. Hearn, "Canterbury Cathedral and the Cult of Becket," *The Art Bulletin* 76, no. 1 (1994):19 - 52, M. F. Hearn, *Romanesque Sculpture: The Revival of Monumental Stone Sculpture in the Eleventh and Twelfth Centuries* (Ithaca, New York: Cornell University Press, 1981).

²³⁶ Earlier, window reading was brought up as a subject and it should be noted that one of the earliest receptions of visual images recorded was that of Asterius of Amaseia and his witnessing of the images of the martyrdom of Euphemia. 'Asterius' means 'ruler of the stars' and may suggest an astronomical/astrological connection as does the Greek allusion to manuscript illuminations as stars. "... a book truly like unto another Heaven, stretched out from sheets of leather provided by nature. This book contains beautiful images like stars ..." Cynthia Hahn, *Portrayed on the Heart: Narrative Effect in Pictorial Lives of Saints from the Tenth through the Thirteenth Century* (Berkeley: University of California Press, 2001). See p. 3.

²³⁷ Hugh Libergier was the architect of the Abbey of Saint-Nicaise in Reims. His tomb slab is one of the most frequently reproduced examples of an architect with the tools of his trade. The slab is currently located on the interior of the Cathedral of Reims, west of the north transept doors. It was relocated after the destruction of the abbey he created. For a reproduction, see von Simson, *The Gothic Cathedral: Origins of Gothic Architecture and the Medieval Concept of Order*. See Plate 6b.

²³⁸ In the Pilgrim's Guide of the *Codex Calixtinus*, the body is used as a means of measuring building lengths and heights in Chapter Nine. For example, the author of the Pilgrim's Guide states: "Basilica namque Sancti Iacobi habet in longitudine quinquaginta et tres hominis status, uidelicet a porta occidentali usque ad Sancti Saluatoris altare. In latitudine uero habet quadraginta unum minus, a porta scilicet Francigena usque ad meridianam portam. Altitudo uero eius quatuordecim status habet intus. Quanta sit extra eius longitude et altitude, a nullo ualet comprehendi."

"The basilica of St. James is in length fifty-three times the stature of a man, namely, from the western door up to the altar of the Holy Saviour, in width, in truth, it is forty-times-less-one, that is, from the Portal of the French to the south portal. The height of it is fourteen times the stature [of a man]. What might be its exterior length and height, no one can comprehend."

See Volume One, pp. 66 – 67 in Stones and Krochalis, *The Pilgrim's Guide: a Critical Edition*.

Canon Yves Delaporte and Colette Deremble-Mahnes have looked at the corpus of the narrative windows for answers to questions of reading and comprehension.²³⁹ My examination focuses on characterizing each window according to a set of criteria based on character (person or protagonist), halo color, and narrative episodes. I map these characteristics on diagrams of the windows as a series of geometrical schema. Then I propose possible solutions to the interpretation of the geometric schemes. These schemes are partially dependent upon the armatures of the windows and the chronology of the narrative. If the window is simple like the Glorification of the Virgin Window, the main scenes are centralized and move in an ascending pattern up the window in a vertical line. If the window is more complex and is structured in two columns, the patterns become more intricate. Diagonally placed recurrence of the same character, or continuation of an episode diagonally, or all of these things in addition to the character with the same colored halo create angles in the window readings. Thus, straight horizontal lines, acute angles, and right angles can be the result of these organizations. The absence of any consistent reading order to all or most of the windows may suggest that a diagrammatic organization was dependent upon all of the above-mentioned factors, similar to the overall layout of the windows within the building presented in Chapter Three. The individual windows—like the building itself is suggested to be in Chapter Three—are armatures that house a group of *loci*. The goal of this dissertation is to interpret the patterns of these *loci*, based on medieval evidence. I suggest that these readings were as methods of interpretation that may have been used by the medieval penitent.

In the windows, angles of reading/writing can be read as tools and signifiers. As is proposed in this and the previous chapter, the halo color in the windows of Chartres and the

²³⁹ Delaporte, *Les Vitraux de la Cathédrale de Chartres: histoire et description*. Colette Mahnes-Deremble, *Les vitraux narratifs de la cathédrale de Chartres: étude iconographie* (Paris: Léopard d'or, 1993). See Volume Three.

windows' protagonists suggest a way to map at least a unit of reading (two or three scenes) at a time. The angle of reading fuses formalistically with the reading patterns as postures (angle = signifier and associated formal posture = signifier). The zodiac personifications (signifiers) signify four different elements (signification or substance of the zodiac signs) and each of the elements signify a color (also signification of the zodiac signs). As stated earlier, I analyze these four aspects in each window: 1) halo color, 2) significance of halo color (element or martyrdom), 3) posture or angle according to color and element, 4) movement or any rotation of color/angle using the concept of Plato's World Soul.

Table 12: Index of Colors

	Red	Blue	Green	Yellow/White	Purple
Byrhtferth and its indicators of movement	Fire 3) Adult 4) Old Age	Earth 1) Childhood	Water 2) Adolescence	Air No association with movement	
Cambrai Homily	Sacrifice Life for Faith	Use of the word <i>glas</i> (which can mean blue or green) for repentance		Chastity and Restraint	
Bacharius	Sacrifice Life for Faith	Repentance			Blending of Free Will and Determinism

The halo colors in the windows at Chartres could reflect meaning connected to the color equivalencies established in the above chart. The Byrhtferth diagram is the primary source and it agrees with the Cambrai Homily that was likely known in the Anglo-Saxon region where Abbo of Fleury taught Byrhtferth of Ramsey. Additionally, the Byrhtferth diagram like the Cambrai Homily appears in the context of Old Irish—the Byrhtferth in Oxford, Bodl. Ashmole 328 (which is written in Old Irish) and the Cambrai Homily in Cambrai, MS 679 on folios 37rb–38rb (which is written in a combination of Old Irish and Latin). Irish influence is found at Chartres in

relationship to the Irishman, perhaps named Tuilecnad, who was a student there during the twelfth century. His presence is evidenced by Oxford, Bodleian Library, MS Auct. F. III. 15 (See Chapter Four).

The Cambrai Homily agrees with the Byrhtferth in its association of the color red with the second half of life (adulthood and old age are marked towards the center of the Byrhtferth on the right with roundels of red) while blue and green are associated with childhood and adolescence also seen in the Byrhtferth on the left. I suggest that the colors of red and blue in the Byrhtferth and in the windows of Chartres signify free will or awareness and determinism or lack of awareness. This idea can be entertained based on the ideas of Socrates and Plato, already seen to be highly regarded by the Chartrains and Cornificians. Socrates believed that knowledge and thus, virtue, could be taught while in Plato's *Ethics*, Plato maintains that virtue cannot be taught. Recollecting Chapter Four, John of Salisbury speaks pejoratively of "speechless wisdom." The idea that virtue is something related to an inherent predisposition is like the idea of eloquence as inherently given.

If the Creation and Good Samaritan Window is taken as a starting point and as the key to the rest of the windows, the use of red is seen in the eating from the Tree of Knowledge of Good and Evil while most of the other panes are blue. The significance of this color pairing may be to suggest that knowledge of good and evil, as Socrates and Plato maintain, is the beginning point of virtue and awareness of when something done is bad or good. The saints in the windows have awareness at different points of time and many have this awareness after baptism. Though the Chartrains did not have Plato's *Ethics*, the kernel of the idea is present in John of Salisbury's *Policraticus*. He states:

And one is not to be afraid to extend a hand towards the tree of knowledge of good and evil on account of the example of the first prohibition because He who teaches men

knowledge and who, according to the promises of the prophets, discloses to the ignorant what is good, invites exiles and wanderers to it. Therefore, in the tree of knowledge is found a certain branch of virtue, through which the whole life of man as he progresses is consecrated. No one except for him who extends the branch of virtue cut from the tree of knowledge may return by other means to the Creator of life, namely God. . . .

Ad arborem scientiae manum extendit, gulam implevit, et contra promissum fallacis inimici, et secundum interdictum veracis Dei, obtenebratus est homo, et in esuriem prostratus, foedus feriens cum morte, et pactum faciens cum inferno. Boni [col. 819C] tamen, et mali sciens factus est per experientiam, et multiplici miseriae locum fecit in se. Ergo a ligno scientiae dum prohibitus illud ascenderet, a veritate, virtute, vita cecidit et deviavit homo, nec revertetur ad vitam, nisi ad arborem scientiae redeat, et inde veritatem in cognitione, virtutem in opere, vitam in iucunditate mutuetur.²⁴⁰

Earlier, John of Salisbury was quoted as saying that: “Reason [is], the mother, nurse, and guardian of knowledge, as well as of virtue.”²⁴¹ Reason is what the Chartrains emphasize.

Fulbert emphasized it to the murderous men from Amiens in Chapter One.²⁴² The question is: is this knowledge that leads to virtue something that can be bestowed through instruction and labor based on rules or is it something inherently determined by astrological determinism, predestination, or even Nature? In order to sacrifice one’s life for the faith voluntarily, free will and awareness are a necessity. But is there a level playing field so that anyone regardless of their inherent determinations can become a saint? The Cornificians would suggest that sainthood is inherently predetermined while the penitential Chartrains would suggest that virtue can be learned. Reason can only be gained with knowledge.

The four ages of man and their colors in the Byrhtferth further suggest the pairing of awareness with age and lack of awareness with youth. On the other hand, repentance in

²⁴⁰ John of Salisbury, *Polycraticus*, printed amongst his other works listed under Joannes Saresberiensis in PL 199, 379 – 822. Book 8, 818C – 819D. *Policraticus of John of Salisbury*. Ed. and Trans. Joseph B. Pike. (Minneapolis: The University of Minnesota Press, 1938).

²⁴¹ See footnotes 197 and 198.

²⁴² “Neither the gate of justice nor the door of mercy is closed to you in our sight, nor have we made . . . a doorkeeper to prevent (as you claim) your entering into our presence; but we have entrusted the keeping of both entrances to Reason. If you wish to enter through the gate of justice, disprove your guilt; if through the door of mercy, do penance. Otherwise Reason will not let you in.”

Bacharius is recognition of the blending of free will (red) and determinism (blue or seeing what can be gained) in the same individual hence seeing the purple in its text that is a mixing of primary colors and the conditions of free will and determinism into the combination of purple. These issues of free will and determinism present themselves as these colors in the scenes of the saints' lives in the window of Chartres based on the color of the saints' halo.

The following tables analyze twenty-four windows according to postures (the angles produced by one specific character's narrative in the window) and element (a color that is assigned to the postures/angles that is tied to the halo or background color of that same specific character). Manilius's postures are the initial basis for these window reading angles. For the most part, Manilius only assigns one element to each posture due to the element related to its corresponding zodiac triplicity; running is Aries, Leo, and Sagittarius which are all fire signs and thus, running is associated with fire by Manilius. The posture is based on following one character by their halo color and narrative sequence. The posture and angle as seen in Villard's sketchbook remain formalistically fused, and the element and color remain fused; however the posture/angle is not always associated with the same element/color. The colors of the halos are related to elements based on the Byrhtferth diagram from St. John's College, Oxford MS 17, 7v in which the color relationships are yellow as air, blue as earth, green as water, and red as fire. The posture/angle changes elemental association across this select group of windows as the evidence of narrative and character organization suggests. Most of the time there are blue backgrounds behind the characters that stand in for the halo when there are none present.

Signifiers with the same substance are organized into triplicities—three signs (for example, Aries, Leo and Sagittarius) with the same significations (fire). There are four different

triplicities, one of air, one of earth, one of fire, and one of water. As the set of triplicities change, the posture and its element change too.













This change of posture/angle with element/color can be considered as related to the building as a form of the Platonic body and soul. As stated in Chapter One and Three, the diagramming of the building can be associated with the “soul” of the building. The soul is described by Plato in his *Timaeus* as circular and the body as made up of fire (red—which this study associates with free will) and earth (blue—which this study associates with determinism). In relation to the postures/angles and elements/colors, the following excerpt about the world soul is as follows:

Now the best of all bonds is that which makes itself and the things it conjoins a unity in the fullest sense; and it is of the nature of a continued geometrical proportion to effect this most perfectly. For whenever, of three numbers, the middle one between any two that are either cubes or squares is such that, as the first is to it, so is it to the last, and conversely as the last is to the middle so is the middle to the first, then since the middle becomes first and last, while the last and first become middle, it follows that all will come to play the same part in relation to one another, and will thereby all form a unity.²⁴³

The concept of the unity or circular changes of the first, second, and third can be related to the permutations of the angles in relationship to element or colors. Thus, this continuous rotation, which relates to the composition of the building as in motion, further relates the building to world soul, the planets, and the universe.

²⁴³ Plato, *Timaeus*. Ed. and Trans. John Warrington. (Dent: London, 1965), See 32 – b.

Table 13: Postures and colors

Platonic Positions of the World Soul (determined by Manilius)	Running or Walking	Sitting or Genuflecting	Reclining	Standing
First Position	Water 	Fire 	Earth 	Air 
Middle Position	Earth 	Water 	Fire 	Air 
Last Position (Manilius)	Fire 	Earth 	Water 	Air 

Aries	Taurus	Gemini	Cancer	Leo	Virgo	Libra	Scorpio	Sag	Cap	Aquar	Pisces	In folio 8r of the St. John's College 17
Taurus	Gemini	Cancer	Leo	Virgo	Libra	Scorpio	Sag	Cap	Aquar	Pisces	Aries	Byrhtferth document, the same organization
Gemini	Cancer	Leo	Virgo	Libra	Scorpio	Sag	Cap	Aquar	Pisces	Aries	Taurus	as seen in the postures can be found in the
Cancer	Leo	Virgo	Libra	Scorpio	Sag	Cap	Aquar	Pisces	Aries	Taurus	Gemini	diagram that faces the Bryhtferth diagram on
Leo	Virgo	Libra	Scorpio	Sag	Cap	Aquar	Pisces	Aries	Taurus	Gemini	Cancer	folio 7v; however, air is intermixed with the
Virgo	Libra	Scorpio	Sag	Cap	Aquar	Pisces	Aries	Taurus	Gemini	Cancer	Leo	other signs. When considering the unusual
Libra	Scorpio	Sag	Cap	Aquar	Pisces	Aries	Taurus	Gemini	Cancer	Leo	Virgo	ordering of the Zodiac Window, air is
Scorpio	Sag	Cap	Aquar	Pisces	Aries	Taurus	Gemini	Cancer	Leo	Virgo	Libra	excluded from the rightmost portion of the
Sag	Cap	Aquar	Pisces	Aries	Taurus	Gemini	Cancer	Leo	Virgo	Libra	Scorpio	ordering in the window from Aries to
Cap	Aquar	Pisces	Aries	Taurus	Gemini	Cancer	Leo	Virgo	Libra	Scorpio	Sag	Cancer, suggesting a possible allusion to the
Aquar	Pisces	Aries	Taurus	Gemini	Cancer	Leo	Virgo	Libra	Scorpio	Sag	Cap	postures.
Pisces	Aries	Taurus	Gemini	Cancer	Leo	Virgo	Libra	Scorpio	Sag	Cap	Aquar	

Figure 22: Oxford, St. John's College 17, folio 8r

From left to right in an ascending direction, in each row the same zodiac sign is represented repeated in a grid. From left to right in a horizontal trajectory, the zodiac is chronologically relayed changing the zodiac sign's association in each diagonal row. This is the folio across from the Byrhtferth diagram and it suggests the postures as shown in Table 11 can be considered representative of correlations to zodiac orderings like the Zodiac Window due to the displacement of air in the postures diagram and in the Zodiac Window when Gemini is placed out of order.

Furthermore, the *syzygy* diagram of William of Conches that is related to the combined elements and the universal elements pictured in Chapter Three and referred to in Chapter Four in relationship to the Byrhtferth, can be applied to Plato's description of the triple compound. The triple compound is demonstrated in the above table, but also can be related to the musical

intervals and as will be shown, the Macrobian and Chalcidian lambda diagram that in actuality represents Plato's theory of the intervals of the planets (See Appendix A). The lambda diagram is an upside-down "V" shape that has the squaring and cubing of two and three on either side. At the apex is the number one, on the left are the numbers two, four, and eight while on the right are the numbers three, nine, and twenty-seven. The elements and postures above can be related to the lambda diagram by examining the types of postures, elements, and angles in the windows as illustrated in the diagrams below.

Returning to the cycling of elements, as the character changes, so does the posture that is associated with each element. This makes the posture, a signifier with multiple significations and thus, it is penitential—thus, postures are penitential as in Peter the Chanter's work. Hence, the narrative of the character affects the posture. For example in Table 20 below, before Nicholas takes up the clerical life, the elements, red and fire are represented by the right-angle or seated posture. After Nicholas takes up the clerical life, the red and fire are acute angles or the running posture.

5.2 THE HISTORIOGRAPHY

Before attempting to demonstrate the postures at work in the windows, it is important to review the contemporary scholars who have thought about the trade windows and reading patterns. While the reading of objects is considered in an empirical way, I will endeavor to show that how an object is read *and written* as it is studied, is another dimension to interpretation. Suggestive evidence for 'reading and writing' of visual material in the middle ages is the use of cryptograms

that were employed by Christians during persecution by the Romans. One example may be the SATOR Square that has not been fully deciphered.²⁴⁴

Many current scholars have written about reading and reading patterns in the medieval period. These scholars include Yves Delaporte, Wolfgang Kemp, Colette Deremble-Mahnes, Madeline Caviness, and Marilyn Lavin.²⁴⁵ I will look at the scholarship on reading in these authors and then I will employ the alternate method suggested at the opening of this chapter that proves to be informative at Chartres and may be used as a method of interpretation in other cathedrals. I will present a survey of the windows of Chartres in terms of their reading patterns that tests theories of reading on the overall cathedral and not just single examples as many are prone to do.

In 1926, Yves Delaporte used the drawings of Alexandre Pintard to create an accompaniment to Étienne Houvet's photography of the windows of Chartres with Pintard's narrative diagrams.²⁴⁶ Pintard paid close attention to how the saints' lives were represented and he created schematics that could be referenced so the narratives of the stories could be followed. Delaporte recreated these diagrams to accompany the photographs of Étienne Houvet. Paul Frankl examined the windows as schematics only, without their narrative content, in order to assess the date of their creation based on formal similarities of their armatures.²⁴⁷ Much later, in 1987, Wolfgang Kemp, revived the article by Paul Frankl and began his reading pattern project

²⁴⁴ The SATOR Square is an example of a cryptogram or word square that is read in various patterns like the boustrophedon which will be described below. H. Leclercq, "SATOR-AREPO," in *Dictionnaire d'archéologie Chrétienne et de liturgie*, ed. Fernand Cabrol (Paris: Letouzey et Ané, 1924 - 1953). See pp. 914 – 915. Leclercq indicates that the SATOR Square is known to have Christian forms from the fourth to the eleventh centuries.

²⁴⁵ Kemp, *The Narratives of Gothic Stained Glass*, Caviness, "Biblical Stories in Windows: Were They Bibles for the Poor?," Caviness, "Biblical Stories in Windows: Were They Bibles for the Poor?," Marilyn Lavin, *The Place of Narrative: Mural Decoration in Italian Churches, 431 - 1600* (Chicago: The University of Chicago Press, 1990), Kemp, *Sermo corporeus : die Erzählung der mittelalterlichen Glasfenster*, Delaporte, *Les Vitraux de la Cathédrale de Chartres: histoire et description*.

²⁴⁶ Delaporte, *Les Vitraux de la Cathédrale de Chartres: histoire et description*.

²⁴⁷ Frankl, "The Chronology of Chartres Cathedral."

by looking at windows with similar subjects in Chartres, Sens, and Bourges.²⁴⁸ Comparing their armatures and the scene represented, he adds shorter spans of numerical sequences within diagrams of the armatures to assist with the viewer in following the narratives of the stories. This he assumes is the intended reading pattern of each window. Kemp utilizes Paul Frankl's classification of the armatures of the windows to build on this rudimentary formal study to interpret the narrative. By suggesting that the imposition of the narrative in an armature is part of the artistic challenge, the space within the armature becomes a creative outlet.²⁴⁹

In 1988, Colette Deremble-Mahnes appropriated Kemp's concerns with armature and in the *Corpus Vitrearum* applied numerical sequences to all the windows in the Cathedral of Chartres; hence, she looks at the entire corpus of narrative windows. Delaporte included the clerestory windows as well. Deremble-Mahnes makes minor changes to some of the narrative orderings suggested by Delaporte.²⁵⁰ In 1991, Madeline Caviness further develops the continuous sequences of reading suggested by Delaporte and Deremble-Mahnes and begins to conceptualize the problem of looking at windows in a continuous reading pattern. She was the first to add continuous trajectory lines to the sequences and diagrams. She states the continuity of the story as a problem to be solved yet at the same time this continuity suggests a solution. The windows were considered a Bible for the illiterate and therefore set/"fixed" patterns enable a

²⁴⁸ Frankl attempts to develop a chronology for the production of the windows at Chartres by looking to the design of the armature or the skeleton holding the glass in place. Kemp uses the armature as an aid to reading the windows and argues that the armature is part of the thought behind narrative formulations.

Kemp, *Sermo corporeus : die Erzählung der mittelalterlichen Glasfenster*. See Teil I: Die Strukturen der Erzählung, pp. 13 – 116. For Chartres, see Chapter Two, pp. 22 – 31. For Bourges see Chapter Three, pp. 32 – 41. For Sens, see pp. 66 – 69.

Frankl, "The Chronology of the Stained Glass in Chartres Cathedral."

²⁴⁹ Frankl, "The Chronology of the Stained Glass in Chartres Cathedral." Kemp has more to say about armatures as I show below.

²⁵⁰ Mahnes-Deremble, *Les vitraux narratifs de la cathédrale de Chartres: étude iconographique*.

reading pattern that can be easily followed by people who are not versed in the stories to help with their edification.²⁵¹

All of these scholars look to the armature as a framework that organizes and presents the story. A study that looks at reading patterns, but does not have the restrictions of an armature to deal with is the 1990 study of Marilyn Lavin who examines narrative sequences in Italian wall paintings. Marilyn Lavin suggested that there are a set group of patterns for the reading of the chronologies of wall fresco cycles and that often these patterns relate to the time period of creation.²⁵² Among Lavin's list of reading patterns is the "wraparound," the "cat's cradle," the "boustrophedon," and the "up, down, down, up." The wraparound (clockwise or here described as the counterclockwise wraparound) or the virtual "C" shaped pattern of motion that is required to move from the apse across the left longitudinal wall to the interior of the west façade continuing along the entrance of the right longitudinal wall ending at the apse on the right side. The "cat's cradle" is an "X" shape that crisscrosses the two lines of reading pattern in the middle. This one is usually found in apse decoration. The boustrophedon is a crenellation pattern that is read "as the ox plows" from left to right up and right to left. Caviness mentions the boustrophedon or epigraphy pattern as a method of reading that is mentioned in Lavin's pattern list; however, Caviness does not credit Lavin with this association.²⁵³ The "up, down, down, up" is usually found in apses with opposing walls from the top down on the left and from the bottom up on the right wall.

Lavin created a computer database in which she attempted to log these patterns in the hopes of finding a contextual solution for why these patterns were chosen. *The Place of*

²⁵¹ Caviness, "Biblical Stories in Windows: Were They Bibles for the Poor?."

²⁵² Lavin, *The Place of Narrative: Mural Decoration in Italian Churches, 431 - 1600*. See pp. 6 – 10.

²⁵³ Caviness, "Biblical Stories in Windows: Were They Bibles for the Poor?."

Narrative is an important pioneering work on looking at how narratives are constructed in their environment and new levels of understanding of these stories as well as recognition of the art of visual reading. Lavin hypothesizes a new message in her reading patterns with an audience who comes to the wall paintings educated. The sequence of development in her “narrative transaction” is the recognition of the story and recall of its events by the viewer, both then and now (Thus, the viewer already knows the story).²⁵⁴ The recognition of a new pattern in the piecemeal and mixed up arrangement and eventually, the discovery of the story’s reading pattern and a meaning in this arrangement is understood. Lavin finds liturgical reasons for odd orderings (organizations that promote liturgical explanations for their distribution in a non-linear way) and though most of her examples are from the Renaissance, they do shed light on medieval patternings. The scope of Lavin’s project is immense! Unlike Caviness, Lavin establishes a pattern for these readings which creates evidence of common ideas governing all these buildings’ development of their programs.

I would like to fuse all the issues that these authors attempt to address, but fundamentally different from all of them, I will suggest that the sequence of the story is *not* the reading pattern. As Kemp suggests that the Prodigal Son is an easily identifiable and traceable storyline, this narrative, he claims, is one of the best illustrations of the use of strict armature and pattern to allow narrative flexibility or finessing.²⁵⁵ Kemp is guided by the idea of *Gestalt* theory in his approach that suggests that the painters of the glass did not repeat armature structures from one window to another but used their creativity to alter the patterns of the narrative to fit in the

²⁵⁴ Lavin, *The Place of Narrative: Mural Decoration in Italian Churches, 431 - 1600*. See p. 6.

²⁵⁵ Gerald Guest, "The Prodigal's Journey: Ideologies of Self and City in the Gothic Cathedral," *Speculum* 81 (2006):35 - 75. Guest discusses the importance of the Prodigal Son narrative to the church’s model of the transgression that results from the secular city life and the need to seek redemption in the spiritual church. This, he argues, accounts for the narrative’s popularity.

respective units of the armature and that the storytellers like the itinerant jongleurs and their creativity in storytelling contributed to the excelling in this art.²⁵⁶ I suggest that the narratives can be understood by *character units*. That is, that instead of attempting to see the narrative as encased in the armature in all instances, the character will suggest a way to break outside of the armature. Kemp focuses on the pictorial creativity of the windows, but does not consider the creativity that may be encased in the design of the reading patterns.²⁵⁷ In fact, Kemp agrees with the outdated statement of Emile Mâle that “Nowhere . . . can any symbolic intention be found in these compositions.”²⁵⁸

I endeavor to show that not only is there symbolic intention in these reading patterns, but there is a language in these patterns that is symbiotically related to visual language—a language that might have been known to the illiterate like the masons through the tools of the architect. In fact, the thesis of Harry Bober that “early practices [from antiquity] in the illumination of scientific, philosophical or technical texts were adapted to the necessities involved in the illumination of Christian texts” will be supported in terms of windows by looking at the colors of the halos as a means of guiding the viewer.²⁵⁹ The color may correspond to certain patterns and by following these patterns in terms of the character, the sequence of the story can be understood. This will further suggest a schematization of the building structure, of the organization of the windows within the buildings, and the organization of the reading patterns in

²⁵⁶ Kemp, *The Narratives of Gothic Stained Glass*. See Chapter Six, pp. 145 – 153.

²⁵⁷ Kemp, *The Narratives of Gothic Stained Glass*. See p. 96.

²⁵⁸ Emile Mâle, *The Gothic Image: Religious Art in France of the Thirteenth Century* (New York: 1958). See p. 199,

²⁵⁹ Harry Bober, “In Principio: Creation Before Time,” in *Essays in Honor of Erwin Panofsky* (New York: New York University Press, 1961), 13 - 28.

individual windows.²⁶⁰ Inevitably, what all these scholars describe but do not acknowledge is the practice of mentally writing that accompanies their reading of the windows.

5.3 THE IMPORTANCE OF COLOR

The scholars cited in the previous section make no mention of contemporary accounts of ‘reading’ medieval images. Perhaps this is because reading images involves a set of rules and is a language in and of itself that is submerged among other implied methods of formal understanding like the postures as I suggest. Contemporary documentation of this language would seem to be a lacuna that is hard to fill; as stated in Chapter Four, a much earlier instance in which a painting is discussed in terms of its affective qualities is the Greek text by Asterius of Amaseia (c. 400) in which he discusses the wall paintings of the martyrdom of Euphemia referred to in Chapter Four.²⁶¹ Asterius’s text may be a rudimentary discussion of reading images because he is discussing a work of art and emphasizes bodily poses along with the highlighting of color’s importance. Whether this was known to Fulbert (or anyone else at Chartres) is highly unlikely.

With this set of visual elements: postures, color and protagonist in mind, I suggest that the color of the halo that frequently changes in the Chartres’s windows may be read as a guide to drawing mental lines to create a narrative chronology. This chronology may be made up of angles and lines that in turn are suggestive of postures. As each window in this study acts as its

²⁶⁰ Bober, "In Principio: Creation Before Time."

²⁶¹ Notably, Asterius states that he has just concluded a session of reading Demosthenes, an author that Gerbert d’Aurillac orders in tandem with a copy of Marcus Manilius from Bobbio. Asterius of Amaseia, "Description of a painting of the martyrdom of St. Euphemia," in *The Art of the Byzantine Empire, 312 - 1453: Sources and Documents*, ed. Cyril Mango (Englewood Cliffs, new Jersey: Prentice Hall, Inc., 1972): 37 – 39.

own memory room, when the themes of the windows change, these postures undergo a set of permutations.

Table 14: Saints and Character Units

Saint or Saints	Type of Character	Dominant Unit of Reading	Dominant Unit Color of Halos	Ancillary Units
Red-Acute Angle				
Anthony and Paul 251 – 356, unknown – 341	Confessors	Acute Angle	Red (Free Will)	Red—Right Angle (early life) Yellow—Horizontal Line (devil)
Apollinare Unknown	Martyr	Acute Angle	Red (Free Will)	Blue—Horizontal Line (Secular)
Cheron 3 rd century	Martyr	Acute Angle	Red (Free Will)	Blue—Acute Angle (Secular, King and Pilgrims)
Julian the Hospitaller Unknown	Martyr	Acute Angle	Red (Free Will)	Blue—Horizontal Line (early life and end of life) Green—Horizontal Line (battle)
Nicholas, Life 270 – 346	Confessor	Acute Angle	Red (Free Will)	Green—Horizontal Line Blue—Horizontal Line Blue—Right Angle
Nicholas, Miracles II After 4 th c.	Confessor	Acute Angle	Red (Free Will)	Red—Right Angle (early life) Blue—Acute Angle Blue—Right

				Angle
Pantaleon 3 rd – 4 th c.	Martyr	Acute Angle	Red (Free Will)	Blue— Horizontal Lines (Emperor Maximen, Hermolaus)
Remi d. 533	Confessor	Acute Angle	Red (Free Will)	Blue— Acute Angle (Clovis and wife)
Stephen 1 st c.	Martyr	Acute Angle	Red (Free Will)	Blue— Acute Angle (Relic Characters)
Sylvester 946 – 1003	Pope, Confessor	Acute Angle	Red (Free Will)	Green— Early life Blue— Constantine
Blue-Horizontal Line				
Lubin 6 th c.	Confessor	Horizontal Line	Blue (Adolescence)	Red—Acute Angle
Prodigal Son B.C.	Secular	Horizontal Line	Blue (Repentance)	Blue— Acute Angle (beginning of his journey)
Red-Right Angle				
Gemain of Auxerre d. 448	Bishop and Martyr	Right Angle	Red (Free Will)	No Other
Martin of Tours 316 – 391	Bishop and Confessor	Right Angle	Red (Free Will)	Red—Acute Angle (early life) Blue— Acute Angle (after death) Blue— Horizontal Line (relic transfer)
Simon and Jude 1 st c.	Martyrs (martyrdom not shown)	Right Angle	Red (Free Will)	Blue— Acute Angle (Magicians)
Blue-Acute Angle				
Becket	Martyr	Acute Angle	Blue	Red—Right

1118 – 1170			(Determinism)	Angle (Before Archbishop)
Eustace 2 nd c.	Martyr	Acute Angle	Blue (Determinism)	Blue— Horizontal Line (Emperor)
Joseph the Patriarch B.C.	Prophet, not martyr	Acute Angle	Blue (Determinism)	Red—Right Angle (Pharoah and Family)
Nicholas, Miracles I After 4 th c.	Archbishop Confessor	Acute Angle	Blue (Miracles— Determinism)	Red—Right Angle (Nicholas in person)
Red-Horizontal Line				
Belle Verriere B.C.	Christ (narrative)	Horizontal Line	Red (Free Will)	Blue—Right Angle (Wedding Feast)
Varied				
Charlemagne 742 – 814	Blessed	Variety	Variety of Stages of Free Will and Determinism	Green— Horizontal Line → Blue— Acute Angle → Green— Horizontal Line → Blue— Acute Angle → Red—Right Angle (2) Roland Blue— Acute Angle → Red— Right Angle
Creation/Good Samaritan B.C.	Old Testament	Variety	Variety	Red—Acute Angle (Christ tells story)→ Blue— Acute Angle (GS helps

				pilgrim→ Red—Acute Angle (Creation)→ Blue— Horizontal Line (Fall)→ Blue— Acute Angle (expelled)
Mary Magdalen 1 st c.	Converted Ascetic	Variety	Variety of Stages of Free Will and Repentance	Blue— Horizontal Line Yellow— Vertical Line Red—Acute Angle Green— Right Angle
Noah B.C.	Old Testament	Blue	Unusual	
Savinian and Potentian d. 390	Martyrs	Variety	Variety of Free Will and Determinism	
Theodore and Vincent 3 rd – 4 th c.	Martyrs	Variety	Variety of Free Will and Determinism	
Thomas 1 st c.	Apostle	Variety	Variety of Free Will and Determinism	
Virgin, (Dormition, Assumption, Coronation) 1 st c.	Mother of God	Vertical Line	Variety of Free Will and Determinism	
Virgin, Life B.C.	Mother of God	Variety	Variety of Free Will and Determinism	Blue— Acute Angle (Joachim and Anna) Green— Horizontal Line (early life) Multicolored

				Blue— Horizontal Lines (majority)
Zodiac	Pagan	Variety	Variety	
Andrew 1 st c.	Apostle	RESTORATION	RESTORATION	
Apostles 1 st c.	Apostles	RESTORATION	RESTORATION	
Paul 1 st c.	Apostle	RESTORATION	RESTORATION	
Typological	Old and New Testament	RESTORATION	RESTORATION	
Virgin, Miracles of	Mother of God	RESTORATION	RESTORATION	
John the Evangelist	Evangelist	REORDERED	REORDERED	
James the Greater 1 st c.	Apostle	REORDERED	REORDERED	
Margaret and Catherine 4 th c.	Martyrs	REORDERED	REORDERED	

The object of this study is to isolate patterns and investigate visual and the implied linear forms based on the positions of scenes in the narrative windows. From the windows that remain with the least amount of restoration, the following conclusions resulted from an assessment of what was extant and intact. See below for the diagrams that enforce and act as evidence for these conclusions.

The use of a last ordering in Table 11 of the postures is a hallmark of a Christian, religious individual. Many of these individuals' lives begin with them as babes in arms and they have not yet become indoctrinated in religion, but often show a proclivity toward Christianity (exp. Nicholas refusing his mother's milk in the Pedagogical Window shows that he has free will

in his infancy.). Before becoming religious, usually these protagonists have a middle order that is employed in the organization of that part of their narrative.

Different types of miracles are also subject to different orderings as shown in Table 11. Miracles performed by ordained religious Christians are based on a last position. If the miracles are performed by protagonists who have not been baptized or are not yet Christian figures, the ordering used is first position (Pantaleon is an example although his miracles become last position after he is baptized). This suggests the first and last positions as significations like the chiasmic organization of Peter of Celle's words. The pagan stories would have signification or blood before seeing the signifier of saintliness. Miracles to counter pagan forces are first (like Martin and Simon and Jude). Local saints like Cheron and Lubin (their religious lives and their miracles) are represented in last position orderings. The miracles in secular figures like Charlemagne's narrative and Jews like Joseph are all represented through a middle ordering. The miracles of a translation of relics are also in a middle position. The middle position suggests the need for penitence where the signifiers are found in Peter of Celle's words.

Some of the windows work better in these ordering categories than others. The Joseph Window and the Nicholas Miracles Window are two that create problems for the hypothesis that the postures govern the writing/reading of the windows. It should be noted that this type of methodology allows for flexibility in interpretation so that breaking the rules or *nomos* occurs in some cases. In some instances, I am able to explain this and in others I simply do not know why. I think this does not necessarily defeat the hypothesis, but instead suggests that improvisation and creativity were in part implemented in these narratives. As will be shown below, rules are considered to apply in some cases and in others not always and this may be part of the interpretive plan. I may not have the foresight to understand all these nuances.

Just as in the Byrhtferth diagram, the angles and colors in the windows reflect the idea of the elements. If at Chartres, the color blue is related to coldness and the color red is related to heat, the right angle can be related to dryness and the acute angle can be related to moisture. This is possible by looking at the number of windows with these combinations in them. For example, the blue right angle appears in only two saints' narratives (the Life of Nicholas and the Miracles of Nicholas and the Belle Verrière) and the red right angle appears as a dominant reading pattern in three narratives (Germain of Auxerre, Simon and Jude, Martin of Tours). The blue acute angle appears as a dominant unit in four narratives (Becket, Eustace, Joseph, and Nicholas Miracles Window). The red acute angle appears as a dominant unit in nine saints' narratives (Anthony and Paul, Apollinare, Cheron, Julian the Hospitaller, Nicholas Life and Miracles, Pantaleon, Remi, Stephen, Sylvester). This creates a lambda diagram imposed on the William of Conches circular diagram, which in fact is relayed in another William of Conches diagram that is a pyramid.

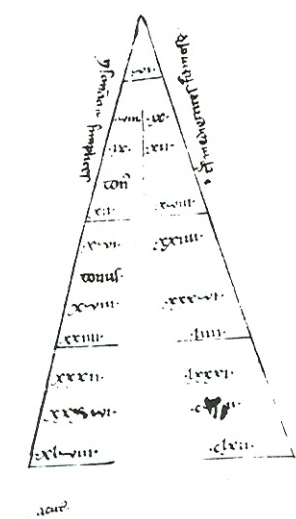


Figure 23: Florence Bibl Nazionale Conv sopp E 8 1398 f. 1v

Thus, the blue right angle that is related to two windows is cold and dry and thus, earth. Across from two on the lambda diagram is the number three (three windows) with the red right angle that is hot and dry and thus, fire. Below three is nine (for nine windows), the red acute angle which is hot and moist or air. Across from nine and below two is four windows in this category and that is the blue acute angle which is cold and moist or water. This replicates the William of Conches Diagram from Figure 4 and also places water and earth on the side of the lambda diagram with even or feminine numbers and fire and air on the side of the lambda diagram with odd or masculine numbers.²⁶²

Though Manilius does not say anything about the signification of the postures as mutable, I argue that the penitent would have used the posture as a signifier to reach the signification of repentance while the martyr uses the signification of their sacrifices to reach a signifier of saintliness.²⁶³ Because I am suggesting Chartres as a penitential structure, signifier comes first

²⁶² William writes spuriously about the trifling concerns of feminine and masculine associations to the humors. See Chapter Two. "Or did they, like the adherents of Pythagoras, regard the even numbers as female and the odd numbers as male? For the odd number is generative, and, when it is added to the even number, it prevails over it. And also, when they are divided into units, the even number, like the female, yields a vacant space between, while of the odd number an integral part always remains. Wherefore they think that the odd is suitable for the male, and the even for the female." Plutarch, *Moralia*, Ed. T.E. Page, E. Capps, W. H. D. Rouse, L. A. Post, and E. H. Warmington. Trans. Frank Cole Babbitt. (Cambridge: Harvard University Press, 1962), (Loeb Classical Edition) Vol. 4 of 15. See 153, 288D. pp. 152 – 153.

²⁶³ In the circle of thinkers from Paris and Chartres at the time of the Gratian's *Decretum*'s rise Peter the Chanter was known to Chartrains like Alan of Lille and Peter proposed ideas related to consanguinity, a topic explored in Chapter Two, but also ideas related to penance and prayer. Peter the Chanter establishes a variety of seven postures that are appropriate for prayer in his *De penitentia et partibus eius*. By viewing these angles as postures, an extra step is added to the process of conceptualization. That is, the posture is connected to the angle and the element is connected to the angle, but both are connected to the color. This is suggestive of Chartrain ideology about humanity. Hermetic thought, which is found in certain forms in Thierry of Chartres's *On the Works of the Six Days*, indicates that humanity is the meeting point of the sensory world and the celestial world. The postures can be aligned with human comportment or the sensory while the angles and colors may represent elements and their place in time. This book was a prayer book for the minister, so it is unlikely to have had a lay audience. See Trexler, *The Christian at Prayer: An Illustrated Prayer Manual Attributed to Peter the Chanter (d. 1197)*. p. 76. See footnote 43. It is also found in Thierry's Commentary on Boethius's *De Trinitate*. See Thierry of Chartres, *De Trinitate in Commentaries on Boethius by Thierry of Chartres and his School* Book II, 9 – 10, Häring, p. 270. Wetherbee, "Philosophy, cosmology, and the twelfth-century Renaissance." See pp. 36 – 37.

in the nave and is static and signification comes next in the choir in such a way that it is mutable. While the structure relates to martyrdom, like the saint, the signification or element comes first in the choir and is related to signifier (zodiac sign) (see Chapter Three for the Trinitarian use of multiple zodiac sign signifiers for singular substances, elements, or significations). Thus, there is an inversion in the practice and reading of saintliness and penance. This is seen in the inversion of the words ‘flesh and blood’ in the quotation by Peter of Celle. Blood to flesh is saved and flesh to blood is not part of God’s kingdom.²⁶⁴ In a chiasmic way, blood encases flesh within it. As shown in the windows, the blood as wine in its use in the Creation and Good Samaritan Window and the Belle Verriere’s narrative of the Marriage of Cana and the Temptation of Christ suggest the blood as signification and the body as signifier.

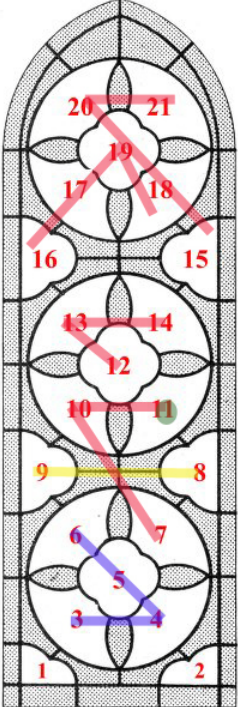
5.4 WINDOW DIAGRAMS WITH COLORS AND POSTURES

In the following set of diagrams, B stands for background and H stands for halo. As stated previously, the colors of the halos are found in the Byrhtferth diagram and are related to the elements (red is fire, yellow is air, green is water and blue is earth).

Through people like Adelard of Bath, Petrus Alfonsi, Hermann of Carinthia, and al-Khwarizmi, Thierry had exposure to hermetic sources. The inclusion of time in the information that the angles may present suggests an interesting corollary to Cubism and the representation of the fourth dimension in the *avant garde*.

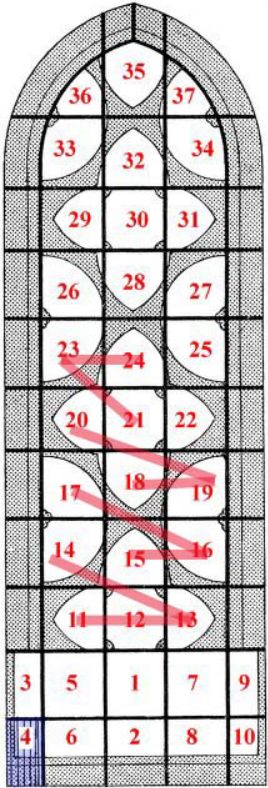
²⁶⁴ This idea is further echoed on the west façade of Chartres. The scene of Christ’s baptism and temptation to turn stones into bread is coupled with Judas’s reception of money in exchange for the flesh of Christ. While Christ is baptized in signification and becomes a signifier through the act, Christ refrains from turning the stone, signifier, into the bread which is also signifier. Conversely, Judas exchanges the signifier of the flesh for the signifier of money. This is next to the scene of the Last Supper and its suggestion of signifier and signified, but most notably, the name of ROGERVS that is accompanied with the figure of the butcher. This may suggest the idea that the artisan that uses a signifier on works that signify have a similar place on the frieze. This also suggests the quotation from Peter of Celle. Adelheid Heimann, "The Capital Frieze and Pilasters of the Portail Royal, Chartres," *Journal of the Warburg and Courtauld Institutes* 31 (1968):73 - 102. See p. 96. Marcel Aubert, "Le Portail Royal et la Façade Occidentale de la Cathédrale de Chartres," *Bulletin monumental c - ci* (1941 - 42):177 - 218. See p. 209. Eugène Lefèvre-Pontalis, "Les Façades successives de la Cathédrale de Chartres au XIe et XIIe siècle," *Congrès Archéologique* lxxvii (1900):256 - 307. See p. 304.

Table 15: Anthony and Paul Window

<p style="text-align: center;">Chartres Cathedral: The St. Anthony and St. Paul the Hermit Window <small>Deremble-Manhes no. 30B, Delaporte no. 13</small></p>  <p>21: Death of Anthony 20: Anthony distributes his clothing before he dies 19: Lions dig Paul's grave 18: Anthony sees Paul's soul taken to Heaven 17: Anthony and Paul pray</p> <p>16: Anthony and Paul share a meal 15: Anthony reads</p> <p>14: Anthony is rescued 13: Anthony is attacked by demons 12: Two men see Anthony lying on the ground 11: Anthony is attacked by demons 10: Anthony speaks to a young man</p> <p>9: A devil speaks to Anthony 8: Temptation of Anthony</p> <p>7: Anthony does manual labor 6: Anthony and the hermit 5: Anthony presents his sister to two religious women 4: Anthony gives his goods to the poor 3: Anthony and his sister enter a church</p> <p>2: Donors- A scene of selling 1: Donors</p> <p><small>After Delaporte Fitzmaurice, p. 212. Copyright Jane Vadnal.</small></p>	<ol style="list-style-type: none"> 1. Donor 2. Donor 3. Blue-Anthony (B) 4. Blue-Anthony (B) 5. Blue-Anthony (B) 6. Blue-Anthony (B), Paul (B) 7. Red-Anthony (H) 8. Yellow-Anthony (H)/Devil 9. Yellow-Anthony (H)/Devil 10. Red-Anthony (H) 11. Green-Anthony (H) 12. Red-Anthony (H) 13. Red-Anthony (H) 14. Red-Anthony (H) 15. Red-Anthony (H) 16. Red-Anthony, Paul (1) (H) 17. Red-Anthony, Paul (2) (H) 18. Red-Anthony, Paul (4) (H) 19. Red-Anthony, Paul (3) (H) 20. Red-Anthony (H) 21. Red-Anthony (H)
<p>The main protagonist of the Anthony and Paul the Hermit Window is Anthony. In the beginning of the window, Anthony is represented by secondary or middle position orderings (running earth) because he has not yet converted to a religious life. However, when he does, he achieves awareness and is represented with a red halo. In the next level, the unusual position of yellow halos in a horizontal trajectory instead of the perpetual, upright and vertical stance is explained by the presence of the devil in the narrative. Anthony's conversion to a religious life through his trials is marked by the beginning of a last position ordering in his narrative. As is shown, a last ordering is marked by saints that have a predominantly red halo and this may be associated with Anthony and Paul's decisions as related to their adult free will or knowledge. The point of green reflects the inability of Anthony to exercise aware control while being attacked by demons.</p>	

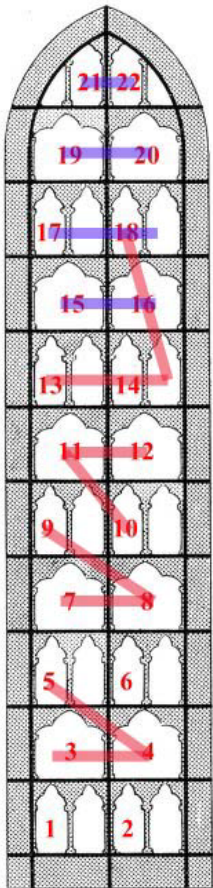
Anthony and Paul 251 – 356, unknown – 341	Confessors	Acute Angle	Red	Yellow—Horizontal Line (devil)
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Table 16: Apollinare Window

<p style="text-align: center;">Chartres Cathedral Windows: Apollinare and the Choirs of Angels</p> <p style="text-align: center;">Deremble- Manhes no. 36, Delaporte no. 10</p>  <p style="text-align: center;">Diagram after Delaporte <i>Vitraux</i>, p. 197. Panel numbering from Manhes-Deremble. © Jane Vadnol, 2005.</p>	<p>11. Red-Apollinare (H)</p> <p>12. Red-Apollinare (H)</p> <p>13. Red-Apollinare (H)</p> <p>14. Red-Apollinare (H)</p> <p>15. Red-Apollinare (H)</p> <p>16. Red-Apollinare (H)</p> <p>17. Red-Apollinare (H)</p> <p>18. Red-Apollinare (H)</p> <p>19. Red-Apollinare (H)</p> <p>20. Red-Apollinare (H)</p> <p>21. Red-Apollinare (H)</p> <p>22. Secular (B)</p> <p>23. Red-Apollinare (H)</p> <p>24. Red-Apollinare (H)</p> <p>25. Secular (B)</p>
<p>In the Apollinare Window, the majority of ‘writing’ units is red and may relate to the free will of Apollinare. He is capable of virtue as shown in his red halo. Apollinare is ordained throughout the window and he is performing miracles. He is represented in the last position.</p>	

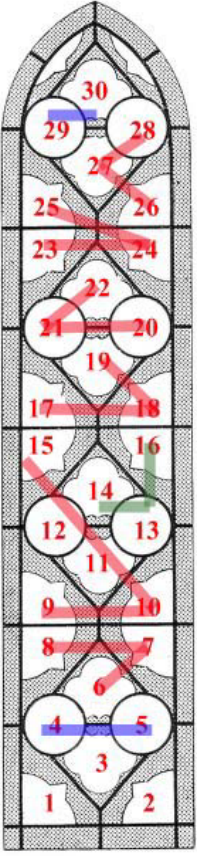
Apollinare Unknown Dates	Martyr	Acute Angle	Red	Blue—Horizontal Line (Secular)
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Table 17: Cheron Window

Chartres Cathedral: The St. Chéron Window		
Deremble-Manhes no. 15, Delaporte no. 42		
	<p>22: Bishop donates chalice 21: A man with a chalice</p> <p>20: King Clotaire's son's retinue rest 19: King Clotaire's son's retinue</p> <p>18: Chéron appears to King Clotaire's son 17: King Clotaire and his young son</p> <p>16: The translations of Chéron's relics 15: Pilgrims to the shrine of Chéron</p> <p>14: Chéron appears to Abbott Aper 13: Elevation of Chéron's soul/ Chéron near fountain</p> <p>12: Chéron carries his head 11: Chéron killed by bandits</p> <p>10: Chéron heals a chariot driver 09: Chéron tells of his approaching martyrdom</p> <p>08: Chéron heals a blind man 07: Chéron heals a woman possessed by demons</p> <p>05-6: Chéron refuses to marry</p> <p>04: Chéron at school 03: Chéron's parents take him to school</p> <p>02: Donors- stone workers carve statues 01: Donors- masons and stone cutters at work</p>	<p>3. Red-Cheron (H) 4. Red-Cheron (H) 5. Red-Cheron (H) 6. Blue-Secular (B) 7. Red-Cheron (H) 8. Red-Cheron (H) 9. Red-Cheron (H) 10. Red-Cheron (H) 11. Red-Cheron (H) 12. Red-Cheron (H) 13. Red-Cheron (H) 14. Red-Cheron (H) 15. Blue-Secular (B) 16. Blue-Secular (B) 17. Blue-Secular (B) 18. Blue-Secular (B), Red-Cheron (H) 19. Blue-Secular (B) 20. Blue-Secular (B) 21. Blue-Secular (B) 22. Blue-Secular (B)</p>
	<p>After Delaporte <i>Fitraux</i>, p. 338. Copyright Jane Vadnal.</p>	
<p>The Cheron Window is predominantly made of red halos for the saint and acute forms that may relate to free will. Cheron is a local saint. The blue figures are secular and are represented in the first position while Cheron has progressed to the last position. He exhibits free will by refusing to marry.</p>		

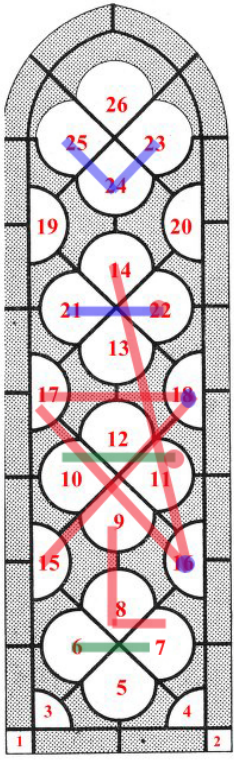
Cheron 3 rd century	Martyr	Acute Angle	Red	Blue—Horizontal Line (Secular, King and Pilgrims)
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Table 18: Julian the Hospitaller Window

<p style="text-align: center;">Chartres Cathedral: The Julian the Hospitaller Window</p> <p style="text-align: center;">Deremble-Manhes no. 21, Delaporte no. 45</p>  <p>30: Deaths of Julian and his wife 29: Julian's wife holds a lamp to guide his boat 28: Julian in his boat 27: Christ on the riverbank 26: Julian washes travelers' feet 25: Julian and his wife greet travelers 24: Julian and his wife build a hospice 23: Julian and his wife cross river 22: Julian & wife leave for pilgrimage 21: Funeral of Julian's parents 20: Julian mourns his parents 19: Julian meets his wife 18: Julian kills his parents 17: Julian enters his castle 16: Julian departs for his home 15: Julian sleeps in his tent 14: Julian and his troops in front of a city gate 13: Battle 12: Julian and his companions leave for war 11: Julian's wedding feast 10: Julian is married 9 A man is dead 8 A man gets the last rites 7: Julian's lord gives him a scepter 6: Julian serves his master 5: Julian's parents present him to a lord (?) 4: Julian with his parents (?) 3: Donors - the woodworkers 2: Donors - the wheelwrights and coopers 1: Donors - the carpenters</p> <p style="font-size: small;">After Delaporte <i>Vitrancx</i>, p. 351. Copyright Jane Vaidmal</p>	<ol style="list-style-type: none"> 4. Blue-Julian (B) 5. Blue-Julian (B) 6. Red-Julian (B) 7. Red-Julian (H) 8. Red-Julian (H) 9. Red-Julian (H) 10. Red-Julian (H) 11. Red-Julian (H) 12. Red-Julian (H) 13. Green (2)-Julian (H) 14. Green (1)-Julian (H) 15. Red-Julian (H) 16. Green (3)-Julian (H) 17. Red-Julian (H) 18. Red-Julian (H) 19. Red-Julian (H) 20. Red-Julian (H) 21. Red-Julian (H) 22. Red-Julian (H) 23. Red-Julian (H) 24. Red-Julian (H) 25. Red-Julian (H) 26. Red-Julian (H) 27. Red-Julian (H), Green-Christ (H) 28. Red-Julian (H) 29. Blue-Julian's wife (B) 30. Red-Julian (H), Blue-Julian's wife (B)
<p>The Julian Window has predominantly red halos. Julian's serving of his master may be an innuendo for serving God, making his color, red/aware or free will and moving him from the first to the last position. The green and blue of the parents of Julian and the battle shows that events outside of his own awareness are dictating his fate. The green right angle is the middle position and may relate to determinism instead of conscious decision.</p>	

Julian the Hospitaller Unknown	Martyr	Acute Angle	Red	Blue—Horizontal Line (early life and end of life) Green—Horizontal Line (battle)
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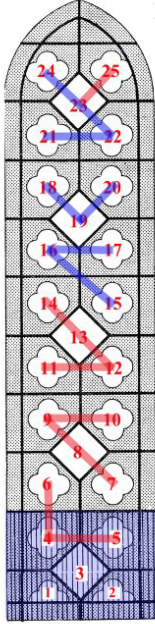
Table 19: Life of Nicholas Window

<p>Chartres Cathedral: Life of St. Nicholas Window</p> <p><small>Dereemble-Manhes no. 39, Delaporte no. 60</small></p>  <p>26 A Jew beats the statue of St. Nicholas 25 Death of the debtor 24 Debtor swears he has already repaid his debt 23 Debtor swears he will repay his debt 22 Nicholas returns the child to his parents 21 Child with a cup falls into the sea 20 Innkeeper and his wife murder three young men 19 Innkeeper meets three young men 18 Men carrying sacks 17 Nicholas and seated men 16 Men in a ship 15 Nicholas asks sailors for aid during a famine 14 Nicholas consecrated Bishop of Myra 13 A woman and her baby 12 Nicholas is chosen to be Bishop of Myra 11 Nicholas is thanked by the father of the girls 10 Nicholas Provides dowries for 3 poor girls 9 Nicholas at school 8 The infant Nicholas refuses his mother's milk 7 Bath of the infant Nicholas 6 Birth of Nicholas 1-5 Donors: the Grocers, Apothecaries and Haberdashers</p> <p><small>After Delaporte <i>Fitraux</i>, p. 392. Copyright Jane Viall.</small></p>	<p>6. Green-Nicholas (H) 7. Red-Nicholas (H) 8. Red-Nicholas (H) 9. Red-Nicholas (H) 10. Green-Nicholas (H) 11. Green-Nicholas (H) 12. Green-Nicholas (H) 13. Blue-Woman and Baby (B) 14. Red-Nicholas (H) 15. Red-Nicholas (H) 16. Blue-Sailors (B) 17. Red-Nicholas (H) 18. Blue-Sailors (B) 19. 20. 21. Blue-Child (B) 22. Red-Nicholas (H) 23. Blue-Debtor (B) 24. Blue-Debtor (B) 25. Blue-Debtor (B) 26. Blue-Jew (B)</p>
<p>Nicholas is not a religious at the beginning of this narrative and as this non-religious, he asserts his free will and refuses his mother's milk; however he is in the first position. The act of the dowries is a miracle mixed with awareness and lack of awareness and thus, red and green. Nicholas becomes a religious in narrative unit fourteen. He performs a "Eucharistic" miracle of the multiplying of the grain. (See Creation Window and Adam from earth for the acute red angle with blue connecting point.) This is a red or free will miracle. The point of blue is the unaware situation for the sailors. The use of blue in the secular figures shows the lack of awareness of their situations until the right angle with the baptism of the Jew. This act (the baptism of the Jew) results in a "progression" of the postures to a new set of associations. The secular figures in the window are represented by the first position and the baptism of the Jew results in the movement of the postures to the last position, the same position as martyrs.</p>	

<p>Nicholas, Life 270 – 346</p>	<p>Confessor</p>	<p>Acute Angle</p>	<p>Red</p>	<p>Green—Horizontal Line Blue—Horizontal Line</p>
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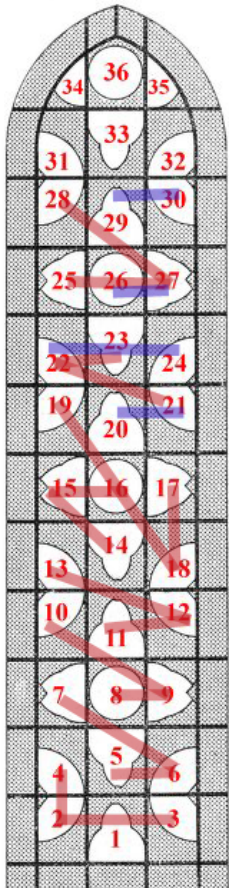
				Blue—Right Angle
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Table 20: Life of Nicholas Window

<p>Chartres Cathedral: Life of St. Nicholas Window</p> <p><small>Dereble-Manhes no. 14, Delaporte no. 27</small></p>  <p>25: Nicholas returns the child to his parents 24: Child with a cup falls into the sea 23: Nicholas raises the three young men 22: Innkeeper and his wife murder three young men 21: Innkeeper meets three young men 20: Jew beats the statue of St. Nicholas 19: Baptism of the Jew 18: Death of the debtor 17: Debtor swears he has repaid his debt 16: Man swears to repay a debt 15: Men in a ship 14: Nicholas asks sailors for aid during a famine 13: Nicholas consecrated Bishop of Myra 12: Nicholas kneels before an altar 11: Nicholas is escorted into a church 10: Nicholas is addressed by two young men 9: Nicholas prays 8: Nicholas provides dowries for poor girls 7: Nicholas at school 6: The infant Nicholas refuses his mother's milk 5: Bath of the infant Nicholas 4: Birth of Nicholas 3: Angels holding a cartouche 2: Angel holding a scroll MODERN 1: Angel holding a scroll MODERN</p> <p><small>Diagram adapted from Delaporte <i>Firoux</i>, p. 262. Numbering scheme from Dereble-Manhes. Copyright Jane Vidal.</small></p>	<p>6. Red-Nicholas (H) 7. Red-Nicholas (H) 8. Red-Nicholas (H) 9. Red-Nicholas (H) 10. Red-Nicholas (H) 11. Red-Nicholas (H) 12. Red-Nicholas (H) 13. Red-Nicholas (H) 14. Red-Nicholas (H) 15. Blue-Secular (B) 16. Blue-Secular (B) 17. Blue-Secular (B) 18. Blue-Secular (B) 19. Blue-Secular (B) 20. Blue-Secular (B) 21. Blue-Secular (B) 22. Blue-Secular (B) 23. Red-Nicholas (H), Blue-Secular (B) 24. Blue-Secular (B) 25. Red-Nicholas (H)</p>
<p>Originally, in the life of Nicholas Window, Nicholas is described using first position orderings, hence the seated red (which is partly conjectural due to loss). Panel 6 is red which represents Nicholas's free will in refusing his mother's milk. Like Anthony, part of Nicholas's life is the transition from non-religious to religious and this is reflected in the change of orderings. In this window, the dowry miracle is represented in last position orderings and perhaps this is a rendition that tells the narrative of Nicholas's first miracle as happening after he becomes a religious and in this instance the miracle is completely based on free will.</p>	

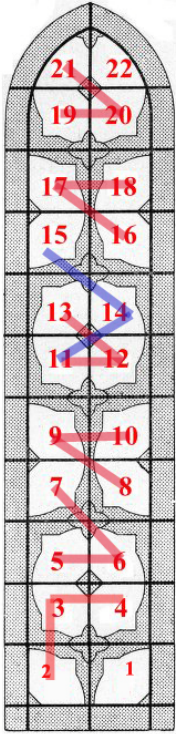
Nicholas, Miracles II After 4 th c.	Confessor	Acute Angle	Red	Red—Right Angle (early life) Blue—Acute Angle
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Table 21: Pantaléon Window

Chartres Cathedral: The St. Pantaléon Window	
Deremble-Manhes no. 11, Delaporte no. 40	
	<p>36: Christ blessing 34-5: Angel 33: Pantaléon's soul carried to Heaven 31-2: Censing angel 29: Pantaléon is martyred 28: Pantaléon prays in front of his executioners 27: Pantaléon before Maximien 26: Entombment of Hermolaus 25: Hermolaus is beheaded 24: Fall of the idols 23: Pantaléon and Hermolaus before Maximien 22: Pantaléon goes to find Hermolaus 21: Pantaléon before Maximien 20: Maximien and an advisor (?) 19: The wheel breaks 18: Pantaléon tortured on a wheel 17: Pantaléon led to his execution 16: Pantaléon before Emperor Maximien 15: Pantaléon is rescued by Christ 14: Pantaléon is visited by an angel in prison 13: Pantaléon is thrown to wild beasts 12: Pantaléon is thrown into the sea 11: Pantaléon in a cauldron of molten lead 10: Pantaléon is tied to a cross and burned 9: Pantaléon imprisoned 8: Pantaléon before the Emperor Maximien 7: Pantaléon cures a paralyzed man 6: Pantaléon cures a blind man 5: Pantaléon is baptized 4: Pantaléon raises a man bitten by a snake 3: Pantaléon with the priest Hermolaus 2: Pantaléon studies medicine 1: Donor – Deacon Nicholas Lescine</p>
	<p>2. Red-Pantaleon (H) 3. Red-Pantaleon (H) 4. Red-Pantaleon (H) 5. Red-Pantaleon (H) 6. Red-Pantaleon (H) 7. Red-Pantaleon (H) 8. Red-Pantaleon (H) 9. Red-Pantaleon (H) 10. Red-Pantaleon (H) 11. Red-Pantaleon (H) 12. Red-Pantaleon (H) 13. Purple-Pantaleon (H) 14. Red-Pantaleon (H) 15. Red-Pantaleon (H) 16. Red-Pantaleon (H) 17. Purple-Pantaleon (H) 18. Purple-Pantaleon (H) 19. Red-Pantaleon (H) 20. Blue (B) 21. Red-Pantaleon (H), Blue-King (B) 22. Red (H), Blue (H) 23. Red (H), Red (H) 24. Blue (B) 25. Red (H) 26. Blue (H) 27. Red- (H), Blue-King (B) 28. Red (H) 29. Green (H), Blue Face-Executioner 30. Blue (H)</p>
<p>Pantaleon's first miracle occurs as a non-religious and thus, is a first position ordering; however, it is red and shows awareness. After becoming baptized in panel five, Pantaleon takes on ordering for his life and his miracles that is the last position. The predominance of red reflects free will.</p>	

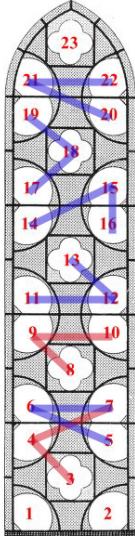
Pantaleon 3 rd – 4 th c.	Martyr	Acute Angle	Red	Red Martyrdom	Blue—Horizontal Lines (Emperor Maximen, Hermolaus)
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Table 22: Remi Window

<p style="text-align: center;">Chartres Cathedral: St. Remi Window</p> <p style="text-align: center;"><small>Deremble-Mahnes no. 12, Delaporte no. 28</small></p>  <p>22: An angel takes Rémi 's soul to Heaven 21: Death of Rémi 20: Rémi shows Clovis a burning man on an altar 19: Rémi Speaks to Clovis</p> <p>18: Clovis enthroned 17: Baptism of Clovis 16: Rémi prays 15: Queen Clotilde prays</p> <p>14: Rémi causes wine to appear 13: Rémi eats a meal 12: Rémi miraculously stops a fire consuming Reims 11: Rémi preaches to King Clovis and Queen Clotilde</p> <p>10: Rémi blesses a woman and a man 9: Rémi on horseback 8: Clotilde and Rémi 7: Rémi cures a man possessed by a demon</p> <p>6: Rémi invested as Archbishop of Reims 5: Rémi chosen to be a bishop 4: Rémi escapes from the assassins 3: Rémi attacked by assassins</p> <p>2: St: Rémi cures a hermit of blindness 1: Donor</p>	<p>2. Red-Remi (H) 3. Reddish Purple (H) 4. Reddish Purple (H) 5. Red-Remi (H) 6. Red-Remi (H) 7. Red-Remi (H) 8. Red-Remi (H) 9. Red-Remi (H) 10. Red-Remi (H) 11. Blue-King and Queen (B), Red-Remi (H) 12. Red-Remi (H) 13. Red-Remi (H) 14. Blue-Secular (B) 15. Blue-Queen (B) 16. Red-Remi (H) 17. Red-Remi (H) 18. Red-Remi (H) 19. Red-Remi (H) 20. Red-Remi (H) 21. Red-Remi (H) 22. Red-Remi (H)</p>
<p>Remi's narrative begins with him as an ecclesiastic but he is aware and this is reflected in the red halo. Remi is non-religious in his first miracle with a first position ordering. When he is chosen as a bishop, he takes on a last position ordering while the king and queen are represented in first position.</p>	

Remi d. 533	Confessor	Acute Angle	Red	White Martyrdom	Blue—Acute Angle (Clovis and wife)
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Table 23: Stephen and the Translation of his Relics

<p>Chartres Cathedral: The St. Stephen and the Translation of His Relics Window</p> <p><small>Dereble-Manhes no. 13, Delaporte no. 41</small></p>  <p>23: Elevation of Stephen's soul 22: A procession greets the arrival of the relics 21: The relics are transported 20: Crowd views the arrival of relics 19: The relics arrive in Constantinople 18: A tempest 17: A king leads horsemen 16: A demon appears to a sleeping king 15: Juliana and relics depart for Constantinople 14: The relics are transported 13: St. Stephen is disinterred 12: Juliana asks for her husband's body 11: Burial of Stephen 10: Martyrdom of Stephen 9: Saul holds garments of Stephen & executioners 8: Stephen is lead to the place of execution 7: Stephen is inspired 6: Stephen before the High Priest 5: King and Jews 4: Stephen with an angel 3: Stephen between two apostles 2: Donors: Cobblers donate the window 1: Donors: Cobblers at work</p> <p><small>After Delaporte <i>France</i>, p. 332. Copyright Jane Vadnal.</small></p>	<p>3. Red-Stephen (H) 4. Red-Stephen (H) 5. Blue-Jews (B) 6. Red-Stephen (H), Blue-Jews (B) 7. Red-Stephen (H), Blue-Jews (B) 8. Red-Stephen (H) 9. Red-Cape as Background, Executioners 10. Red Face-Stephen 11. Blue-Secular (B) 12. Blue-Secular (B) 13. Blue-Secular (B) 14. Blue-Secular (B) 15. Blue-Secular (B) 16. Blue-Secular (B) 17. Blue-Secular (B) 18. Blue-Secular (B) 19. Blue-Secular (B) 20. Blue-Secular (B) 21. Blue-Secular (B) 22. Blue-Secular (B)</p>
<p>Stephen is an ecclesiastical figure and he is represented with a last position ordering (he is aware) while the secular figures and Jews in this window are represented with a middle position order. The miracles of translation of relics are also first position order miracles.</p>	

Stephen 1 st c.	Martyr	Acute Angle	Red	Blue—Acute Angle (Relic Characters)
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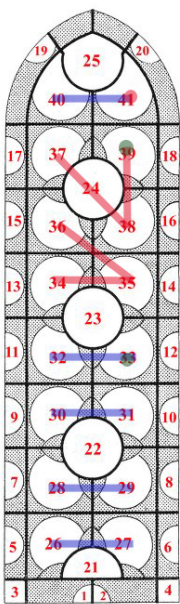
Table 24: Sylvester Window

<p>Chartres Cathedral: St. Sylvester Window</p> <p>Deremble-Mahnes no. 8, Delaporte no. 30</p>	
<p>41: Figure looking at the elevation of St. Sylvester 34-40: Figures hold scrolls with Constantine's laws concerning the church 33: Angel censuring 32: Angel holding the soul of Sylvester 31: Funeral of Sylvester 30: Constantine watches miracle of Sylvester 29: Sylvester revives bull 28: Magician causes death of bull 27: Confrontation between Sylvester and magician 26: Sylvester and Constantine in chariot 25: Sylvester tells Constantine where to build St. Peter's 24: Baptism of Constantine 23: Sylvester and Constantine 22: Sylvester receives messengers from Constantine. 21: Dream of Constantine 20: Departure of mothers and children 19: Constantine and followers 18: Mothers lament impending murder of children 17: Bloodbath stopped 16: Constantine becomes ill 15: Sylvester and his followers flee 14: Constantine orders sacrifices to pagan idol 13: Sylvester becomes Pope 12: Sylvester ordained as deacon 11: Sylvester urged to become a deacon 10: Sylvester released from prison 9: Death of Tarquinius 8: Tarquinius orders Sylvester to sacrifice to idol 7: Funeral of Timothy 6: Execution of Timothy 5: Sylvester meets Timothy 4: Sylvester's mother presents him to Cyrinus 3: Tools of Masons and Stone-Cutters 1-2: Donors: Masons and Stone Cutters</p> <p>After Delaporte Vitruvius, p 274. Copyright Jane Vadal</p>	<p>4. Green-Sylvester (H) 5. Red-Sylvester (H), Timothy (H) 6. Red-Timothy (H), Tarquinius (H) 7. Red-Timothy (H), Sylvester (H) 8. Red-Sylvester (H), Tarquinius (H) 9. Blue-Tarquinius (H) 10. Blue-Sylvester (B) 11. Red-Sylvester (H) 12. Red-Sylvester (H) 13. Red-Sylvester (Constantine related) (H) 14. Blue-Constantine (B) 15. Red-Sylvester (Constantine related) (H) 16. Blue-Constantine (B) 17. Blue-Constantine related (B) 18. Blue-Constantine related (B) 19. Blue-Constantine (B) 20. Blue-Constantine related (B) 21. Blue-Constantine (B), Red Sylvester (H) 22. Red-Sylvester (Constantine related) (H) 23. Red-Sylvester (H), Constantine (B) 24. Red-Sylvester (H), Constantine (B) 25. Red-Sylvester (H), Constantine (B) 26. Red-Sylvester (H), Constantine (B) 27. Blue-Constantine (B) 28. Blue-Constantine related (B) 29. Red-Sylvester (H) 30. Blue-Constantine (B) 31. Red-Sylvester (H) 32. Red-Sylvester related (H) 33. Red-Sylvester related (H)</p>
<p>Sylvester is an ecclesiastical figure and he is represented using last position patterns while the</p>	

secular participants in this window including Constantine are represented with the middle position postures. This shows Sylvester's awareness and Constantine's lack of awareness.

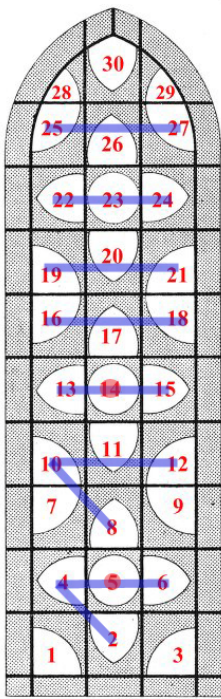
Sylvester 946 – 1003	Pope, Confessor	Acute Angle	Red	Green—Early life Blue—Constantine
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Table 25: Lubin Window

<p>Chartres Cathedral: The St. Lubin Window Derebille-Manhes no. 47, Delaporte no. 64</p>  <p>41 Miracle of Lubin 40 Witnesses of miracle of Lubin 39 Lubin leaves a town 38 Lubin invested as bishop 37 Avit gives keys to Lubin 36 Avit blesses Lubin 35 Lubin leaves a monastery 34 Lubin arrives at a monastery 33 Lubin and monks 32 Lubin enters a monastery 31 Lubin studies 30 Lubin receives the rest of the alphabet 29 Lubin receives a belt with the alphabet 28 Lubin tends sheep 27 Priests and common people watch the group of riders 26 A group of riders 25 Christ in Majesty 24 A Mass 23 A deacon draws wine 22 Wine is transported 21 Donors: A wine crier and merchant 14-20 Wine offering 13 A pilgrim? 12 A merchant? 5-11 Wine offering 3-4 Donors: Wine criers 1-2 Donors: Wine merchant and customer</p> <p><small>After Delaporte Vitruve, p. 407. Copyright Jani Vidual.</small></p>	<p>26. Blue-Lubin (secular) (B) 27. Blue-Lubin (secular) (B) 28. Blue-Lubin (secular) (B) 29. Blue-Lubin (secular) (B) 30. Blue-Lubin (secular) (B) 31. Blue-Lubin (secular) (B) 32. Blue-Lubin (secular) (B) 33. Green-Lubin (H) 34. Red-Lubin (H) 35. Red-Lubin (H) 36. Red-Lubin (H) 37. Red-Lubin (H) 38. Red-Lubin (H) 39. Green-Lubin (H) 40. Blue-Secular (B) 41. Red-Lubin (H)</p>
<p>Lubin's Window starts with a first position ordering. Lubin is a local saint and thus, represented with a last position ordering after his conversion. When he is blue, he is an adolescent, while he asserts his free will and becomes an adult at the monastery, he progresses to free will and awareness in last position orderings.</p>	

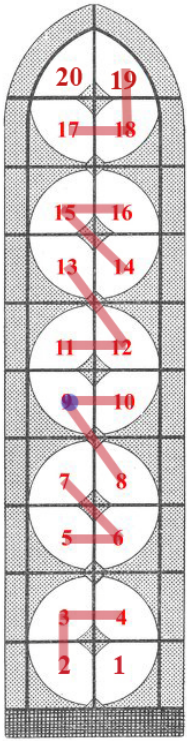
Lubin 6 th c.	Confessor	Horizontal Line	Red	Red—Acute Angle
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Table 26: Prodigal Son Window

<p>Chartres Cathedral: The Prodigal Son Window</p> <p><small>Dereemble-Manhes no. 35, Delaporte no. 58</small></p>  <p>30: Christ in Majesty 28-9: Angels 25-7: A feast 24: The older son protests 23: A feast is prepared 22: The father orders the killing of the fatted calf 21: A servant brings garments to the prodigal son 20: The prodigal son and his father 19: The prodigal son returns to his father's house 18: The prodigal son among swine 17: The prodigal son among swine 16: The prodigal son seeks work 15: The prodigal son is expelled from a house 14: The prodigal son and a woman 13: The prodigal son is robbed 12: The prodigal son gambles 11: The prodigal son and courtesans 10: The prodigal son in bed 9: Preparation for a Feast 8: A feast 7: Preparation for a feast 6: Two women 5: The younger son (?) rides off 4: The younger son leaves his father's house 3: The older son in the fields 2: The father gives his younger son his inheritance 1: The younger son asks his father for his inheritance</p> <p><small>Diagram after Delaporte Vitraux, p. 382. Panel numbering from Manhes-Dereemble. Copyright Jane Vadnal.</small></p>	<ol style="list-style-type: none"> 1. 2. Blue-Prodigal Son 3. 4. Blue-Prodigal Son (B) 5. Red-Prodigal Son (B) 6. Blue-Prodigal Son (B) 7. 8. Blue-Prodigal Son (B) 9. 10. Blue-Prodigal Son (B) 11. Blue-Prodigal Son (B) 12. Blue-Prodigal Son (B) 13. Blue-Prodigal Son (B) 14. Red-Prodigal Son (B) 15. Blue-Prodigal Son (B) 16. Blue-Prodigal Son (B) 17. Blue-Prodigal Son (B) 18. Blue-Prodigal Son (B) 19. Blue-Prodigal Son (B) 20. Blue-Prodigal Son (B) 21. Blue-Prodigal Son (B) 22. Blue-Prodigal Son (B) 23. Blue-Prodigal Son (B) 24. Blue-Prodigal Son (B) 25. Blue-Prodigal Son (B) 26. Blue-Prodigal Son (B) 27. Blue-Prodigal Son (B)
<p>The reading pattern in the Prodigal Son Window serves as a typological compliment to the Good Samaritan/Creation Window in which the Prodigal Son is both a pilgrim and is represented in tandem with his own Adam and Eve-like Fall. The conversion of the Prodigal Son allows him to change from a middle position to a first position ordering. The use of red emphasizes his awareness during his transgression.</p>	

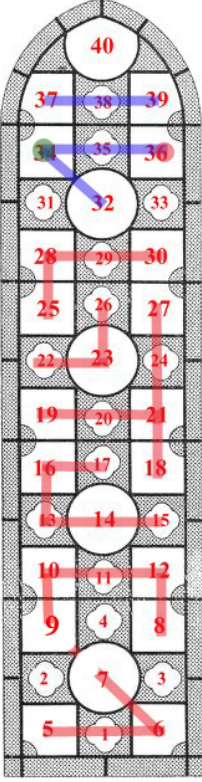
Prodigal Son B.C.	Secular	Horizontal Line	Blue-Bachrius	Blue—Acute Angle (beginning of his journey)
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Table 27: Germain of Auxerre Window

Chartres Cathedral: The Germain of Auxerre Window		
 <p>20: Germain's soul taken to Heaven 19: Death of Germain 18: The thief returns Germain's horse 17: A thief steals Germain's horse 16: Germain in a house that a devil is setting on fire 15: Loup in a house that a devil is setting on fire 14: Germain cures a child 13: Germain preaches 12: Germain calms a storm 11: Germain's ship encounters a storm 10: Germain cures a group of people 9: People sickened by a devil 8: Man returns the stolen money to Januarius 7: Germain celebrates Mass 6: Germain speaks to the man who took Januarius' money. 5: Januarius tells Germain that his money is missing 4: Germain is invested as Bishop of Auxerre 3: Germain is tonsured? 2: Germain at school 1: Donor: Geoffry Chardone, canon of Chartres</p>		<p>2. Red-Germain (H) 3. Red-Germain (H) 4. Red-Germain (H) 5. <i>Red-Germain (H)</i> 6. <i>Red-Germain (H)</i> 7. Red-Germain (H) 8. <i>Red-Germain (H)</i> 9. Blue-secular (B) 10. Red-Germain (H) 11. <i>Red-Germain (H)</i> 12. <i>Red-Germain (H)</i> 13. Red-Germain (H) 14. <i>Red-Germain (H)</i> 15. Red-Germain (H) 16. Red-Germain (H) 17. <i>Red-Germain (H)</i> 18. <i>Red-Germain (H)</i> 19. <i>Red-Germain (H)</i></p>
<p>Diagram after Delaporte <i>France</i>, p. 372. Panel numbering from Manhes-Dereemble. Copyright Jane Vialat.</p>		
<p>St. Germain is represented using the middle position order of seated fire because he is not yet a religious and later also includes the Eucharistic pattern of an acute angle with blue at the connecting point which is deterministic when people are stricken by the devil. The miracles are last positions and after he is tonsured, he becomes a religious. The last position of free will can be related to the thief who steals his horse. His life is based on free will and awareness.</p>		

Germain of Auxerre d. 448	Bishop and Martyr	Right Angle	Red	No Other
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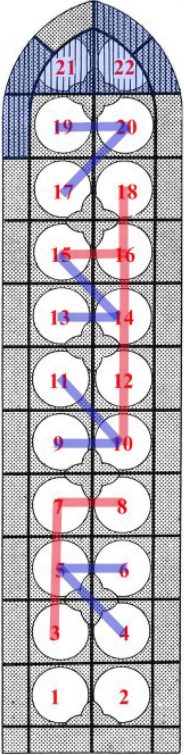
Table 28: Martin Window

Chartres Cathedral Windows: Martin			
<p>Deremble-Manhes no. 20, Delaporte no. 24</p>  <p>40. Christ (?) between two angels 39. Bishop of Tours greets Martin's relics 38. Martin's soul carried to Heaven 37. Martin's corpse carried towards Tours 36. Martin's corpse transported on a boat 35. Censing angel 34. Martin's corpse lowered out a window 33. Censing angel 32. Death of Martin 31. Censing angel 30. Miracle of the vase that fell without breaking 29. Censing angel 28. Martin embraces a leper 27. Two men bring a madman to Martin 26. Witnesses to Martin's miracle 25. Martin goes to Tetradius' house 24. Witnesses to Martin's miracle 23. Martin cures a paralyzed girl 21-2. Martin preaches 20. Witnesses to Martin's miracles 19. Martin cures a madman 18. Martin's resuscitates a child 17. Witnesses to Martin's miracles 16. Martin investigates a venerated tomb 13-5. Martin is consecrated as bishop 12. Martin and the pagan's sacred tree 11. Two robbers 10. Martin is tied to a tree and beaten 9. Martin raises a dead man 8. Hilaire blesses Martin. 7. Martin is baptized 6. Martin dreams of Christ 5. Martin gives half of his cloak to a beggar 1-4. Donors - the leather workers</p> <p>Diagram after Delaporte Vitraux, p. 243. Panel numbering from Manhes-Dereble. Copyright Jane Vidual.</p>			
5. Red-Martin (secular) (H)	38.	The reading pattern of the Martin Window creates a meander pattern that has been used to form the Chartres floor labyrinth by opening it up in a rotated manner. Martin is fighting the pagans and so his miracles are represented by first position orderings.	
6. Red-Martin (secular) (H)	39. Blue (B)		
7. Red-Martin (baptized) (H)	40. Red-Mart. (H)		
8. Red-Martin (H)			
9. Red-Martin (H)			
10. Red-Martin (H)			
11.			
12. Red-Martin (H)			
13.			
14. Red-Martin (H)			
15.			
16. Red-Martin (H)			
17.			
18.			
19. Red-Martin (H)			
20.			
21. Red-Martin (H)			
22.			
23. Red-Martin			

					(H) 24. 25. Red- Martin (H) 26. 27. 28. Red- Martin (H) 29. 30. Red- Martin (H) 31. 32. Blue- Martin (H) 33. 34. Green- Martin (H) 35. 36. Red- Martin (H) 37. Blue- Martin (B)		
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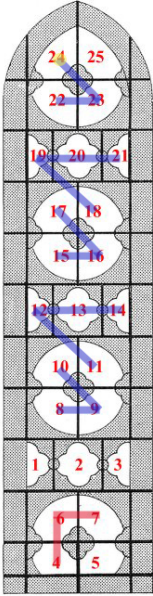
Martin of Tours 316 - 391	Martyr	Right Angle	Red	Red Martrdom- Pagan	Red—Acute Angle (early life) Blue—Acute Angle (after death) Blue—Horizontal Line (relic transfer)
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Table 29: Simon and Jude Window

Chartres Cathedral Windows: Simon and Jude	
<p>Deremble-Manhes no. 1, Delaporte no. 35</p> <p> Modern</p>  <p>21-22. Censing angels (Modern)</p> <p>20. Chariot of the Sun 19. Chariot of the Moon</p> <p>18. Simon and Jude before Warardac 17. A man in flames attacked by serpents</p> <p>16. Newborn infant speaks to Simon and Jude 15. Simon and Jude defend falsely accused deacon</p> <p>14. Arrival of ambassadors 13. Arrival of ambassadors announced to Warardac</p> <p>12. Simon and Jude imprisoned 11. Pagan magicians accuse Simon and Jude</p> <p>10. Simon and Jude before Warardac 9. Pagan magicians pray to an Idol</p> <p>8. Simon and Jude pray 7. Simon and Jude before Warardac</p> <p>6. Idol refuses to answer pagan magicians 5. Pagan magicians sacrifice to an idol</p> <p>4. Pagan Magicians 3. Simon and Jude</p> <p>2. Donor: Canon Henri Noblet before (statue of?) Christ 1. Donor: Canon Henri Noblet before (statue of?) the Virgin and Child</p> <p><small>Diagram after Delaporte <i>Vitrans</i>, p. 302. Panel numbering from Manhes-Deremble. © Jane Vial, 2005.</small></p>	
	<p>3. <i>Red-Simon and Jude (H)</i></p> <p>4. Blue-Pagan (B)</p> <p>5. Blue-Pagan (B)</p> <p>6. Blue-Pagan (B)</p> <p>7. <i>Red-Simon and Jude (H)</i></p> <p>8. <i>Red-Simon and Jude (H)</i></p> <p>9. <u>Blue-Pagan (B)</u></p> <p>10. Red-Simon and Jude (H), <u>Blue-Pagan (B)</u></p> <p>11. <u>Blue-Pagan (B)</u></p> <p>12. Red-Simon and Jude (H)</p> <p>13. <i>Blue-Pagan (B)</i></p> <p>14. <i>Blue-Pagan (B)</i></p> <p>15. Red-Simon and Jude (H), <i>Blue-Pagan (B)</i></p> <p>16. Red-Simon and Jude (H)</p> <p>17. <i>Blue (1)-Pagan (B)</i></p> <p>18. <i>Red-Simon and Jude (H)</i></p> <p>19. <i>Blue (3) –Pagan (B)</i></p> <p>20. <i>Blue (2)-Pagan (B)</i></p>
Simon and Jude are fighting a pagan audience and are aware so they are represented with middle position patterns of free will.	

Simon and Jude 1 st c.	Martyrs (martyrdom not shown)	Right Angle	Red	Red Martyrdom- Pagan	Blue—Acute Angle (Magicians)
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Table 30: Thomas Becket Window

<p>Chartres Cathedral: The Thomas Becket Window Dereble-Manhes no. 18, Delaporte no. 25</p>  <p>24-5: Entombment of Becket 22-3: Martyrdom of Becket</p> <p>21: The murderers don their armor 20: Becket enters Canterbury Cathedral 19: Becket speaks with three knights</p> <p>18: Henry II and Becket 17: Henry II speaks to a cleric 16: Becket returns to England 15: Becket, the Pope and a king</p> <p>14: Becket and a king 12-3: A group of monks greets Becket</p> <p>11: Becket and Pope Alexander III 10: Becket leaves for exile 9: Becket before Henry II 8: Becket is consecrated an Archbishop</p> <p>7: Becket (?) on horseback arrives at a town 6: Becket before Henry II 5: Two armed men follow a group of people 4: Becket leaves a town, pursued by an armed man</p> <p>1-3: Donors: the Tanners</p> <p><small>Diagram after Delaporte Vitraux, p. 248. Panel numbering from Manhes-Dereble. Copyright Jane Vidal.</small></p>	<p>4. Red-Becket (H) 5. Blue (B) 6. Red-Becket (H) 7. Red-Becket (H) 8. Blue-Becket (B) 9. Blue-Becket (B) 10. Blue-Becket (B) 11. Blue-Becket (B) 12. Blue-Becket (B) 13. Blue-Becket (B) 14. Blue-Becket (B) 15. Blue-Becket (B) 16. Blue -Becket (B) 17. Blue-Henry II (B) 18. Blue-Henry II and Becket (B) 19. Blue-Becket (B) 20. Blue-Becket (B) 21. Blue-Secular (B) 22. Blue-Becket (B) 23. Blue-Becket (B) 24. Yellow-Becket (H)</p>
<p>Strangely, Becket's life is represented with all middle position orderings, showing that his life is based on the whim of the secular king or determinism of the unaware.</p>	

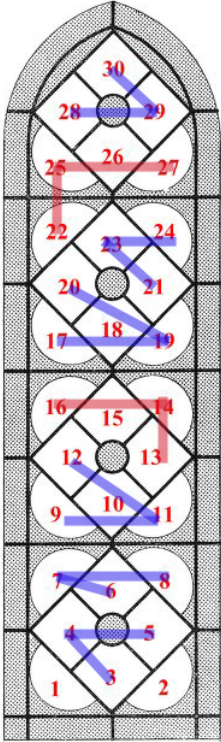
Becket	Martyr	Acute Angle	Blue	White Martyrdom	Red—Right Angle (Before Archbishop)
1118 – 1170					

Table 31: Eustace Window

<p>Chartres Cathedral: The St. Eustace Window</p> <p><small>Deremble-Manhes no. 43, Delaporte no. 62</small></p> <p>33: Martyrdom of Eustace and his family 31-2: A torturer 30: Man carrying wood to the fire 29: Judge condemns Eustace and his family 28: Hadrian orders Eustace to worship an idol 27: Hadrian worships an idol 26: A feast 25: Eustace recognizes his sons 24: Two men 23: Eustace recognizes his wife 22: Eustace's wife leaves the inn 21: Eustace's sons recognize one another 20: Eustace's sons meet at an inn 19: Emperor's men recognize Eustace 18: Trajan sends soldiers to look for Eustace 17: Eustace's son rescued from a wolf 16: Eustace's son carried off by a lion 15: Eustace and his sons cast into the sea 14: Eustace and his family board a ship 13: Eustace speaks to the captain of a ship 12: Eustace and his family leave a city 11: The baptism of Placidus 10: The conversion of Placidus 6-9: Members of the hunt 5: Placidus hunts 3-4: Donors- Furriers 1-2: Donors- Drapers</p> <p><small>After Delaporte <i>Vitrans</i>, p. 400. Copyright Jane Vialat.</small></p>	<p>5. Blue-Eustace (B) 10. Blue-Eustace (B) 11. Blue-Eustace (B) 12. Blue-Eustace (B) 13. Blue-Eustace (B) 14. Blue-Eustace (B) 15. Blue-Eustace (B) 16. Blue-Eustace (B) 17. Blue-Eustace (B) 18. Blue-Pagan (B) 19. Blue-Pagan (B) 20. Blue-Eustace's sons (B) 21. Blue-Eustace's sons (B) 22. Blue-Eustace's wife (B) 23. Blue-Eustace (B) 24. Blue-Pagan (B) 25. Blue-Eustace (B) 26. Blue-Feast (B) 27. Blue-Pagan (B) 28. Blue-Pagan (B) 29. Blue-Pagan Judge (B) 30. Blue-Pagan (B) 31. Blue-Pagan (B) 32. Blue-Pagan (B) 33. Blue-Eustace (B)</p>
<p>Eustace as a Roman Noble is presented as middle position ordering while the Pagan emperor is represented with a horizontal line for earth in the first position ordering. The use of blue shows the lack of awareness in this narrative and the first position for Eustace shows a pagan foe.</p>	

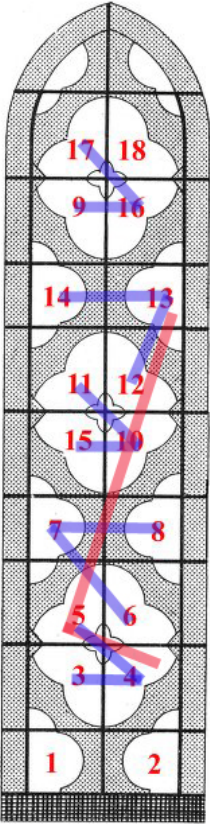
Eustace 2 nd c.	Martyr	Acute Angle	Blue	Blue Martyrdom	Blue—Horizontal Line (Emperor)
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Table 32: Life of Joseph Window

<p>Chartres Cathedral: Life of Joseph Window</p> <p>Deremble-Manhes no. 41, Delaporte no. 61</p>  <p>30 Christ in Majesty 29 Joseph and Jacob Reunited 28 Jacob Goes to Egypt 27 Jacob Greet his Sons 25-6 Joseph's Brothers Return to Israel</p> <p>24 Cup Found in Benjamin's Bag 23 A Feast 22 Joseph and his Brothers (?) 21 Joseph's Brothers Go to Egypt 20 Jacob Sends his Sons to Egypt to Buy Food 19 Egyptians Store Grain 18 Egyptians Plant (?) Grain 17 Joseph Interprets the Dream of the Pharaoh</p> <p>16 Dream of the Pharaoh 15 Pharaoh Asleep 14 Joseph Interprets the Dreams of the Pharaoh's Servants 13 Joseph Put in Prison 12 Potiphar Orders Joseph's Imprisonment 11 Potiphar's Wife Accuses Joseph 10 Potiphar's Wife Attempts to Seduce Joseph 09 Joseph Sold to Potiphar</p> <p>08 Joseph's Brothers tell Jacob that Joseph is Dead 07 Joseph Sold into Slavery 06 Joseph's Brothers Put him in a Well 05 Joseph's Brothers in the Fields 04 Jacob Sends Joseph to the Fields 03 Dream of Joseph 01-2 Donors: The Moneychangers</p> <p>After Delaporte <i>Vitraux</i>, p. 396. Copyright Jane Vialat.</p>	<p>3. Blue-Joseph (B) 4. Blue-Joseph (B) 5. Blue-Joseph (B) 6. Blue-Joseph's Brothers (B) 7. Blue-Joseph's Brothers (B) 8. Blue-Joseph's Brothers (B) 9. Blue-Joseph (B) 10. Blue-Joseph (B) 11. Blue-Joseph (B) 12. Blue-Joseph (B) 13. Red (B) 14. Red (B) 15. Blue-this panel is blue and not red (B) 16. Blue-this panel is blue and not red (B) 17. Blue (B) 18. Blue (B) 19. Blue (B) 20. Blue (B) 21. Blue (B) 22. Red (B) 23. Blue (B) 24. Blue (B) 25. Blue-this panel is blue and not red (B) 26. Blue-this panel is blue and not red (B) 27. Blue-this panel is blue and not red (B) 28. Blue (B)</p>
<p>Joseph's Window is represented in diagrammatic form of a possible interpretation; however, as can be seen in the key, some of the red panels are blue. This is one of the windows that does not seem to follow this patterning. There are no halos in this window because Joseph is a Jew. The use of blue shows the deterministic situation of Joseph's life. Joseph is unaware most of the time except when assisting in prophecy.</p>	

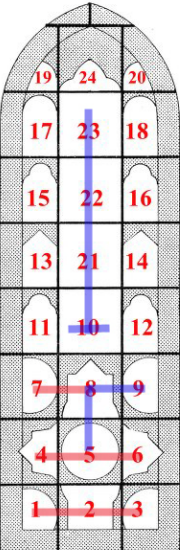
Joseph the Patriarch B.C.	Prophet, not martyr	Acute Angle	Blue	Blue Martyrdom	Red—Right Angle (Pharoah and Family)
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Table 33: Miracles of Nicholas Window

<p style="text-align: center;">Chartres Cathedral: The Miracles of St. Nicholas Window</p> <p style="text-align: center;">Deremble-Manhes no. 29A, Delaporte no. 53</p>  <p>17-8: Nicholas blesses pilgrims 16: Pilgrim arrives at Myra 9: Pagan magicians give potion to demon (displaced)</p> <p>14: Passenger throws flask into the sea 13: Nicholas speaks to passengers of a ship</p> <p>12: Demon disguised as a woman speaks to passengers on a ship 11: Ship at sea 10: Woman with a flask 15: Passengers disembark (displaced)</p> <p>7-8: Pagan magicians prepare a potion</p> <p>6: Demon speaks to pagan magicians 5: Nicholas overthrows statue of Diana 4: Nicholas preaching 3: Men worship statue of Diana</p> <p>1-2: Donors</p> <p style="font-size: small;">After Delaporte <i>Vitraux</i>, p. 367. Copyright Jane Vadrnal.</p>	<p>1 – 2 Donors 3. Blue-Pagan (B) 4. Blue-Pagan, Nicholas (B) 5. Red-Nicholas (H) 6. Blue-Pagan (B) 7. Blue-Pagan (B) 8. Blue-Pagan (B) 9. Blue-Pagan (B) 10. Blue-Pagan (B) 11. 12. 13. Blue-Nicholas (B), Pagan (B) 14. Blue-Pagan (B) 15. Blue-Pagan (B) 16. Blue-Pagan (B) 17. Blue-Pagan (B) 18. Red-Nicholas (H)</p>
<p>The Miracles of St. Nicholas Window because it is dealing with Paganism is using middle position orderings. This window is difficult to incorporate into the postures schematic rules and remains a challenge to this study’s hypothesis. The secular participants are unaware while Nicholas is aware.</p>	

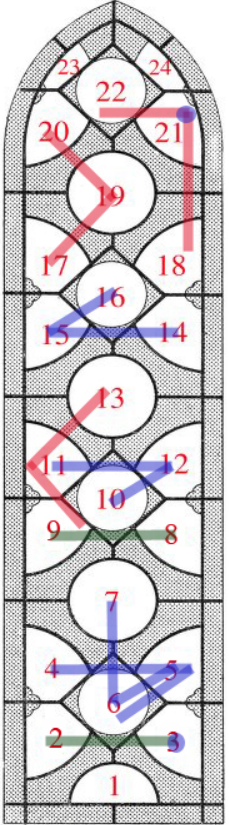
Nicholas, Miracles I After 4 th c.	Archbishop Confessor	Acute Angle	Blue (Miracles)	White Martyrdom	Red—Right Angle (Nicholas in person)
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Table 34: Notre Dame of Belle Verrière Window

<p>Chartres Cathedral: Notre Dame of the Belle Verrière Window Deremble-Manhes no. 30a, Delaporte no. 14</p>  <p>21-5 Virgin and Child Enthroned 19-20 Angel 17-8 Angel with Censer 15-6 Angel with Candlestick 13-4 Angel with Censer</p> <p>11-2 Angel with Censer 10 Four Angels hold Pillars</p> <p>09 The Wine is Served 08 Jesus turns the Water into Wine 07 Mary tells the Servants to obey Jesus</p> <p>06 Mary tells Jesus there is not Wine 05 The Wedding Feast at Cana 04 Jesus and his Disciples go to Cana</p> <p>03 The Third Temptation of Christ 02 The Second Temptation of Christ 01 The First Temptation of Christ</p> <p><small>After Delaporte Vitraux, p. 217. Copyright Jane Vodul.</small></p>	<ol style="list-style-type: none"> 1. Red-Christ (H) 2. Red-Christ (H) 3. Red-Christ (H) 4. Red-Christ (H) 5. Blue-People of Cana (B) 6. Red-Christ (H) 7. Red-Mary (H) 8. Blue-People of Cana (B) 9. Blue-People of Cana (B) 10 – 23. Blue-the <i>Theotokos</i> or <i>enthroned</i> Virgin (B)
<p>A brand new cycle of ordering occurs in the Belle Verrière. The elements cycle in their slippery significations to the point where fire is a horizontal line showing his free will but the first position also shows the effects of determinism. Thus, the signifier or posture—e.g. Christ’s body had free will while his signification or color was determined. In the Marriage of Cana, water is a seated posture is the determinism of the wine and water situation, but the last position posture shows that there is also an element of free will. The posture or signifier/body is free while the signification or meaning is determined.</p> <p>In this window, there is a juxtapositioning between the status of the body of Christ and the status of the blood of Christ. The body or sign (its element and its color) are not transitive, but the blood, its signification or posture is. Jesus is tempted to turn stones into bread, but does not, unlike the changing of water into wine. The stone is made of earth and thus, is a stable element. Water is an unstable element. See the Creation window and the creation of Adam from earth (a stable element) while Eve is created from Adam’s rib—Eve and water as unstable.</p> <p>The progression of the zodiac symbols to the next transition of signifier and meaning may be due to the reuse of the upper portion of the window from the previous building or it may relate to the window’s position that unites temporal and divine with the month of May and the zodiac sign of Gemini.</p>	

Belle Verrière B.C.	Christ (narrative)	Horizontal Line	Red	Blue—Right Angle (Wedding Feast)
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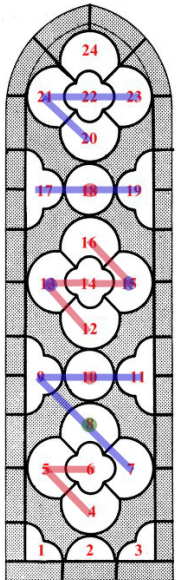
Table 35: Charlemagne Window

Chartres Cathedral : Charlemagne Window	
Manhes-Deremble number 7, Delaporte number 38	
 <p>24 Angel 23 Angel 22 Mass of St. Giles 21 Baudoin tells Charlemagne of Roland's death 20 Baudoin and Roland 19 Roland tries to break his sword; He sounds his horn 18 Charlemagne leaves Spain 17 Roland defeats an enemy 16 Combat between Roland and Marsile 15 Battle Scene 14 Miracle of the Flowering Lances 13 Charlemagne orders the construction of a church 12 Battle for a city 11 Charlemagne prays 10 Charlemagne departs for Spain 9 Charlemagne looks at the Milky Way 8 St James appears to Charlemagne in a dream 7 Charlemagne gives relics to the chapel at Aachen 6 Constantine presents relics to Charlemagne 5 Constantine greets Charlemagne at Constantinople 4 Charlemagne fights the Saracens 3 Constantine's letter presented to Charlemagne 2 Charlemagne appears to Constantine in a dream 1 Donors: the furriers</p> <p><small>After Delaporte Vitraux, p 314. Copyright Jane Vignal</small></p>	<p>2. Green-Constantine (H) 3. Blue-Constantine (B), Blue-Charlemagne (B) 5. Blue-Constantine (B), Blue-Charlemagne (B) 6. Blue-Constantine (B), Blue-Charlemagne (B) 4. Blue-Charlemagne (B) 7. Blue-Constantine (B) 8. Green-Charlemagne (H) 9. Red-Charlemagne (H) 10. Blue-Charlemagne (B) 11. Red-Charlemagne (H) 12. Blue (B) 13. Red-Charlemagne (H) 14. Blue (B) 15. Blue (B) 16. Blue (B) 17. Red-Roland (H) 18. Red-Charlemagne (H) 19. Red-Roland (H) 20. Red-Roland (H) 21. Blue-Charlemagne (B) 22. Red-Charlemagne (H)</p>
<p>Charlemagne, who is a secular figure but he is canonized in 1165 and elevated to the status of blessed., suggests the use of a middle position order. Thus, water is recumbent or middle position and horizontal, earth is running and middle position, and fire is seated or middle position. Miracles in the window are related to non-religious players in the narrative and thus, they are middle or determined. As a special exception to this window, the appearance of the Mass and its references to Eucharistic transubstantiation are represented with the special Red-Blue-Red order. Roland too is secular and the</p>	

secondary order is applied. Roland's battle is related to determinism while breaking his sword and sounding his horn are related to free will. Charlemagne is also shifted to awareness as seen in the use of red after his diagrammatic pilgrimage by looking at the Milky Way.

Charlemagne 742 – 814	Blessed	Variety	Variety	Consistent	Green—Horizontal Line → Blue— Acute Angle → Green—Horizontal Line → Blue— Acute Angle → Red—Right Angle (2) Roland Blue—Acute Angle → Red— Right Angle
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Table 36: Creation and Good Samaritan Window

<p>Chartres Cathedral: Good Samaritan Window <small>Dereimble-Mahnes no. 44, Delaportie no. 6</small></p>  <p>24 God (Christ?) in Majesty 21 Adam and Eve labor 22 God 23 Cain slays Abel 20 Adam and Eve expelled from Eden</p> <p>17 Adam and Eve 18 Fall of Man 19 God confronts Adam and Eve</p> <p>16 God warns Adam and Eve 13 Creation of Adam 14 Adam in Eden 15 Creation of Eve 12 Good Samaritan cares for the injured pilgrim</p> <p>9 Good Samaritan helps the pilgrim 10 Good Samaritan leads horse carrying the pilgrim 11 Innkeeper at door of inn</p> <p>8 Injured pilgrim ignored by a priest and a Levite 5 Pilgrim leaves Jerusalem for Jericho 6 Thieves prepare to attack the pilgrim 7 Pilgrim is attacked by thieves 4 Jesus narrates parable of the Good Samaritan</p> <p>1-2 Donors: shoemakers at work 3 Donors: shoemakers present window</p> <p><small>After Delaportie <i>Finances</i>, p. 169. Copyright Jane Vahdat.</small></p>	<p>1 – 3 Donors 4. Red-Christ (H) 5. Red-Pilgrim (B) 6. Red-Thieves (B) 7. Blue-Pilgrim (B) 8. Green-Pilgrim (B) 9. Blue-Pilgrim (B) 10. Red-Pilgrim (B) 11. Blue-Pilgrim (B) 12. Red-Pilgrim (B) 13. Blue-Adam (B), Red-God (H) 14. Red-Adam (B) 15. Blue-Eve (B) 16. Red-God (H) 17. Blue-Adam and Eve (B) 18. Red-Adam and Eve (B) 19. Blue-Adam and Eve (B), Green-God (H) 20. Blue-Adam and Eve (B) 21. Blue-Adam and Eve (B) 22. Blue-God (H) 23. Blue-Cain and Abel (B) 24. Green-Christ (H)</p>
<p>The Creation/Good Samaritan Window demonstrates the association with Christ and the Godhead with both good and evil. Christ as narrator can be related in the first character unit with both the pilgrim and the thieves because all of these people are agents to the greater good of the breaking down of social barriers for the benefit of mankind (the moral of the Good Samaritan narrative). The Godhead is also associated with the elements of the mass, Adam as bread and Eve as wine, in their appearance in the red character unit as the blue element. This organization for the mass is seen in the Germain Window and the Charlemagne Window.</p> <p>As stated in Chapter Three, the parable of the Good Samaritan states: “Now which of these three do you think seemed to be a neighbor to him who fell among the robbers?” He said, “He who showed mercy on him.” Then Jesus said to him, “Go and do likewise.” This statement and its inclusion of a number in triplicity sets up a Trinitarian notion that links two agents of judgment with one agent of mercy; thus, the inclusion of the Godhead with the villainous agents is justified. The importance of mercy in the</p>	

Trinity will be discussed further.

The Pilgrim is shown as red and aware after his pilgrimage to Jerusalem is complete. The Good Samaritan is shown as aware in his assistance of the Pilgrim. Adam and Eve become aware or red when eating from the Tree of Knowledge of Good and Evil.

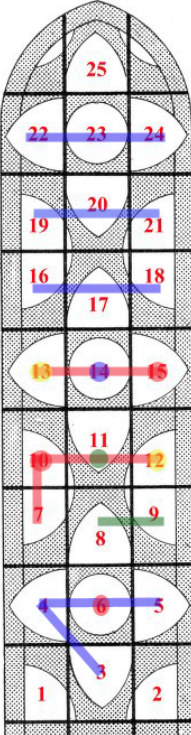
Creation/Good Samaritan B.C.	Old Testament	Variety	Variety		Red—Acute Angle (Christ tells story)→ Blue—Acute Angle (GS helps pilgrim)→ Red—Acute Angle (Creation)→ Blue—Horizontal Line (Fall)→ Blue—Acute Angle (expelled)
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Table 37: Thomas Window

<p>Chartres Cathedral: The St. Thomas Window</p> <p><small>Dereemble-Manhes no. 23, Delaporte no. 46</small></p> <p>27-8: Angels 26: Pilgrims sleep near Thomas's tomb 24-5: Witnesses 23: Entombment of Thomas 22: Thomas is martyred 21: When Thomas prays, a demon breaks the idol 20: King demands Thomas sacrifice to the Sun God 19: Thomas thrown into a furnace 18: Thomas between two torturers 17: Thomas converts the multitudes 16: The resurrected Gad tells king what he has seen 15: An angel shows Gad a palace in Heaven 14: Gad, the King's brother, dies 13: King Gundophorus orders Thomas' imprisonment 11: Thomas distributes bread to the poor 12: Thomas oversees construction of a church 10: King Gundophorus departs 09: King Gundophorus gives Thomas gold 08: Abbanes presents Thomas to King Gundophorus 07: The cup-bearer is attacked by a lion 05: Thomas and Abbanes arrive at Andropolis 06: Wedding feast of the daughter of king of Andropolis 04: Thomas sails to India 03: Christ recommends Thomas to Abbanes 02: Christ sends Thomas to India 01: Thomas examines Christ's wounds</p> <p><small>After Delaporte <i>Vitraux</i>, p. 358. Copyright Jane Vialat.</small></p>	<p>2. Red-Thomas, Christ (H) 3. Red- Thomas, Christ (H) 4. Blue-Thomas (H) 5. Red-Thomas (H) 6. Red-Thomas (H) 7. Blue-Secular (B) 8. Red-Thomas (H) 9. Red-Thomas (H) 10. Blue-King Gundophorus (B) 11. Red-Thomas (H) 12. Red-Thomas (H) 13. Green-Thomas (H) 14. Blue-Gad (B) 15. Blue-Gad (B) 16. Blue-Gad (B), Thomas (H) 17. Red-Thomas (H) 18. Red-Thomas (H) 19. Red-Thomas (B) 20. Red-Thomas (H) 21. Red-Thomas (H) 22. Red-Thomas (H) 23. Green-Thomas (H) 24. 25. 26. Blue-Pilgrims (B)</p>
<p>St. Thomas represents a window in which Thomas performs first order miracles until converting the multitude. At this point his life becomes characterized by last orderings. Thomas is aware.</p>	

<p>Thomas 1st c.</p>	<p>Apostle</p>	<p>Variety</p>	<p>Variety</p>		
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Table 38: Life of the Virgin Window

Chartres Cathedral: Life of the Virgin Window	
Deremble-Mâhnes no. 28b, Delaporte no. 16	
 <p>25: Christ blessing 24: Herod views the Massacre of the Innocents 23: Massacre of the Innocents 22: Flight into Egypt 21: Adoration of one of the Magi 20: Two Magi and the star 19: Herod and the Magi 18: Presentation of Jesus at the Temple 17: Annunciation to the shepherds 16: Nativity of Jesus 15: Visitation 14: Annunciation to the Virgin 13: Wedding of Mary and Joseph 12: Joseph selected as the husband of Mary 11: Education of the Virgin Mary 10: Joachim and Anna present Mary to a teacher(?) 9: The infant Mary is bathed 8: Birth of the Virgin 7: Joachim and Anna converse 6: Annunciation to Anna 5: Joachim and Anna meet at the Golden Gate 4: Annunciation to Joachim 3: Sacrifice of Joachim and Anna is rejected 2: Donor - Count Theobald of Chartres 1: Donor - Vintners</p>	<p>3. Blue (1) (B) 4. Blue (2) (B) 5. Blue (3) (B) 6. Red-Joachim (H) 7. Red-Joachim (H)/Red (2) 8. Green-Virgin Mary (H) 9. Green-Virgin Mary (H) 10 – 12. Red (Fire), Green (Earth), Yellow (Air)-Virgin Mary (H) 12. Red-Joseph (H) 13. Red halo, Yellow (Air) shoes-Virgin Mary 14. Red halo, Blue (Water) shoes-Virgin Mary 15. Red halo, Red (Fire) shoes-Virgin Mary 16. Blue-Christ (1) (H) 17. Blue-Shepherds (3) (B) 18. Blue-Christ (B) 19. 20. 21. 22. Blue-Joseph (B) 23. Blue-Innocents (B) 24. Blue-Herod (B) 25. Yellow-Christ (H)</p>
After Delaporte <i>Fitraux</i> , p. 224. Copyright Jane Vadnal.	
<p>The Life of the Virgin Window demonstrates the importance of the Virgin to semantic thought. The representation of her halo and feet with different successive colors suggests what will later be considered the body part association with subject and predicate as diagrammatically presented. Head (Fire, Earth, Air), Feet (Air, Water, Fire)</p> <p>The use of the elements, fire, air, and water for the feet of the Virgin also suggests the overall diagramming of the structure and its relation to head and feet in the consanguinity tree diagrams. The interchanging of the elements earth and water in these combinations suggests the unusual zodiacal orderings and the Byrhtferth diagram that interchanges the element names and element colors in its schema.</p> <p>See Good Samaritan and Prodigal Son for blue acute angle with red dot in the middle of the second arm.</p>	

Virgin, Life B.C.	Mother of God	Variety	Variety		Blue—Acute Angle (Joachim and Anna) Green—Horizontal Line (early life) Multicolored Blue—Horizontal Lines (majority)
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5.5 CONCLUSION

In this chapter, I have proposed a language of reading and writing images that has a tripartite signifier, posture/form/color, and signification. Through the evidence of the extant and original placement of the window narratives, the balancing of these angles of reading between penitential poses and zodiacal angles suggests a dialogue. The colors also represent an idea of free will and determinism. From this evidence, it is my suggestion that the planners of the windows drew upon the ideas and structures of both sources—penitential poses and zodiacal angles. As seen in the previous chapter, there seems to be significant zodiacal influence on the organization of the windows within the structure of the church building. Likewise, there could be a way of understanding the cathedral in light of further zodiac interpretation that presents the union of influence informing the structure with pagan ideology, all ideologies being semantic. Ultimately, I will suggest that what is at stake in the structure of Chartres is not a heretical confrontation between rival ideologies, but a semantic dialogue.

6.0 CONCLUSION

The informing of the structure of Chartres Cathedral with theology, philosophy, and textually-based interpretive significance is a concept that this study maintains is of the utmost importance to understanding this structure and likely Gothic architecture as a whole. The implications of entelechy as part of the method of understanding, particularly the visual history of the past, present a significant contribution. The diagramming of the building presented in Chapter Three is not a concrete proof yet it serves as a hypothetical way of viewing medieval architecture that, in this instance, is likely to have existed in an astronomically, astrologically, and theologically-informed environment like Chartres and Paris. Due to the repositioning of the Lawrence Window and the loss of the Blaise Window as well as other losses and restorations like the Miracles of the Virgin Window, the diagramming of the building remains a conjectural hypothesis. However, emergence of a particular configuration of the Consanguinity Tree of Gautier Lebaube in a Paris manuscript of c. 1230 (New York, Pierpont Morgan Library G.37, discussed in Chapter Three) is one indicator that underlines the importance of the idea of combinations and universals that have been explored in connection with the cathedral based on the ideology of William of Conches and the appearance of his diagram on the north wall of the nave.

It is certain that the zodiac was a knowledge source open to a wide audience in the middle ages. But as explored in Chapter Four, the writings of, Manilius and Peter the Chanter

were known by only the higher elects in the offices of the clergy. The feast days on the other hand were widely-known and celebrated and this lends the possibility of a wider audience for the cathedral entelechy. It further suggests that the hierarchy of the society had the ability to *know* the building. Thierry of Chartres discusses the idea of knowledge as the basis for accessing God and naturally, the access to knowledge (e.g. the library contents, educational opportunities, status, and wealth) would affect who could access “divinity.”

Chapter Five’s analysis of the windows according to a structure based on postures depends on the ability of the individual to extract those postures from the organizations of the windows. The viewer of the windows would need to adopt an approach to visual schematics like that of Villard de Honnecourt; this viewer would need either an astute mnemonic ability or stray parchment to sketch upon.

Chapter Two roots all of this visual evidence in a contextual framework that reflects a *raison d’être* for the notion of idiosyncratic orderings of information that seem like mistakes, but instead can be shown to reflect on a cultural form of communication and language. The Zodiac Window has an unusual ordering while at just the same time, William of Conches complains of “verbal novelty” and “unusual arrangements of material” in the new methods of teaching. This lends some credence to the methods of this study and the notion that of Cornifician concepts may have in part determined the structure’s form. The externalized paths that can be traced through patterns of poses and colors in the windows’ designs may be seen as related to their external and in some ways illiterate nature while literacy is required for a penitential or a linguistic comprehension or signifier and signification based discernment.

But despite the limitations that present themselves in this study, the most important thing that this study can offer is its methodology. While thinkers like M. F. Hearn have suggested the

relation of the monumental and the minor arts, the responsibility for art historical scholarship is to further pursue this avenue instead of the segregation of the art and architectural disciplines. Further, diagrammatic studies pose the most important responsibility to this method as a *figura*, which is in and of itself a method, a bridge between different media, and in the case of the Platonic Chartrains, the bridge between worlds.

In this study, Chartres serves as the best example for what this study has attempted to do. It retains almost all of its original stained glass in the original position and allows an understanding of position or placing in addition to potential concerning artistic style and aesthetic concerns. The importance of position should not be underestimated because it is the next step in moving from aesthetics to experience and from information to environment. The vantage point of a viewer is one of the most important informational concepts to understand. As art and architectural historians, it is of the utmost importance not to collapse the difference between representation and being, but it is important, at least in the middle ages, to collapse the difference between beholding and confronting, seeing and being within. But most important, when doing this is the understanding of how the medieval viewer or any particular audience could have viewed the object.

APPENDIX A

MEDIEVAL DIAGRAMS AND THEIR RELEVANCE TO CHARTRES

There are many manuscripts that had diagrams that were in the Chartres library. MS 103/95—which is no longer extant—was a Martianus Capella manuscript that may have had diagrams relating to the circumsolar nature of Venus and Mercury and other astronomical phenomena. Bede often had diagrams like the tidal *rotae* found in other Bede manuscripts. MS 213/169 and MS 214/173 were astronomical and astrological and also included diagrams. This appendix shows the types of diagrams that were current during the twelfth century and before and suggest the types of diagrams that may have been held in the Chartres Library.

A.1.1 *Rotae*

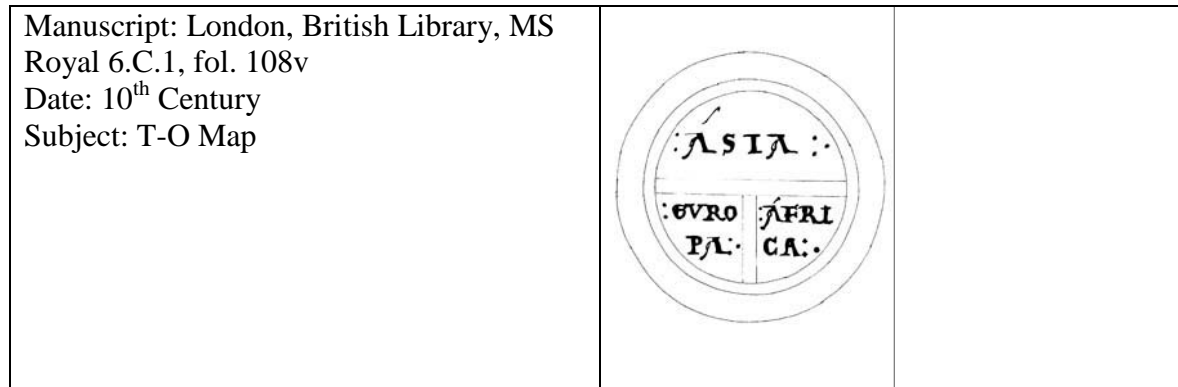


Figure 24

The origin of the T-O map is unknown. It may have appeared in Graeco-Roman manuscripts, but the earliest that are known are in extant copies of the lost original of the seventh-century *De natura rerum* by Isidore of Seville. It has been associated with the Old Testament based on the assignment of the tripartite divisions to the sons of Noah: Asia to Shem, Europe to Japeth, and Africa to Ham.²⁶⁵ MS 16/75 in the Chartres Library was a copy of Isidore's *Etymologiae*.

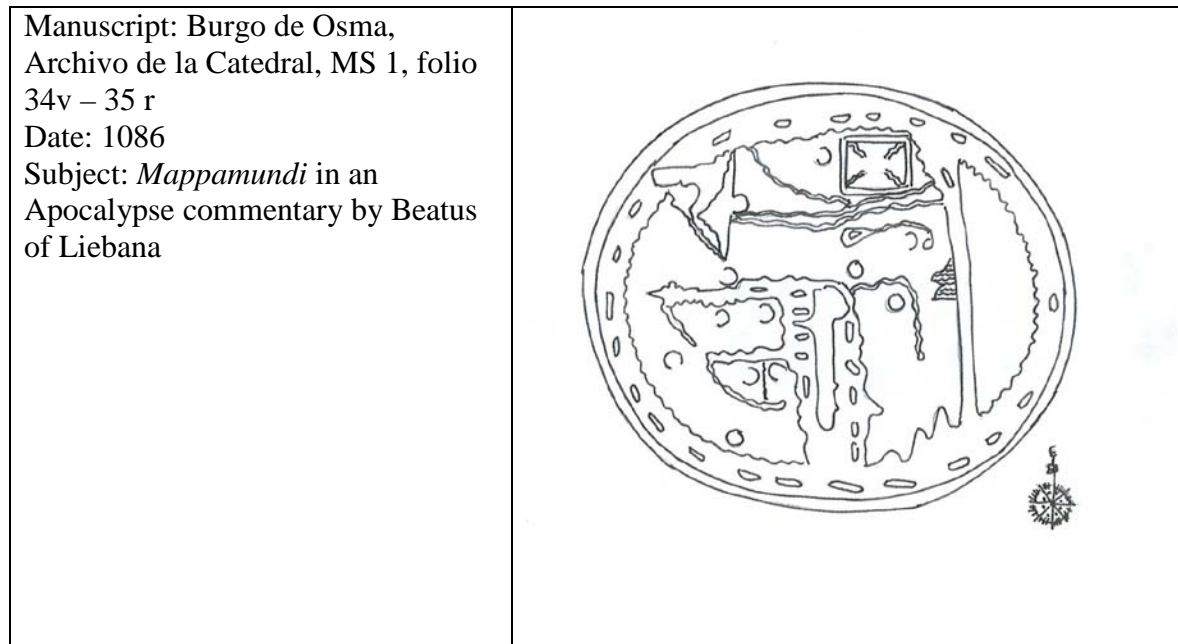


Figure 25

²⁶⁵ For more on the T-O map, see Alessandro Scafi, *Mapping Paradise: A History of Heaven on Earth* (Chicago: The University of Chicago Press, 2006), Kline, *Maps of Medieval Thought: The Hereford Paradigm*, Stevens, "The Figure of the Earth in Isidore's 'De Natura Rerum'."

This is an example of a *mappamundi* (map of the world) that imposes on an Isidorian TO map the places where the apostles evangelized. These Beatus examples were intended to show the solidification of the Christian church in the world during the sixth age of man.²⁶⁶ Chartres MS 80/90 contained a *mappamundi*.

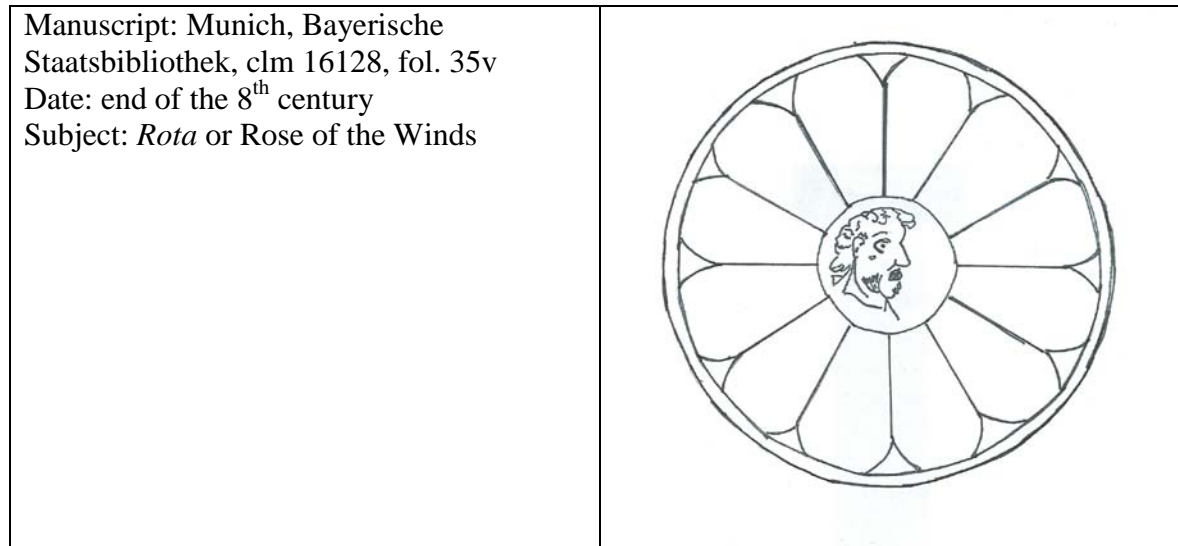


Figure 26

Isidore of Seville was the source for information on the winds before the twelfth century with wind *rotae* appearing in Chapter XXXVII of his *De natura rerum* and chapter XIII (13.11) of his *Etymologiae* (Cf. Chartres, BM, MS 16/75). Predecessors of Isidore in antiquity that used circular distributions of the twelve winds are Pliny, Vitruvius, and Aristotle. Excerpts of Aristotle's *Meteorologica* were known in the ninth century and section 2.6 gives instructions on drawing a rose of the winds.²⁶⁷

²⁶⁶ For more on medieval maps see Scafi, *Mapping Paradise: A History of Heaven on Earth*, Scott Westrem, *The Hereford Map. A Transcription and Translation of the Legends with Commentary* (Turnhout: Brepols, 2001), Kline, *Maps of Medieval Thought: The Hereford Paradigm*, Valerie I. J. Flint, "The Hereford Map: Its Author(s), Two Scenes and a Border," *Transactions of the Royal Historical Society* Sixth Series, 8 (1998):19 - 43, Kupfer, "The Lost Mappamundi at Chalivoy-Milon.", Stevens, "The Figure of the Earth in Isidore's "De Natura Rerum"." John Williams, *The illustrated Beatus: a corpus of the illustrations of the commentary on the Apocalypse* (London: Harvey Miller Publishers, 1994), John Williams, *Beatus de Saint-Sever: état des questions* (Mont-de-Marsan: Comité d'études sur l'histoire et l'art de la Gascogne, 1986).

²⁶⁷ For classification of these *rota* into groups, see Barbara Obrist, "Wind Diagrams and Medieval Cosmology," *Speculum* 72, no. 1 (1997):33 - 84. See p. 42.

Manuscript: Munich, Bayerische
Staatsbibliothek, clm 16128, fol. 16r
Date: end of the 8th century
Subject: *Annus, Mundus, Homo*

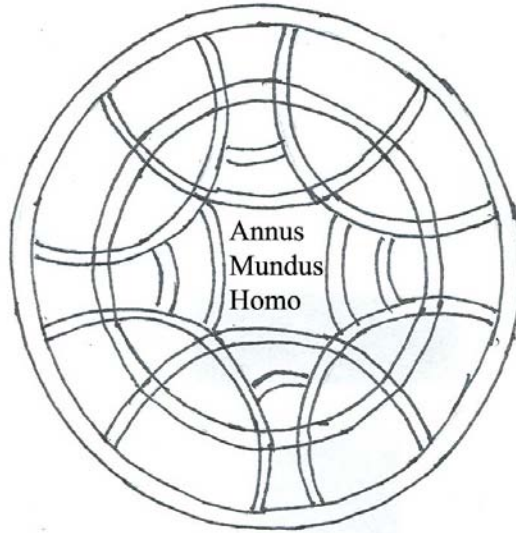


Figure 27

One of the earliest forms of the *Annus, Mundus, Homo* diagram appears in Chapter XI of Isidore of Seville's *De Natura Rerum*. The three words used to allude to the diagram are found in the center of this *rota* along with information about the elements of the world, the seasons of the year, and the humors of the human body.²⁶⁸

Manuscript: Paris, BNF MS Lat. 7028,
folio 154
Date: Eleventh Century
Subject: Zodiac Man in a *rota* diagram
(*Rota*)



Figure 28

²⁶⁸ See Sears, *The Ages of Man: Medieval Interpretations of the Life Cycle*. See pp. 17 – 19.

This manuscript appears with the personifications of the zodiac in a circular diagram or *rota* and the regions of the body supposedly governed by the signs are written in Latin in the line beneath the personification. This is an important example because it is unusually early.²⁶⁹

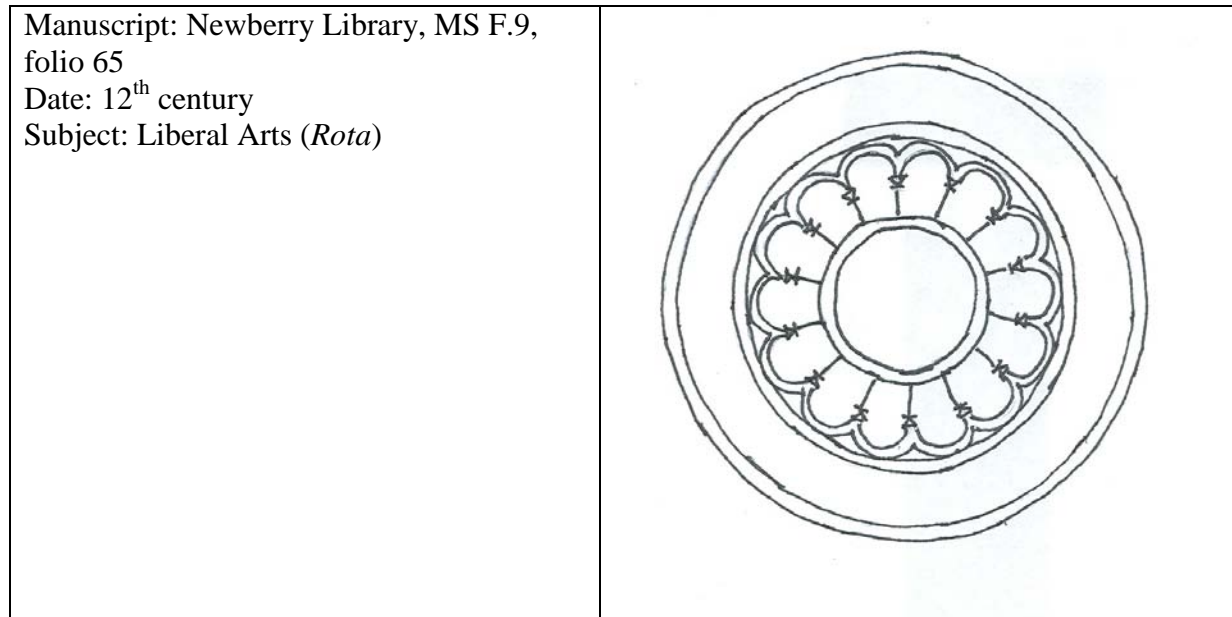


Figure 29

This example of a liberal arts *rota* from a copy of Boethius's *De Musica* has a frame that has been likened to a rose window. Philosophy is referred to in text at the center of the diagram while the liberal arts are referred to in text in the "petals" of the wheel. The diagram has been suggested to be instructive in the production of Herrade of Landsberg's figural personification of the liberal arts in a *rota* for the now destroyed *Hortus Deliciarum*. The frame is suggestive of the spokes of the wheel of Chartres's west façade rose.²⁷⁰ Chartres's library had one copy of Boethius's *De musica*, MS 48/41 and MSS 45/36 and 46/38 were Boethius's Arithmetic.

²⁶⁹ See Charles W. Clark, "The Zodiac Man in Medieval Medical Astrology" (University of Colorado at Boulder 1979), Bober, "The Zodiacal Miniature of the Trés Riches Heures of the Duke of Berry: Its Sources and Meaning." For Bober, see p. 14. For Clark, see pp. 171 – 172.

²⁷⁰ See Michael Masi, "A Newberry Diagram of the Liberal Arts," *Gesta* 11, no. 2 (1972):52 - 56. Herrad of Hohenbourg, *Hortus Deliciarum*. Ed. Rosalie Green, Michael Evans, Christine Bischoff and Michael Curschmann. 2 v. (London: The Warburg Institute, 1979), See no. 738, min. fol. 215r, Cat. No. 295.

Manuscript: Munich, Bayerische
Staatsbibliothek, MS lat. 4660, f. 1
Date: c. 1230
Subject: Wheel of Fortune



Figure 30

The origins of the Wheel of Fortune are believed to be in Boethius's *Consolatio Philosophiae*. There are two types of wheel. One is based on the *Annus Mundus Homo* diagram with the personification of Fortune at the center of the wheel. Another represents Fortuna outside of the wheel and turning a crank to make the wheel turn.²⁷¹ This diagram illustrates the Fortuna poem at the beginning of the *Carmina burana*.²⁷²

²⁷¹ Kline, *Maps of Medieval Thought: The Hereford Paradigm*, Pierre Courcelle, *La Consolation de Philosophie dans la Tradition Littéraire* (Paris: Études Augustiniennes, 1967).

²⁷² See *Carmina Burana: facsimile reproduction of the manuscript Bayerische Staatsbibliothek München Clm 4660 and Clm 4600a*. Ed. Bernhard Bischoff. (Brooklyn: Institute of Medieval Music, 1967).

Manuscript: Heiligenkreuz,
Stiftsbibliothek, MS Cod. 226, folio 146r
Date: late 12th century
Subject: Wheel of True Religion



Figure 31

The Wheel of True Religion is based on a treatise by Hugh of Fouilloy also known as Hugh of Folieto and often appears as the preface to Hugh's allegorical tract, *De Avibus*.²⁷³ This suggests that not only is the book on birds, it is also theological in nature. The work is believed to be written between 1132 and 1152. The True Religion wheel is paired with another illumination of the Wheel of False Religion shown below. In the Wheel of True Religion, the wheel is flanked by two monks who are standing and governing the wheel's motion. This wheel and the Wheel of False Religion are discussed in Chapter Two.

²⁷³ *The Medieval Book of Birds: Hugh of Fouilloy's Avarium*. Ed. and Trans. Willene B. Clark. (Binghamton, NY: Medieval & Renaissance Texts & Studies, 1992).

Manuscript: Heiligenkreuz,
Stiftsbibliothek, MS Cod. 226, folio 149v
Date: late 12th century
Subject: Wheel of False Religion



Figure 32

The Wheel of False Religion is the foil to the Wheel of True Religion which is discussed above. In the False Religion Wheel, the monastics flanking the wheel are holding on to the rim, and one is right side up and the other is upside down as the rim and movement of the wheel govern their position. This wheel is similar to the Wheel of Fortune also discussed above. This wheel is discussed in Chapter Two.

Rotae as Windows/Architecture

Church: St. Etienne at
Beauvais
Date: c. 1150
Subject: Wheel of Fortune

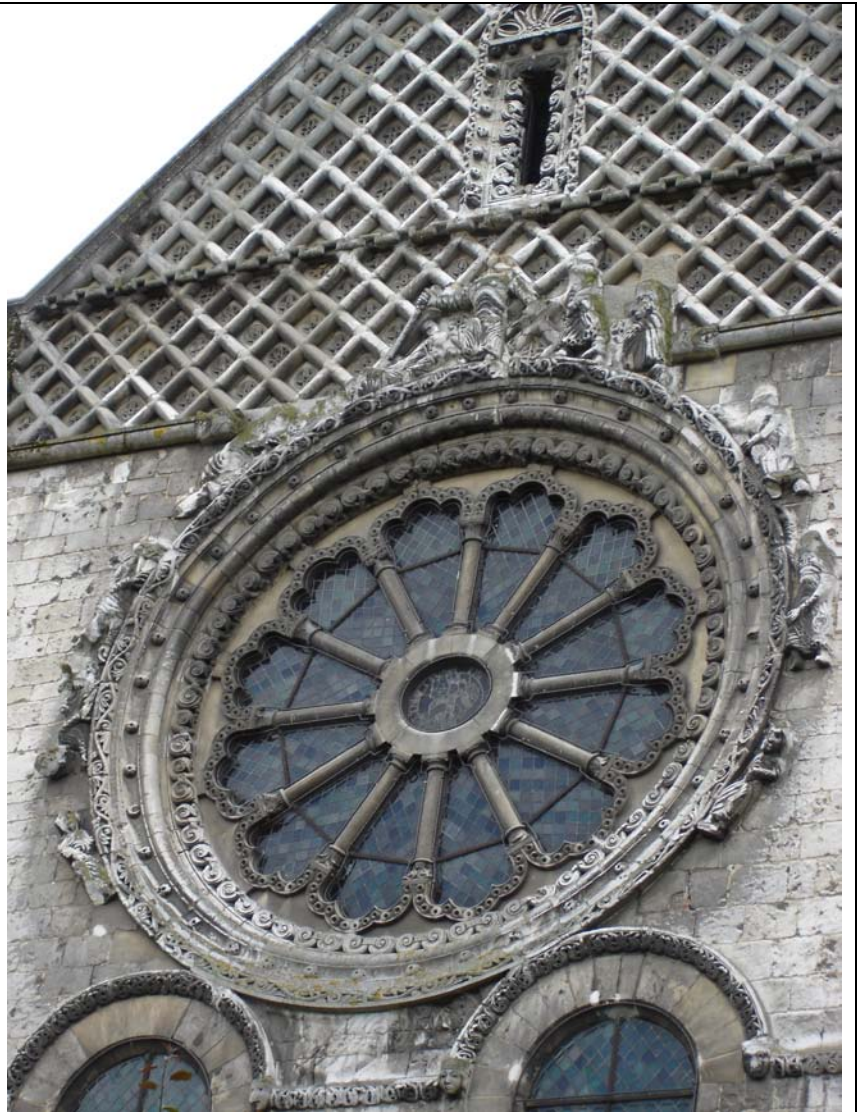


Figure 33

Cathedral: Lausanne
Manuscript: Paris, MS BNF Fr. 19093,
folio 31 (Villard de Honnecourt's
Sketchbook)
Date: 1225 – 1250
Subject: North Transept Rose



Figure 34

Cathedral: Chartres
Manuscript: Paris, MS BNF Fr. 19093,
folio 30 (Villard de Honnecourt's
Sketchbook)
Date: 1225 – 1250 (after 1194)
Subject: Western Rose

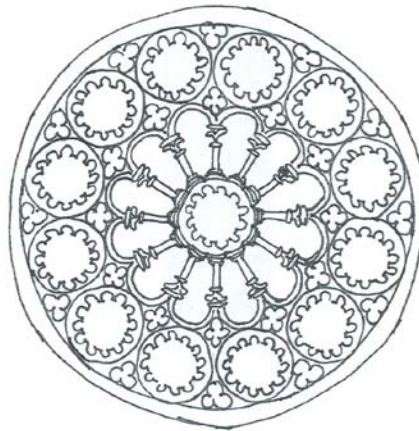


Figure 35

The progression of the rose window can be seen in the slow dissolving of the mass that begins with larger expanses of plate tracery. The earliest proto-rose windows are called *transennas* (exp. Petit Niort, late 11th century) and the holes were punched out of a plate of stone. As the

rose develops, the window of St. Etienne at Beauvais (1150) is an example of the use of plate tracery in the solid perimeter of the circular oculus.²⁷⁴ The Lausanne north rose is dated by Bony to c. 1180 – 1190.²⁷⁵ Lausanne's south transept rose (after 1205) is predominantly plate tracery. The wheel spokes of the Beauvais Window continue into the west rose of Chartres (1215) that slowly begins to dissolve the plates of stone and uses bar tracery or thin pieces of stone to hold the glass pieces. The Laon west rose (1200) uses thicker bar tracery while the North Rose of Notre Dame in Paris has radiating bar tracery. Curvilinear tracery is the next step and this is seen in St. Mary's at Cheltenham (early 14th century). Finally, the Flamboyant or flame-like tracery such as the replaced west window at Ste-Chapelle is the late fifteenth-century development.²⁷⁶

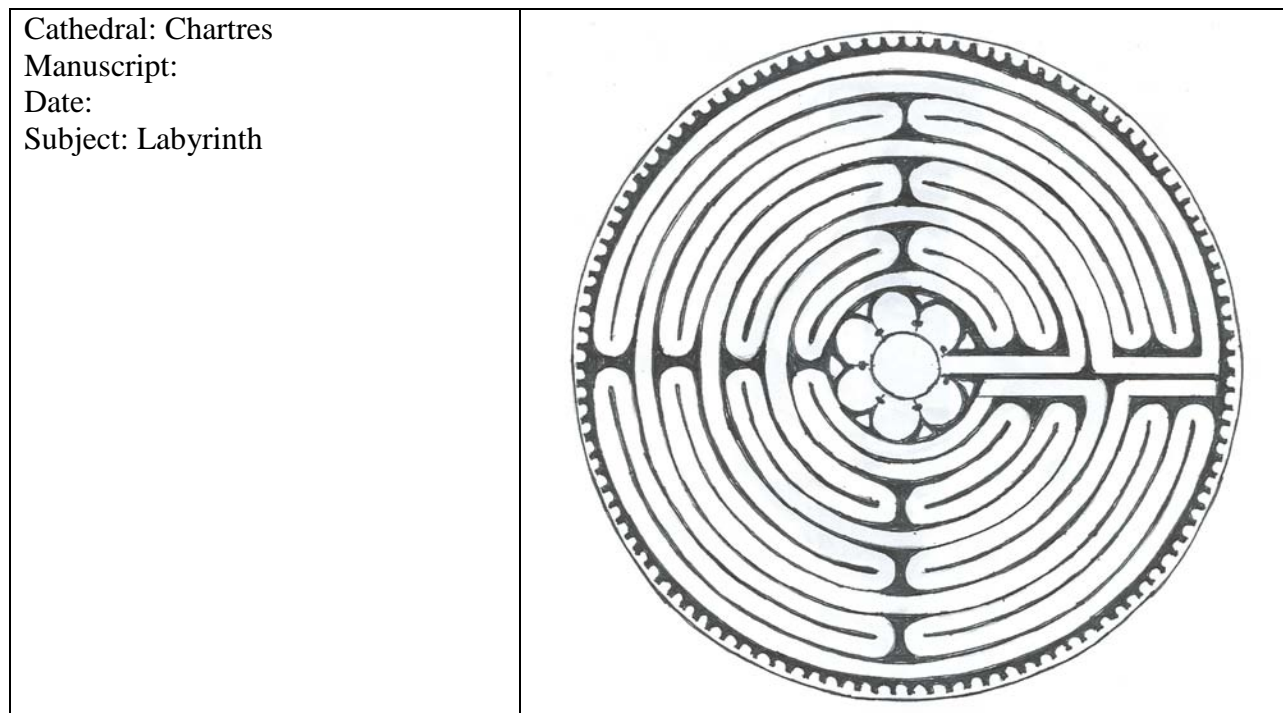


Figure 36

There are no medieval documentations of the Chartres labyrinth, but there are many modern interpretations. Four modern interpretations of the Chartres labyrinth include: 1) the replacement of a pilgrimage to Jerusalem by walking the labyrinth, 2) the figurative representation of the Heavenly Jerusalem and the walk to reinforce this archetypal destination to prepare for death 3) a monument celebrating the builders of Chartres like the labyrinth at Amiens.²⁷⁷

²⁷⁴ Jean Bony, *French Gothic Architecture of the 12th and 13th Centuries* (Berkeley: University of California Press, 1983). See p. 494.

²⁷⁵ Bony, *French Gothic Architecture of the 12th and 13th Centuries*. See p. 191.

²⁷⁶ Painton Cowen, *The Rose Window: Splendor and Symbol* (London: Thames Hudson, 2005). See pp. 22 – 23. Robert Suckale, "Thesen zum Bedeutungswandel der gotischen Fensterrose," in *Bauwerk und Bildwerk im Hochmittelalter*, ed. Karl Clausberg (Giessen: Anabas-Verlag, 1981).

²⁷⁷ In addition to these reasons, Doob suggests the twelve circuits of the labyrinth as representative of the zodiac. Doob strongly disagrees and even dismisses the idea of a substitution of a pilgrimage to Jerusalem with the walking of the labyrinth. Laishley, "Labyrinths in American contemporary religion: rituals that engage a sacred cosmos",

Table 39: List of Labyrinth Locations and Possible Dates of Creation

Arras	1160 (destroyed 1825)
Sens	12 th century (destroyed 1769)
Chartres	1194 – 1235
Amiens	1288 (destroyed 1825)
Reims	1287 –1311 (destroyed 1779)
Bayeux	13 th century
Poitiers	13 th century (destroyed)
Orleans	13 th century (destroyed)
Auxerre	1334 (destroyed 1690)
St. Omer	14 th c. (destroyed c.1779)
St. Quentin	1495

Doob, *The Idea of the Labyrinth from Classical Antiquity through the Middle Ages* Stephen Murray, *Notre-Dame Cathedral of Amiens: the Power of Change in Gothic* (New York: Cambridge University Press, 1996). See pp. 129, 170 – 173. Murray indicates that the labyrinth at Amiens is 12.14 m and in the fourth and fifth bays of the nave. It was installed by Renaud de Cormont in 1288 and removed in 1827. The original central octagon plaque is now in the Musée de Picardie. Murray’s concept of the function of the labyrinth is primarily penitential in the pilgrimage to Jerusalem that it is supposed to recreate. He also cites a possible funerary function if the architects are buried in the nave and an artistic function relating the labyrinth to memory and myth. The inscription on the labyrinth is as follows: Memore quant leuvre de leglise/ de cheens fu commenchie. Et si comme/ il est escript el moilon dele/ maison dedalus./ En lan de grace mil. IIC. & XX./ fu leuvre de cheens premiere/ ment encommenchie, adonc/ yert de cheste evesquie evrart e/ vesques benis. et roy de france/ loys qui fu filz phelippe le sage./ Chil qui maistre yert de loeuvre/maistre robert estoit nommes et de/ lusarches surnommes. maistre/ thomas fu après luy de cormont/ et apres ses filz maistre reg/ nault qui mectre fist a chest/ point chy ceste lectre que lin/ carnacion valoit .XIIIc. ans./ XII. en faloit. (The recording of the inscription from the labyrinth is in Amiens, Arch. Somme, G 2975, folio 247r—a 14th c. martyrology and register of the chapter of Amiens)

Note on when this church was begun. Just as it is written in the slab of the House of Daedalus. In the year 1220 was this work first begun. At this time the bishop of this diocese was Evrard blessed bishop. And the king of France was Louis who was the son of Philip the wise (Philip Augustus). He who was master of the work was named Master Robert and surnamed Luzarches. Master Thomas de Cormont was after him and afterwards his son Master Renaud who had this inscription placed at this place in he year of incarnation 1288. (Translation by Murray, p. 129)

A.1.2 Body Diagrams

Manuscript: MS Oxford, Bodleian Library,
Ashmole 391, folio 9r
Date: 14th century
Subject: Zodiac Man

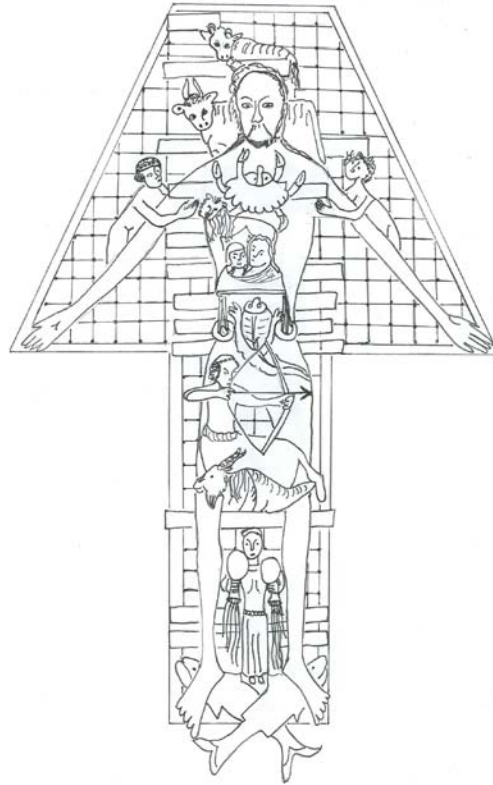


Figure 37

The Zodiac Man is a formula for associating the human body parts with the astrological signs of the zodiac. It is known to be firmly in use in the Hellenistic period and is considered heretical as seen by Isidore of Seville's statement concerning the Priscillian and Manichean heresies in his *Etymologiae*. According to Orosius, the Priscillians ascribed the following body parts to the following astrological signs: "[Priscillian], [c]ontra autem in membris corporis caeli signa esse disposita, id est arietem in capite, taurum in ceruice, geminos in bracchiis, cancrum in pectore et cetera . . ."²⁷⁸ Chartres MS 9/20 is Books III-VII of Orosius' *Historia*. See also above.

²⁷⁸ *Consultatio siuve Commonitorium Orosii ad Augustinum de Errore Priscillianistarum et Origenistarum*, CC 54 – 56, p. 159 Clark, "The Zodiac Man in Medieval Medical Astrology", Bober, "The Zodiacal Miniature of the Trés Riches Heures of the Duke of Berry: Its Sources and Meaning."

Manuscript: MS Milan, Bibl. Ambrosiana,
(Mi Ambr) D.75 inf, folio 6r
Date: 1274
Subject: Guidonian Hand



Figure 38

The Guidonian Hand is a method of using the left hand as a diagram for learning music. The left hand acts as a schematic while the right hand points to the joints of the fingers that act as *loci* in the musical scale. The concept of the Guidonian Hand is attributed to Guido of Arezzo (991 – after 1033), but is never actually mentioned in any of his extant treatises. John Cotton of Afflighem is the first to attribute the hand method to Guido in 1100. Another monk, Siegbert, follows John and credits Guido with the instruction of young children in music through the aid of learning syllables on the joints of the hand and applying that to music.²⁷⁹

²⁷⁹ Susan Forscher Weiss, "The Singing Hand," in *Writing on Hands: Memory and Knowledge in Early Modern Europe*, ed. Claire Richter Sherman (Seattle: University of Washington Press, 2000). See p. 38.

Manuscript: New York, Pierpont Morgan
Library, MS G.37
Date: c. 1260
Subject: Consanguinity Tree

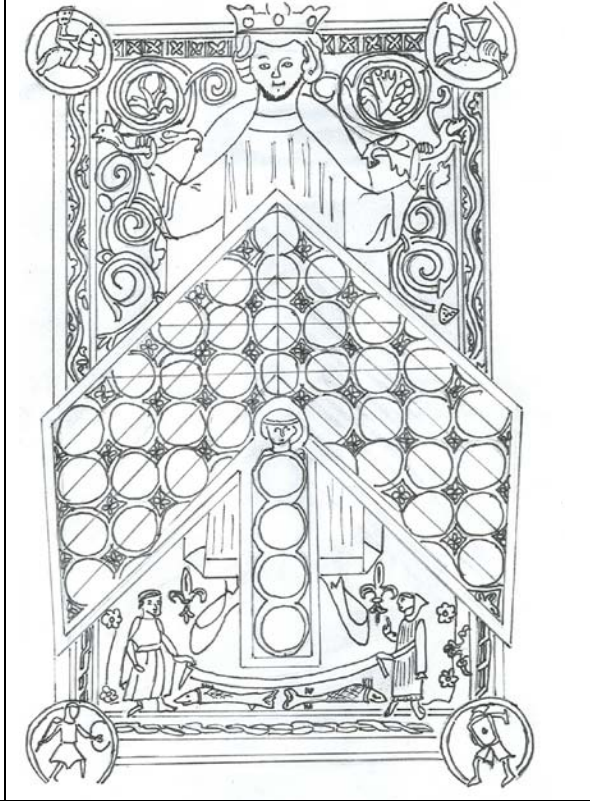


Figure 39

The Consanguinity Tree is a diagram that was used to prevent incestuous unions in the middle ages. There were different degrees of separation that were observed from four to seven and it was often difficult for rulers to observe these standards due to the amount of intermarriage within the royal lines. This example is used in Chapter Three to suggest the idea of combined elements through union in the philosophy of William of Conches and in the marriage rules of the thirteenth century.²⁸⁰ These tables were routinely added to canon law books, especially the Decretum of Gratian (cf. Chartres 169/160, 173/200), and occasionally to the papal decretals, of which Chartres 148/202, 149/207, 150/263, are copies.

²⁸⁰ See Schadt, *Die Darstellung der Arbores Consanguinitatis und der Arbores Affinitatis*.

A.1.3 Rectangular and Grid Diagrams

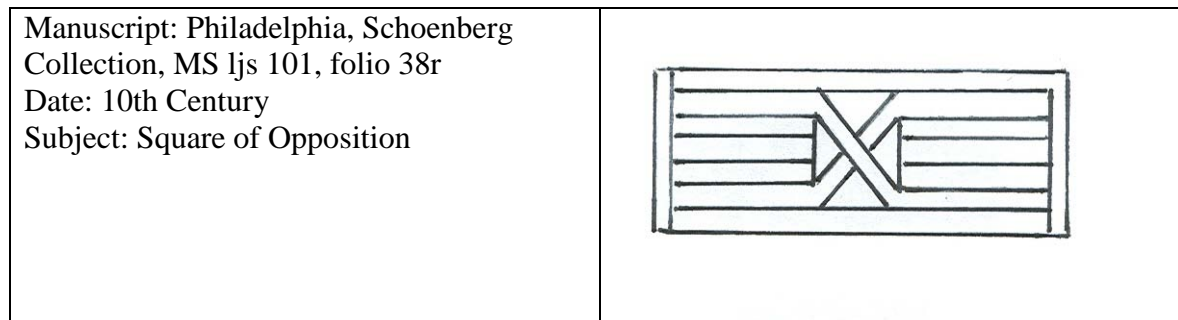


Figure 40

The Square of Opposition appears in Boethius's Commentary on Aristotle's *De Interpretatione*. Chartres 12/23 was a Boethius and Aristotle compilation. It also appears in a ninth-century source, Apuleius's Commentary on Aristotle's *Perihermeneias*. The example presented above is from North Central France and is likely to be from the library of Fleury's St. Benoit-de-Loire.²⁸¹ If this is the case, the Square could have been easily made available to the Chartrains due to the exchanges with Micy and Fleury (See Chapter One).

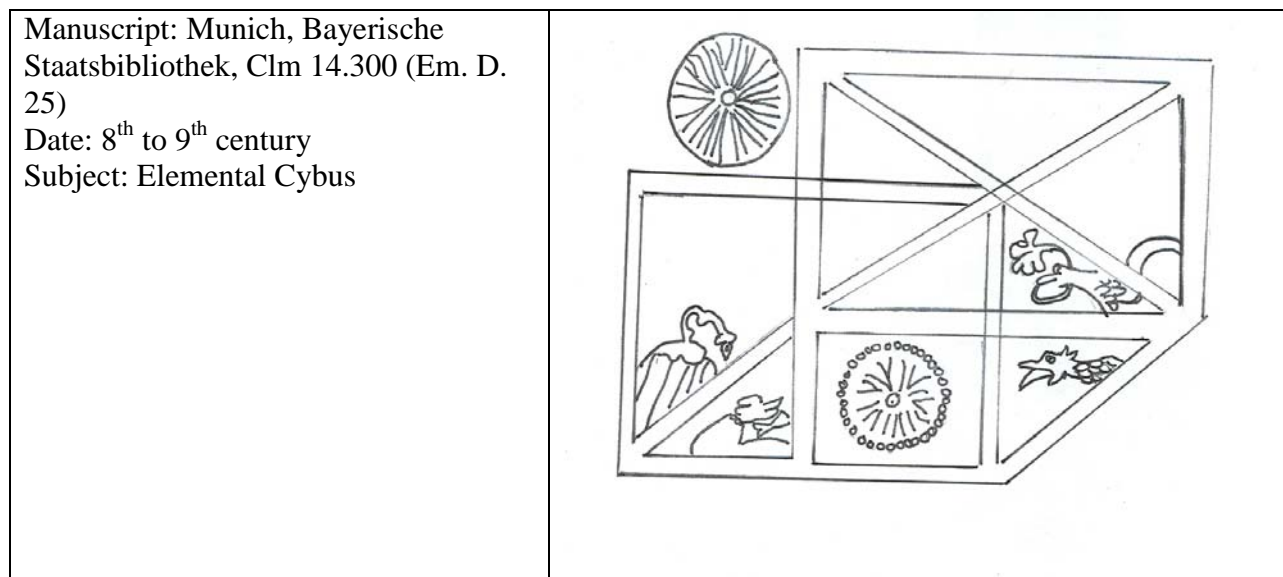


Figure 41

Isidore of Seville's diagram of the elements in Chapter XI of *De natura rerum* is related to the statement *Haec figura solida est secundum geometricam rationem*. [This figure is solid

²⁸¹ MS ljs 101, Schoenberg Center for Electronic Text & Image.
<http://dewey.library.upenn.edu/sceti/ljs/PageLevel/index.cfm?option=view&ManID=ljs101> (Last Accessed: 08/21/09).

according to geometric ratio.]²⁸² Perhaps in plainer English, this could read, ‘this figure is solid according to the comparison of geometric forms. In the early diagrams of Isidore, these figures do share a diagonal as in eighth-century MS Paris, BNF lat 6413, fol. 4v and tenth-century MS London, BL Cotton Tiberius C.I. fol. 6v. Later versions like MS BNF lat 6649, fol. 9r do not share a diagonal between two squares.²⁸³ (cf. Isidore, MS Chartres 68/10, plus MS 63/125 has some Isidore).

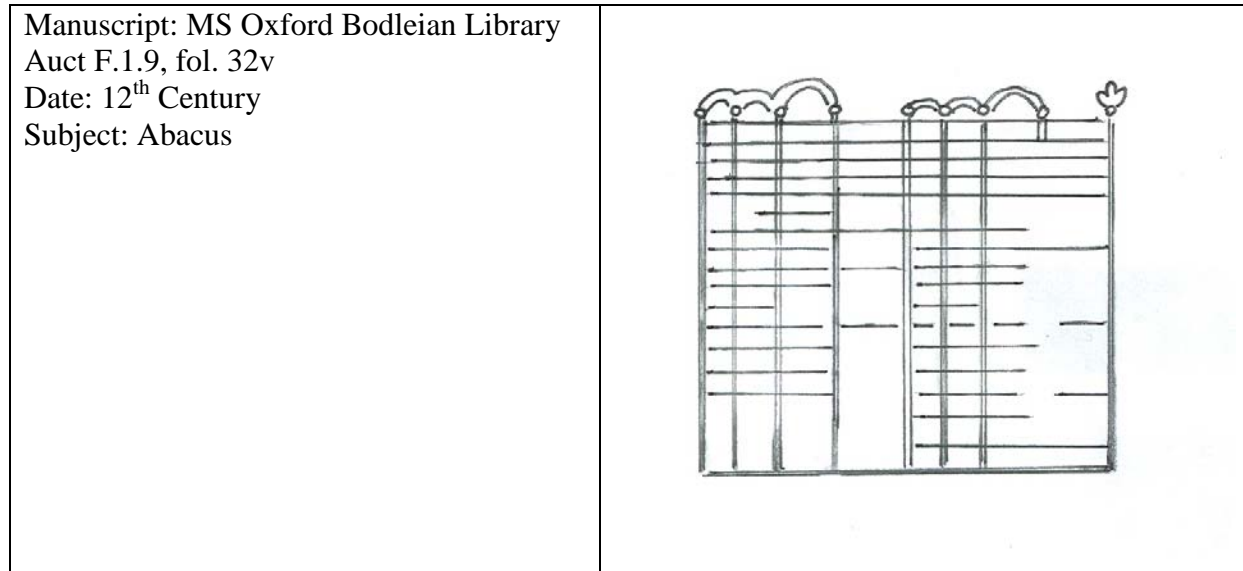


Figure 42

The abacus is a diagram of substitution. It presents itself in a grid form that allows the insertion of numerical values that determine the rest of the diagram. The Chartres parallel for the abacus is the transposition of the Zodiac Window to the cathedral floor plan.

²⁸² John E. Murdoch, *Album of Science: Antiquity and the Middle Ages* (New York: Charles Scribner's Sons, 1984). 280.

²⁸³ These diagrams appear in Murdoch, the observations are from the author of this study. Murdoch, *Album of Science: Antiquity and the Middle Ages*.

Manuscript: MS Oxford Bodleian Library.
Auct F.5.28, fol.16r
Date: 13th Century
Subject: Rithmomachia (Number Battle)

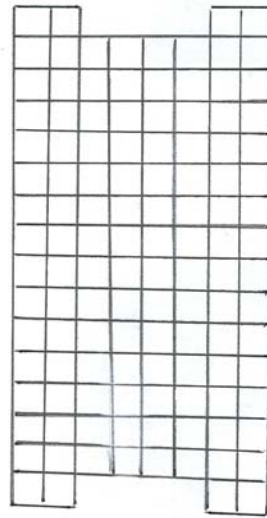


Figure 43

This manuscript contains information that is in a copy of a Latin text of Ptolemy's *Planisphaerum* translated from the Arabic by Hermann of Carinthia, a pupil of Thierry of Chartres. A copy of Ptolemy's text was in fact copied by Hermann and dedicated to Thierry.²⁸⁴ The "number battle" is played in a way that the board is used so that pieces move based on number logic and mathematics. The idea of mathematics and the use of substitution in addition to mental exercises is what is being suggested was at work in the arrangement of Chartres Cathedral.²⁸⁵

²⁸⁴ R. P. Lorch, "Ptolemy and Maslama on the transformation of circles into circles in stereographic projection," *Archive for History of Exact Sciences* 49, no. 3 (1995):271 - 84.

²⁸⁵ Ann E. Moyer, *The Philosophers' Game: Rithmomachia in Medieval and Renaissance Europe* (Ann Arbor: University of Michigan Press, 2001), David Eugene and Clara C. Eaton Smith, "Rithmomachia, the Great Medieval Number Game," *Mathematical Monthly* 18, no. 4 (1911):73 - 80.

Manuscript: Wolfenbüttel Herzog
August Bibl. MS 36.23 Aug 2, fol.
62v

Date: 6th century

Subject: Gromatic Diagram

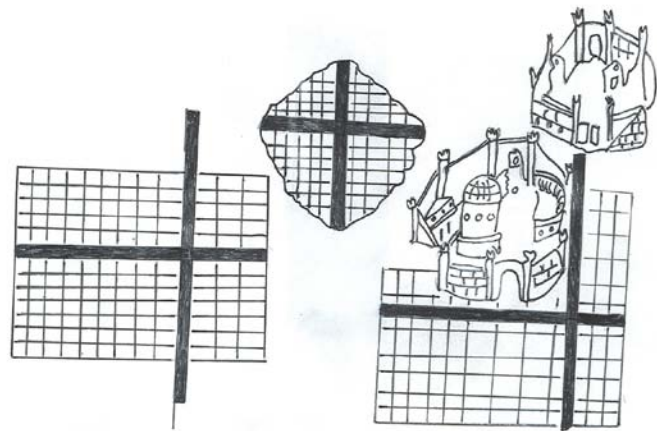


Figure 44

There are three varieties of gromatic drawings in the *agrimensores* or gromatic land surveying manuscript genre: schematic diagrams, pictures of panoramic landscapes, and a combination of the two. This example is of the third type that presents the landscape in three-dimensional view while the grid portion is of an overhead or floorplan-like vantage point. This diagram indicates that the kinds of vantage points I am suggesting in my reading of medieval Chartres were known in the early middle ages. It is the kind of three-dimensional schema that was known in early medieval Europe and might conceivably have been known at Chartres, although there is NO PROOF that Chartrain masters had access to it. The vantage points I suggest may have been in the minds of the architects are expressed in this manuscript, though it should be noted that it is the only surviving copy.²⁸⁶

²⁸⁶ James Nelson Carder, "Art historical problems of a Roman land surveying manuscript, the Codex Arcerianus A, Wolfenbüttel" (University of Pittsburgh, 1978). See p. 36.

A.1.4 Triangle Diagrams

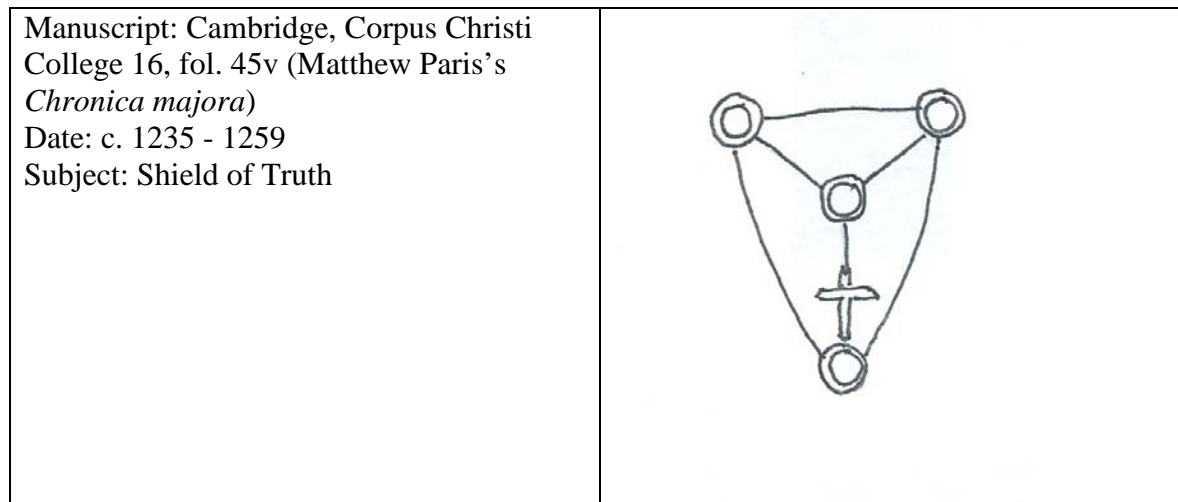


Figure 45

This diagram appears in copies of Peraldus's *Summa de vitiis* and is a new diagrammatic variation on the Aristotelian Square of Opposition. The shield of faith is a piece of armor that St. Paul classifies as aiding in the execution of six theological ideas.²⁸⁷ The form of the shield of faith bears resemblance to the shield held by the Gemini on the west façade's southern tympanum at Chartres. Chartres MS 147/203 was a *Tractatus de Virtutibus* of Peraldus (13th c.); 204/228 a *Tractatus de Vitiis*.

²⁸⁷ The four pieces of armor are the hauberk of justice, the shield of faith, the helm of salvation and the sword of the spirit. The loins are protected by truth and the feet are covered in the gospel of peace. Michael Evans, "An Illustrated Fragment of Peraldus's *Summa* of Vice: Harleian MS 3244," *Journal of the Warburg and Courtauld Institutes* 45 (1982):14 - 68.

Manuscript: Oxford, Bodleian Library MS
Digby 107, fol. 52v
Date: 14th century
Subject: Lambda Diagram²⁸⁸

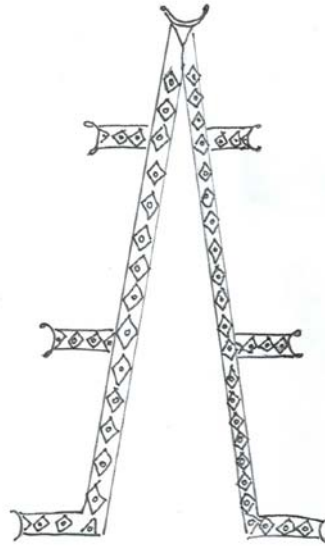


Figure 46

The lambda diagram presents itself as a corollary to the structure of Chartres in its organization of numbers on either side of its structure. Whereas the copy above dates to the 14th c. the type was available much earlier. Macrobius writes about the diagram: “Monade enim in vertice locata, terni numeri ab eadem ex utraque parte fluxerunt: ab hac pares, ab illa impares, id est post monadem a parte altera duo, inde quattuor, deinde octo; ab altera vero parte tria, deinde novem et inde viginti septem; et ex his numeris facta contextio generationem animae imperio creatoris effecit.”

²⁸⁸ Macrobius Ambrosii Theodosii, *Commentariorum in Somnium Scipionis Libri Duo*, ed. Luigi Scarpa, Book I: 46 – 47, (Padova: Liviana Editrice, 1981), pp.114, 116

A.1.5 Architectural Diagrams

Manuscript: Vienna, Österreichische Nationalbibliothek, MS 458, fol. 4v
Date: 9th century
Subject: Holy Sepulchre

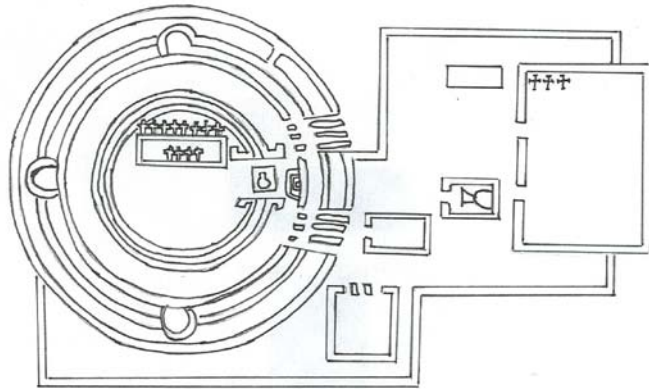


Figure 47

Arculf (8th century) was a monk from Gaul who made a pilgrimage to Jerusalem and in the course of returning to Gaul was blown off course to land in Iona where he met Adamnan. Adamnan, abbot of the monastery of Hy, listened to Arculf's tales of the east and the abbot wrote them down on wax tablets (xi, xii). Adamnan's text is called *De Locis Sanctis* and it includes diagrams of the Holy Sepulchre, the Church of the Ascension, Church of Jacob's Well, and the Church on Mount Sinai and it includes floor plans of these sites. These diagrams were drawn onto wax tablets by Arculf for Adamnan who later copied them onto parchment. Adamnan explains that the diagrams are for clarity.²⁸⁹

These diagrams are some of the few architectural plans that are left from the middle ages. This makes Arculf's legacy an important contribution to real-world medieval architecture.

The Venerable Bede is also known to have copied the diagrams of Arculf in his summation of *De Locis Sanctorum*. These diagrams are a simplified version have altered from the images in manuscripts of Adomnan and John Wilkinson surmises that the Bede copies reveal little of what Arculf drew on the tablets. Wilkinson also suggests that full comprehension of Bede's diagrams would require aligning them with their manuscript tradition and doing a full analysis of text and diagrams.²⁹⁰ This is a large task that would require more space than this study has allotted to this issue. However it is worth noting that Chartres MS 19/26 was a copy of Bede with diagrams (*figurae*).

²⁸⁹ Adamnan's *De locis sanctis*, *Scriptores Latini Hiberniae* 3 (Dublin 1958). Adamnan of Hy, *The pilgrimage of Arculfus in the Holy Land: about the year A. D. 670*, (New York: AMS Press, 1971)

See pp. 5, 8.

²⁹⁰ John Wilkinson, *Jerusalem Pilgrims Before the Crusades*, trans. John Wilkinson (Jerusalem: Ariel, 1977). See p. 197.

A.2 TEXTUAL AND VISUAL TRANSLATIONS OF TEXTUAL DIAGRAMS

Table 40: Textual Diagram—Manilius

Subject: Manilian Postures (Textual Diagram)	
<p>Nec tu nulla putes in eo commenta locasse naturam rerum, quod sunt currentia quaedam, ut Leo et Arcitenens Ariesque in cornua tortus; ut Virgo et Gemini, fundens et Aquarius undas; vel quae fessa sedent pigras referenda mentes, Taurus depositis collo sopitus aratri, Libra sub emerito considens orbe laborum, tuque tuos, Capricorne, gelu contractus in artus; quaeve iacent, Cancer patulam distentus in alvum, Scorpions incumbens plano sub pectore terrae, in latus obliqui Pisces semperque iacentes.</p> <p>Nor must you imagine that Nature has wrought a design of no purpose in that certain signs are running, as are the Lion, the Archer, and the Ram that ends in twisted horns; or that some stand erect with their limbs perfectly poised as the Virgin and Twins and Waterman pouring forth his stream; or that some sit fatigued and reflect their weariness of mind, the Bull, slumberous now the plough has left his shoulder, the Balance that sinks down after discharging its round of tasks, and you, Capricorn, whose limbs are shriveled by the frost; or that some lie flat, the Crab sprawling with distended belly, the Scorpion reposing on the ground beneath its smooth breast, the Fishes swimming sideways for ever horizontal.”²⁹¹</p>	

²⁹¹ Marcus Manilius, *Astronomica*. Trans. G. P. Goold. (Cambridge: Harvard University Press, 1977). (Latin and English), Book II, 244 – 255, See pp. 100 – 103.


<p>Manuscript: London, MS BL, Add. 19767 Date: 1246 Subject: Peter the Chanter's Prayer Posture 1²⁹²</p>	
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Figure 48


<p>Manuscript: London, MS BL, Add. 19767 Date: 1246 Subject: Peter the Chanter's Prayer Posture 2²⁹³</p>	
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Figure 49

²⁹² “Primus orandi modus est talis, videlicet brachia et ambas manus coniunctas et extensas supra caput tuum versus celum, in quantum prevalet extendere. Ita dico non sedens neque iacens nec appodiat, sed erectus, sursum toto corpore. Unde apostolus: “Volo ergo viros orare in omni loco, levantes manus puras sine ira et disceptatione.”” Book Five: 405 – 410, p. 182. “The first method of praying is like this, i.e. to extend the arms and the hands, which are joined together and extended, above the head toward heaven, as much as you are able. In this way I speak, not sitting or lying down or leaning, but standing up straight with the whole body. Hence the apostle: “Therefore I want men to pray in every place, lifting up hands that are pure without anger and dispute.” Translated by Mark Possanza.

²⁹³ “Secundus modus orandi debet fieri minibus et ulnis expansis ad modum atque similitudinem crucis.” Book Five: 456 – 457, p. 183 The second method of praying ought to be done with the hands and arms outspread in the manner and likeness of the cross. Translated by Mark Possanza.


<p>Manuscript: London, MS BL, Add. 19767 Date: 1246 Subject: Peter the Chanter's Prayer Posture 3²⁹⁴</p>	
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Figure 50


<p>Manuscript: London, MS BL, Add. 19767 Date: 1246 Subject: Peter the Chanter's Prayer Posture 4²⁹⁵</p>	
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Figure 51

²⁹⁴ "Tertius autem modus intercedendi ad deum fit stando orante, existente directo toto corpore, utpote in duobus est agendum superioribus. Tamen in hoc differt iste modus ab aliis, quoniam in hoc tertio tenetur orator esse erectus super pedes suos ita quod non sit adpodiatius neque inherens alicui rei, sicut in iamdictis—habens manus complosas, et contiguas extensas ac directas coram oculis suis." Book Five: 510 – 514, p. 184 Moreover, the third method of interceding with God is done with the person praying standing, the whole body being upright, as is to be done in the two methods above. Nevertheless, this method differs from the other ones in this respect, since in this third one the person praying is required to be standing erect on his feet in such a way that he is not leaning or clinging to anything, as in the methods already mentioned, having his hands clapped together and touching one another, extended and straight in front of his eyes. (Translation by Mark Possanza)

²⁹⁵ "Quartus modus deprecandi deum fit positus genibus in terra." Book Five: 594, p. 187 The fourth method of entreating God is done with the knees placed on the ground. (Translation by Mark Possanza)


<p>Manuscript: London, MS BL, Add. 19767 Date: 1246 Subject: Peter the Chanter's Prayer Posture 5²⁹⁶</p>	
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Figure 52

<p>Manuscript: London, MS BL, Add. 19767 Date: 1246 Subject: Peter the Chanter's Prayer Posture 6²⁹⁷</p>	
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Figure 53

²⁹⁶ Quintus modus nempe obsecrandi est iste, videlicet quando homo proicit se planum in terra super faciem suam . . ." Book Five: 630 – 631, p. 188. The fifth method of praying is this, i.e. when a person prostrates himself face down on the ground. (Translation by Mark Possanza)

²⁹⁷ Insuper sciendum est quod preter modos iamdictos orandi est alius qui sic habet fieri: cum orans, stans etiam erectus, toto corpore inclinatur caput suum ante sacrum et sanctum altare." Book Five: 721 – 723, p. 190. Furthermore it must be known that in addition to the methods of praying already mentioned there is another which has to be done in the following manner: when the person, while praying, also standing up straight with the whole body, bends his head before the sacred and holy altar. (Translation by Mark Possanza)


Manuscript: London, MS BL, Add. 19767 Date: 1246 Subject: Peter the Chanter's Prayer Posture 7 ²⁹⁸	
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Figure 54


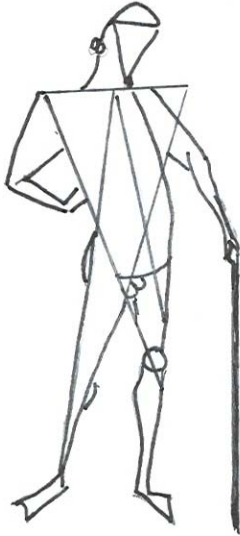

Manuscript: Paris, MS BNF Fr. 19093 Date: 1225 – 1250 Subject: Villard's Posture diagram on folio 35	
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Figure 55

²⁹⁸ Item nota Gregorius papa docet difficilemodum orandi, et alium a predictis sex, in expositione parabole illius: "Simile factum est regnum celorum homini regi," etc., ubi ait de quadam sorore patris sui hoc: "Cumque corpus eius de more mortuorum ad lavandum esset nudatum, longe orationis usu in cubitis eius et genibus, camelorum more, inventa est cutis obdurata excrevisse, et quod vivens eius spiritus semper gesserit vel egerit, caro mortua testabatur." Et ita habes septem utiles modos intercedendi pro peccatis tuis et omnium popullorum. Hec figura septima quam habes *antea hic* preoculis docet enucleatus quod dictum est a Gregorio superius." Book Five: 766 – 773, p. 191. Moreover, note: Pope Gregory teaches a difficult method of praying, different from the six already mentioned, in the exposition of that parable "The kingdom of heaven is like a king," etc.,

where he says this about his father's sister: "and when her body was stripped for being washed according to the custom of the dead, her skin was found to have become calloused on her elbows and knees, in the manner of camels, and her dead flesh bore witness to what her living spirit accomplished or did." And thus you have seven useful ways of interceding for your sins and the sins of all peoples. This seventh figure, which you have [*antea ??*] here before your eyes, shows more precisely what was said by Gregory above.

<p>Manuscript: Paris, MS BNF Fr. 19093 Date: 1225 – 1250 Subject: Villard's Posture diagram on folio 35 and 37</p>	 <p>Figure 56</p>
<p>Manuscript: Paris, MS BNF Fr. 19093 Date: 1225 – 1250</p>	 <p>Figure 57</p>
<p>Subject: Villard's Posture diagram on folio 37²⁹⁹</p>	

²⁹⁹ Marie-Therese Zenner, ed., *Villard's Legacy: Studies in medieval technology, science and art in memory of Jean Gimpel* (Aldershot: Ashgate, 2004), Hearn, "Villard de Honnecourt's Perception of Gothic Architecture.", Wolfgang Schöller, "Le Dessin d'architecture a l'époque gothique," in *Les Bâisseurs des cathedrales gothiques*, ed. Roland Recht (Strasbourg: Musée de Strasbourg, 1989), 227-35, Franz Bischoff, "Les Maquettes d'Architecture," in *Les Bâisseurs des cathedrales gothiques*, ed. Roland Recht (Strasbourg: Musée de Strasbourg, 1989), 287-95, Rüdiger Becksmann, "Le Vitrail et l'Architecture," in *Les Bâisseurs des Cathedrales Gothiques*, ed. Roland Recht (Strasbourg: Musée de Strasbourg, 1989), 297-305, Carl F. Barnes, Jr., "Le "Problème" Villard de Honnecourt," in *Les Bâisseurs des Cathedrales Gothiques*, ed. Roland Recht (Strasbourg: Musées de la Ville de Strasbourg, 1989), 498, Carl F. Barnes, Jr., *Villard de Honnecourt: The Artist and His Drawings, a critical bibliography* (Boston: G. K. Hall and Co., 1982), Carl F. Barnes, Jr., "The Drapery-Rendering Technique of Villard de Honnecourt," *Gesta* 20,

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APPENDIX B

CHARTRES LIBRARY LIST

The manuscripts in the Bibliothèque municipale de Chartres were bombed by friendly fire on June 26, 1944.³⁰⁰ In the table below, Chartres # refers to current shelf number, 1890 refers to the *Catalogue general des manuscrits de bibliothèques publiques de France*, Ed. E. Plon, Nourrit et Cie, Paris: Librairie Plon, 1890. Authors and titles are cited according to this catalogue, using English where the Catalogue uses French identifiers for titles. Delaporte refers to Yves Delaporte, *Les manuscrits enluminés de la Bibliothèque de Chartres* . (Chartres, Société archéologique d'Eure-et-Loir, 1929). The key indicates what the manuscripts' present state of preservation is.

Key: * = Good Condition

** = Partially Useable

*** = Difficult to Use

**** = Unuseable

No symbol = Destroyed

³⁰⁰ See footnote 1.

Chartres #	1890 #	Date	Manuscript Contents	Reproductions	Provenance
1	12	1000-1099	Expositiones Haimonis [Halberstantensis] per circulum anni super Epistolas vel Evangelia	Delaporte p.10	Saint-Père
2	13	900-1199	Biblorum pars	Delaporte p.10	Chapter
3	14	800-899	***S. Hieronymi tractatus in Psalmos	Delaporte p.2	Chapter
4	15	800-899	*S. Hieronymi commentarius in Isaiam	Delaporte p.4	Chapter
5	16	800-899	*Vitae Patrum—S Hieronymo (includes Paul the Hermit)		Chapter
6	17	800-899	*Omellas Aurelii Augustini, numero L due, In Evangelio beati Johannis		Chapter
7	18	900-999	**S. Augustini tractatus contra Faustum		Chapter
8	19	1100-1199	*Lectionarium		Saint-Père
9	20	800-899	Pauli Orosii historiarum libri III-VII		Chapter
10	21	800-899	*Socratis, Sozomeni et Theodoreti historia Ecclesiastica (8 folios at beg. Liturgical 10th c.)		Saint-Père
11	22	1100-1199	**Lectionarium (works of SS Peres)		Chapter
12	23	900-999	**Anicii Manlii Severini Boetii, Kategorie Aristotelis, Virgilii Aeneidos libri I-II		Chapter
13	24	800-899	**S. Hieronymi commentaria in Abdiam et Matthaëum (and a fragment of commentary on Virgil's Bucoliques)		Saint-Père
14	25	1000-1099	*Omellae domini Aimonis super Evangelia In diebus dominicis seu in diebus festis tocius anni	Delaporte p.10	Chapter
15	74	900-999	*Biblorum pars (with Bede)	Delaporte p.4	Saint-Père
16	75	1000-1099	*Isidori Hispalensis Etymologiarum libri XVII priores		Chapter

17	113	1100-1199	*Eugipii excerpta Augustine		Saint-Père
18	116	1100-1199	**Expositio Cassiodori senatoris Super et Psalterii		Saint-Père
19	26	900-999	Bede et figurae		Chapter
20	27	800-999	****Cassiodori, senatoris, exigui servi Dei, expositio Psalmo	Delaporte p.2	Chapter
21	28	800-999	Cassiani Collationes Patrum		Saint-Père
22	30	800-899	Psalterium tripartitum		Saint-Père
23	31	900-999	Aureus textus sancti Evangelii	Delaporte p.4	Saint-Père
24	32	800-899	Incipit prologus libri Comitis sancti Hieronimi (attributed to Alcuin)	Delaporte p.1	Saint-Père
25	44	900-1099	***Rabanus Maurus, Ambrosius, Vitae sancti	Delaporte p.11	Saint-Père
26	67	800-899	Decretales Pseudo-Isidorianae (excerpt)		Chapter
27	68	1000-1099	Vitae sanctorum	Delaporte p.15-16	Saint-Père
28	69	1000-1099	Amalaire De ecclesiasticis		Chapter
29	70	900-999	***Libri Josephi, totius operis antiquitatis Judaice	Delaporte pp.11-12	Saint-Père
30	73	1000-1199	Opuscula Biblia	Delaporte p.25	Saint-Père
31	85	800-899	**Pater ecclesiae		Saint-Père
32	86	900-999	*Cassiodorus, (Commentary on the Psalms) CI-CL	Delaporte p.5	Saint-Père
33	100	1000-1199	*Pauli epistolae	Delaporte p.26	Saint-Père
34	109	900-999	S. Ambrose-exposition on the letters of Paul		Saint-Père
35	110	1000-1199	Anonymi epitome Priscani		Chapter
36	111	1000-1199	S. Cypriani opuscula et passio S. Eusebii, Vercellenis episcopo 1 st part 12th c. 2nd part 10th c.		Saint-Père
37	112	1000-1199	Alufus de Tournay (Commentary on the New Testament)	Delaporte p.26	Chapter
38	114	1000-1199	Iohannis Cassiani, Sulpicus Severus, Martin de Braga, etc.	Delaporte p.26	Saint-Père
39	1	900-999	Augustinus Hipponensis Confessiones, Libri XIII	Delaporte p.9	Chapter
40	2	700-799	S. Gregory's Magni moralium in Job Libri XXVII – XXXIII		Saint-Père
41	3	700-799	SS. Hieronymi, Gregorii Magni and Augustini		Saint-Père

			Opuscula		
		1100-			
42	29	1199	Lectionarium Sancti Petri Carnotensis	Delaporte p.16	Saint-Père
43	33	800-899	Speculum sancti Augustini		Chapter
44	34	900-999	Expositio Haimonis [Halberstatensis] in epistolis Paul	Delaporte p.12	Saint-Père
		1000-			
45	36	1099	Boetii arithmetica		Saint-Père
		1000-			
46	38	1099	Boetii arithmetica		Saint-Père
47	40	900-999	S. Gregorii Magni antiphonarium	Delaporte p.5	Chapter
		1000-			
48	41	1099	Boethius de musica libri V	Delaporte p.12	Saint-Père
		1100-			
49	42	1199	Evangeliarium	Delaporte p.27	Saint-Père
		1100-			
50	71	1199	S. Gregorii Magni epistolae	Delaporte p.27	Saint-Père
		1000-			
51	76	1099	Pauli epistolae, cum glosis, capitulis et argumentis		Saint-Père
52	78	900-999	Expositio Rabani monachi in libro Regum		Saint-Père
53	79	800-899	Omelia prima Gregorii pape in extrema parte Ezechieelis prophetae	Delaporte p.2	Chapter
		1100-			
54	81	1199	***Origenis commentarius in epistolam Pauli ad Romanos	Delaporte p.27	Saint-Père
55	82	15th c.	****		Saint-Père
		1000-			
56	83	1199	Anonymi epitome Priscani	Delaporte p.16	Saint-Père
		900-			
57	84	1099	***Lectionarium (Bede, Gregory, Augustine, Origen, and others) Beati Hieronimi presbitieri explanationis in Isaiam prophetam libri numero septem		Saint-Père
58	87	900-999		Delaporte p.16	Saint-Père
		1000-			
59	91	1099	Annicii Manlii Severini Boetii Torquati, Ex consulis ordinarii patricii	Delaporte p.17	Chapter
		1100-			
60	97	1199	S. Augustini opuscula		Saint-Père
61	99	800-899	Concilium Aquisgranense sub Ludovico pio		Chapter
62	115	800-899	***Opuscula medica (including Galen and figurae)	Delaporte p.6	Saint-Père
		900-			
63	125	1099	Ambrosii, Isidori et aliorum opuscula		Saint-Père

64	5	900-999	Evangelia IV		Saint-Père
65	6	800-899	Pastoral (Gregory)		Saint-Père
66	7	900-999	S. Augustin, Prosper, and Mamert Claudien, etc		Chapter
67	8	800-899	Liber Cesarii episcopi et sermones Augustini		Chapter
68	10	900-999	Isidori Hispalensis "libri aethimologiarum"	Delaporte p.6	Saint-Père
69	35	1099	Liber Sententiarum beati Ysidori episcopi	Delaporte p.17	Saint-Père
70	45	800-899	Smaragdi, Bedae, Aratoris opuscula, etc		Chapter
71	52	800-899	Aristotelis, Ciceronis et Boetii opuscula		Chapter
72	52 bis	800-899	Boetii commentarius in Aristotelis libros de interpretatione		Chapter
73	53	800-899	S. Augustini opuscula		Chapter
74	54	800-899	Works of Philosophy (Figurae)		Chapter
75	55	800-999	grammar, astronomy, chronology, poem on the letters of the alphabet, Bede		Chapter
76	56	800-899	Bedae exposition in evangelium secundum Marcum	Delaporte p.3	Chapter
77	57	800-899	Alcuini et Albertani de Brechia opuscula		Chapter
78	65	800-999	S. Augustini opuscula		Saint-Père
79	88	1199	Expositio sancti Hilarii, Pictavensis urbis episcopi, super Matheum		Saint-Père
80	90	800-899	Bedae et Isidori Hispaniensis opuscula, etc. (mappamundi)	Delaporte p.3	Saint-Père
81	122	1299	****Ordo officiorum ad usum monasterii Sancti Carauni		Saint-Cheron
82	123	1299	Omellie de diversis lectionibus sancti Evangelii beati Gregorii pape, numero quadraginta		Saint-Père
83	124	1199	*Bedae commentarius in evangelium S. Lucae		Saint-Père
84	131	1299	Visiones cujusdam novicii, vita sanctae Alpaidis et Purgatorium sancti Patricii		Saint-Père
85	132	1199	Gregorii Magni commentarius in Canticum canticorum et S. Hieronymi opuscula	Delaporte p.22	Saint-Père
86	133	1199	S. Augustini opuscula		Saint-Père
87	146	1199	S. Augustini and S. Hieronymi opuscula	Delaporte p.27	Chapter

88	11	1100-1199	S. Augustini opuscula		Chapter
89	37	900-999	****S. Gregorii Magni Dialogorum Libri IV-(figura fol 119 v)	Delaporte p.12-13	Saint-Père
90	39	900-999	Cassiodori liber de artibus ac disciplinis liberalium litterarum	Delaporte p.6	Saint-Père
91	46	900-999	Hiamonis Halberstatensis commentarius in epistolam Pauli ad Romanos	Delaporte p.7	Chapter
92	47	800-1399	Opuscula varia	Delaporte p.28	Chapter
93	48	800-999	S. Augustini opuscula	Delaporte p.3	Chapter
94	49	1000-1099	Bedae commentarius in Epistolas canonicas	Delaporte p.17-18	Chapter
95	50	900-999	S. Hieronymi commentarius in Danielelem, etc.		Saint-Père
96	51	900-999	Bedae venerabilis quastiones in Genesim		Chapter
97	72	900-999	Pauli Orosii historiarum libri VII		Chapter
98	77	800-999	Rabanui Mauri, commentarius in Matthaem		Chapter
99	80	900-1099	Victorini expositio in rhetorica Ciceronis	Delaporte p.13	Chapter
100	92	1000-1099	Aristotelis, Boetii, Alcuini and Ciceronis opuscula, etc.	Delaporte p.18	Chapter
101	93	800-999	Origenis expositiones in Numeros et Leviticum		Saint-Père
102	94	900-999	Cassiodori, etc. opuscula		Chapter
103	95	900-999	****Martiani Capellae de septem liberalibus artibus libri IX (figura on syllogisms fol 157)	Delaporte p.7	Chapter
104	101	900-999	S. Augustini opuscula		Saint-Père
105	102	900-999	Martiani Capellae de septem liberalibus artibus libri IX (figurae fol. 124)		Chapter
106	118	800-999	S. Hieronymi vitae Patrum et S. Isidori Hispaniensis opuscula		Saint-Père
107	119	1100-1199	Opuscula varia	Delaporte p.28	Saint-Père
108	138	1100-1199	S. Augustini de consensu Evangelistarum libri IV	Delaporte p.29	Saint-Père
109	43	800-899	S. Augustini opuscula		Saint-Père
110	58	900-1199	S. Gregorii Magni, Sedulii poetae et S. Dyonisii Areopagitae opuscula		Saint-Père
111	59	800-899	S. Hieronymi commentarius in Danielelem		Chapter
112	60	800-999	S. Augustini vita et index librorum ejus a Possidio episcopo, Alcuini versus, etc.	Delaporte p.3	Chapter
113	61	800-899	Alcuini opuscula		Chapter

114	62	1100-1199	Pastoral (St. Gregory)		Chapter
115	63	800-999	Vitae sanctorum (including Pantaleon)		Saint-Père
116	66	1100-1199	S. Augustini opuscula		Saint-Père
117	89	1099	Hegesippi historiarum libri V	Delaporte p.18	Saint-Père
118	96	900-999	**S. Augustini et S. Hieronymi opuscula		Chapter
119	98	800-899	S. Ambrosii liber de officiis	Delaporte p.4	Chapter
120	103	1000-1199	evangelists with preface by St. Jerome	Delaporte p.19-20	Saint-Père
121	104	1100-1199	Anselmi Cantuariensis opuscula, sermons anonymi, etc.		Saint-Père
122	120	1100-1199	**Gregorii Magni "liber omeliarum"	Delaporte p.29	Saint-Père
123	126	1100-1199	Dialogus beati Gregorii, pape urbis Romae, de miraculis sanctorum Patrum		Saint-Père
124	127	900-999	Excerptum de canonibus	Delaporte p.7	Chapter
125	128	1100-1199	S. Ephraemi opuscula, S. Augustini et S. Benediti regulae		Saint-Père
126	129	900-999	S. Hieronymi adversus Jovinianum libri II		Chapter
127	130	1100-1300	Baudri de Bourgueil History of the first crusade		Saint-Père
128	145	1100-1399			
129	147	1100-1199	Homelies (S. Augustini)		Chapter
130	148	800-999	****Varia opuscula musica (figurae)		Saint-Père
131	149	1200-1299	S. Dyonisii Areopagitae		Chapter
132	262	800-1299	Giraudi Parisiensis glosae super Viaticum, Alcuini et Bedae opuscula		Chapter
133	652	1700-1799			
134	653	1700-1799			
135	134	1100-1299	*Petri Lombardi commentarius in epistolas Pauli	Delaporte p.39-40	Chapter
136	135	1100-1199	*S. Augustini de Civitate Dei libri XXII	Delaporte p.22	Chapter

137	150	1100-1199	*Vitae sanctorum	Delaporte p.22-23	Chapter
138	151	1100-1199	*Lectionarium		Chapter
139	157	1100-1199	*Biblia sacra	Delaporte p.48-50	Chapter
140	194	1100-1299	*** Petri Lombardi commentarius in epistolas Pauli	Delaporte p.40	Chapter
141	195	1200-1299	*Homily beginning on the second Sunday after the octave of Pentecost	Delaporte p.50-51	Chapter
142	196	1200-1299	*Homeliae (for each day of the year)	Delaporte p.40, 50-51	Chapter
143	197	1100-1199	**Petri Lombardi commentarius in epistolas Pauli	Delaporte p.40-41	Chapter
144	198	1200-1299	*Homeliae (for the four Sundays of Advent to the second Sunday of Lent)	Delaporte p.50-51	Chapter
145	199	1300-1399			
146	202	1200-1299	*Gregorii IX Decretalium libri V		Saint-Père
147	203	1200-1299	Guillelmi Peralti tractatus de virtutibus		Saint-Père
148	205	1100-1199	*Peteri Lombardi commentarius in Psalmos	Delaporte p.41	Chapter
149	207	1200-1299	*Gregorii IX Decretalium libri V		Chapter
150	263	1200-1399	*Innocentii IV and Bonifacii VIII Decretales, cum glosa	Delaporte p.77-78	Chapter
151	136	1100-1199	S. Augustini in Genesim commentariorum libri XII	Delaporte p.23	Saint-Père
152	105	900-999	**S. Augustini de Trinitate libri XV	Delaporte p.7	Saint-Père
153	137	1100-1199	**S. Augustini opuscula	Delaporte p.29	Saint-Père
154	106	1000-1099	S. Augustini homeliae	Delaporte p.20	Saint-Père
155	64	800-999	S. Augustini de civitate Dei Libri XII		Saint-Père
156	158	1100-1199	S. Augustini opuscula	Delaporte p.30	Saint-Père

157	107	1100-1199	S. Augustini opuscula	Delaporte p.30	Saint-Père
158	139	1100-1199	Ambrosii Autperti expositio Apocalypsis	Delaporte p.30	Saint-Père
159	152	1100-1199	S. Hieronymi explanatio in XII prophetas	Delaporte p.30-31	Saint-Père
160	153	1100-1299	Varia opuscula medicina (Hippocrates, Constantine the African, etc.)	Delaporte p.31	Chapter
161	154	1100-1199	***Burchardi Wormaciensis Decretum	Delaporte p.23-24	Chapter
162	155	1100-1199	Sermones Virginae	Delaporte p.19	Chapter
163	156	1000-1199	****Homeliae (for the Sunday after octave of Pentecost until the Saturday after the Passion)	Delaporte p.20	Chapter
164	159	1100-1199	S. Hieronymi explanations super Ezekielem and Danielelem	Delaporte p.31	Chapter
165	201	1300-1399	****	Delaporte p.70-73	
166	204	1100-1199	Vitae sanctorum (including St. Nicholas)	Delaporte p.41-42	Chapter
167	206	1200-1299	Evangelists	Delaporte p.57	Chapter
168	660	1700-1799			
169	160	1200-1399	****Biblia abbreviata, commentarius in Decretum Gratiani		Chapter
170	161	1100-1199	Homeliae Origeni	Delaporte p.31	Abbey of Josaphat
171	162	1100-1199	Opuscula varia medicina		Chapter
172	164	1100-1199	SS. Hieronymi, Ambrosii and Augustini opuscula	Delaporte p.32	Chapter
173	200	1200-1299	Stephen of Tournai, Comentary on the Decretals of Gratian		Chapter
174	208	1100-1299	Evangelists of Matthew and Mark	Delaporte p.42	Chapter
175	209	1200-1299	Genesis, with gloss	Delaporte p.46-47	Chapter
176	210	1200-	Peteri Lombardi, Liber Sententiarum	Delaporte p.51	Chapter

		1299			
		1100-			
177	211	1299	Peteri Lombardi commentarius in Psalmos	Delaporte p.47	Chapter
		1200-			
178	212	1399	*		
		1200-			
179	213	1299	Commentary on many books of the Bible		Chapter
		1200-			
180	214	1299	Commentary on the Bible		Chapter
		1200-			
181	215	1299	Exodus with gloss	Delaporte p.42-43	Chapter
		1200-			
182	216	1299	Numbers with gloss	Delaporte p.43	Chapter
		1100-			
183	217	1199	Kings (four books) with gloss	Delaporte p.32	Chapter
		1200-			
184	218	1299	Isaiah with gloss	Delaporte p.43	Chapter
		1200-			
185	219	1299	***The minor Prophets, with gloss	Delaporte p.43-44	Chapter
		1200-			
186	220	1299	Leviticus with gloss	Delaporte p.44	Chapter
		1200-			
187	221	1299	Jeremiah, with gloss	Delaporte p.44	Chapter
		1200-			
188	224	1299	Diverse commentaries on the Bible		Chapter
		1200-			
189	234	1299	Concordance of the bible		Chapter
		900-			
190	163	1299	Boethii commentariorum in Topica Ciceronis libri VI, etc.	Delaporte p.8	Chapter
		1100-			
191	166	1199	S. Ambrosii opuscula	Delaporte p.32	Saint-Père
		1100-			
192	168	1199	Vitae Patrum	Delaporte p.32-33	Chapter
		1000-			
193	172	1099	Pseudo-Isidore	Delaporte p.18-19	Saint-Père
		1100-			
194	175	1199	S. Anselmi opuscula		Saint-Père
		1200-			
195	176	1299	Pontifical, use of Chartres		Chapter
196	177	1200-	Job with gloss		Chapter

		1299			
		1200-			
197	178	1299	***Epistols et lectionary for use at Chartres	Delaporte p.33	Chapter
		1100-			
198	179	1199	Ritual of a Benedictine abbey, probably Saint-Père		Saint-Père
		1100-			
199	180	1199	Evangelist Luke with gloss	Delaporte p.33	Chapter
200	181	1290s	****Ovid's Metamorphosis		Saint-Père
		1200-			
201	223	1299	Glosse super XVI Prophetas, et Cantica canticorum, et Proverbia et Ecclesiastem		Chapter
		1200-			
202	225	1299	Petri Mandscatoris Historia scholastica	Delaporte p.48	Chapter
		1200-			
203	227	1299	Guillemi Peralti tractatus de virtutibus		Chapter
		1200-			
204	228	1299	Guillelmi Peralti tractatus de VII vitiis		Chapter
		1100-			
205	230	1199	***S. Bernardi et S. Anselmi opuscula, etc		Saint-Père
		1100-			
206	232	1199	Pauli epistolae (with commentary)		Saint-Père
		1200-			
207	237	1299	Summa Fratris, Reymundi [de Pennaforti] de penitencia	Delaporte p.57	Chapter
		1200-			Capucins de Chartres
208	247	1299	****Epistole magistri Petri Blesensis, Bathoniensis archdyaconi		
		1100-			
209	248	1199	Glose super Priscianaum majorem and Priscianus minor		Chapter
		1100-			
210	252	1199	Gospel of St. John	Delaporte p.33	Chapter
		1300-			
211	264	1399	Jacobus de Voragine, Legenda aurea		Chapter
		1200-			
212	302	1299	Ordinary of Tancres, canon of Bologna	Delaporte p.78	Saint-Père
		1100-			
213	169	1199	****Treatises and Diagrams Astrological (Figurae)		Chapter
		1100-			
214	173	1199	Treatise astronomical and mathematical (Figurae)	Delaporte p.25	Chapter
		1100-			
215	174	1199	S. Hieronymi expositio in Psalmos		Chapter
216	183	1100-	Boetii and Cicero rhetorica		Chapter

		1199			
		1200-			
217	185	1299	Epistles and Gospels for the year		Chapter
		1100-			
218	186	1199	Genesis, with gloss		Saint-Père
		1200-			
219	226	1299	Petri Manducatoris Historia Scholastica		Chapter
		1100-			
220	236	1199	Pauli epistolae (with gloss)	Delaporte p.24	Chapter
		1200-			
221	250	1299	Biblia Latina (with prologues of Jerome)		Dominicans
		1200-			
222	254	1299	Nicolai de Byart distinctiones		Chapter
		1200-			
223	255	1399	Prisciani, S. Thomae Aquinatis et Johannis de Sancto Amando opuscula		Chapter
		1300-			
224	278	1399			
		1200-			
225	279	1399	Guillelmi de Sancto Amore collatio catholicae et canonicae Scripturae		Chapter
		1300-			
226	280	1399	Anonymous Sermons		Chapter
		1200-			
227	281	1399	Guidonis Ebroicensis sermones		Chapter
		1300-			
228	282	1399			
		1200-			
229	283	1299	Glosses on the Pentateuch, Joshua and Judges		Chapter
		1300-			
230	285	1399			
		1200-			
231	289	1299	****Lectionary used at Saint-Père		Saint-Père
		1400-			
232	291	1499			
		1300-			
233	297	1399			
		1200-			
234	300	1299	Roberti de Flammesburia Poenitentialis liber, etc.		
235	301	1300-			

		1399			
		1700-			
236	664	1799			
		1700-			
237	665	1799			
		1100-			
238	171	1199	Sermons		Dominicans
		1100-			
239	184	1199	Lectionarium Carnotensis	Delaporte p.57	Chapter
		1100-			
240	187	1199	Psalterium	Delaporte p.44-45	Chapter
		1200-			
241	188	1399	Genesis, with gloss	Delaporte p.24	Saint-Père
		1200-			
242	238	1399	S. Gregorii Magni opuscula		Chapter
		1200-			
243	239	1299	S. Bonaventurae opusculum de septem donis Spiritus sancti, etc,		Chapter
		1300-			
244	243	1399			
		1200-			
245	244	1299	Sermons with varied themes	Delaporte p.73	Chapter
		1200-			
246	249	1299	Actus Apostolorum, cum glosa marginali et interlineari	Delaporte p.45-46	Chapter
		1200-			
247	251	1399	Peteri Lombardi Sententiarum, libri IV		Chapter
		1200-			
248	265	1299	Guillelmi Peralti Summa abbreviata, etc.		Saint-Père
		1200-			
249	267	1299	Juliani Toletani opuscula, etc,		
		1300-			
250	268	1399			
		1300-			
251	271	1399			
		1300-			
252	274	1399			
		1300-			
253	275	1399			
		1200-			
254	276	1299	Monaldi Summa de jure canonico		Chapter
255	284	1300-	***		

		1399			
		1300-			
256	287	1399			
		1200-			
257	288	1299	Petri Cantoris summa Abel		Chapter
		1500-			
258	290	1599	**		
		1200-			
259	294	1299	S. Bonaventurae commentarius in libros IV Sententiarum		Dominicans
		1500-			
260	295	1599			
		1300-			
261	296	1399	***		
262	299	800-999	Glossarium latinum		Saint-Père
		1400-			
263	446	1499			
		1300-			
264	305	1399	*	Delaporte p.78-79	
		1200-			
265	306	1299	*Lectura Cyni de Pistorio super Codicem		Chapter
		1300-			
266	307	1399			
		1300-			
267	308	1399	*		
		1200-			
268	309	1399	Speculum judiciale a Guillermo Duranti compositum		Chapter
		1300-			
269	310	1399	*		
		1300-			
270	311	1399	*		
		1300-			
271	312	1499	*		
		1300-			
272	313	1399			
		1300-			
273	314	1399		Delaporte p.79	
		1300-			
274	317	1399	***		
		1300-			
275	318	1399	*	Delaporte p.58	

276	191	1100-1199	*S. Gregorii Magni Moraliu libri XXXV	Delaporte p.34	Chapter
277	257	1200-1399	***Collectanea de jure canonico		Chapter***
278	258 and 666	1300-1399			
279	333	1300-1399			
280	334	1300-1399		Delaporte p.58	
281	336	1300-1399			
282	338	1300-1399		Delaporte p.58	
283	339	1300-1399	*		
284	340	1200-1299	Galenii opuscula		Chapter
285	341	1300-1399	*	Delaporte p.80	
286	342	1300-1399	****		
287	343	1300-1399	***		
288	344	1200-1299	Commentary on the Prophets and the Books of Wisdom		Chapter
289	345	1300-1399		Delaporte p.73-74	
290	346	1200-1299	Peteri Lombardi commentarius in Psalmos	Delaporte p.46	Chapter
291	349	1300-1399	****		
292	350	1200-1299	Guillelmi, Parisiensis episcopi, commentarius in Proverbia, Ecclesiasten et Cantica canticorum		Chapter
293	351	1300-1399	***		
294	352	1200-1299	Expositio Stephani Cantuariensis in libros Genesis, Exodi, etc.		Chapter
295	353	1100-1399	Rabani Mauri expositio in Regum libro IV	Delaporte p.34	Saint-Père

		1199			
		1300-			
296	354	1399			
		1700-			
297	581	1799			
		1300-			
298	315	1399			
		1300-			
299	316	1399			
		1300-			
300	319	1399			
		1300-			
301	320	1399			
		1300-			
302	321	1399			
		1300-			
303	322	1399			
		1300-			
304	323	1399			
		1300-			
305	324	1399			
		1400-			
306	325	1499			
		1200-			
307	326	1299	Innocentii IV epistolae	Delaporte p.74	Chapter
		1200-			
308	327	1299	Summa Azonia super Codicem et Instituta		Chapter
		1300-			
309	328	1399			
		1300-			
310	329	1399	**		
		1300-			
311	330	1399	***		
		1300-			
312	331	1399			
		1300-			
313	332	1399			
		1300-			
314	335	1399			
315	337	1200-	Bernardi Compostellani casus de jure canonico		Chapter

		1299			
		1300-			
316	356	1399			
		1300-			
317	404	1399			
		1200-	**Antiquae Decretalium collectiones IV cum glosa Johannis		
318	355	1299	Teutonici		Saint-Père
		1300-			
319	357	1399	**		
		1300-			
320	358	1399			
		1300-			
321	359	1399	** , ***		
		1300-			
322	360	1399			
/					
		1200-			
325	363	1299	Peter Lombardi Sententiarum libri IV	Delaporte p.47	Chapter
/					
		1200-			
327	189	1299	Sacramentale Guillelmi de Monte Lauduno		Chapter
/			*		
		1200-			
329	367	1399	Summa super titulos Decretalium composita A madistro Gofrido de Trano		Chapter
		1200-			
330	368	1299	Bernardi Compostellani et Gaufridi de Trano opuscula		Chapter
/					
		1200-			
332	370	1299	Gregorii IX Decretales		Chapter
		1200-			
333	371	1399	***La Somme le Roi de Frere Laurent, vies de saints, sermons (in French)		Chapter
		1200-			
334	372	1299	Johannis de Abbatisvilla sermones In epistolas et evangelia totius anni		Saint-Père
		1200-			
335	373	1299	Sermones varii		Saint-Père
/					

342	383	1100-1199	Alexandri Tralliani de arte medica libri III		Chapter
343	386	1200-1299	Casus Decretalium magistri Bernardi Compostellani		Saint-Père
/					
352	385	1200-1399	Opuscula theological		
/					
376	140	1000-1099	**Isidori Mercatoris collectio Decretalium		Chapter
379	397	1200-1399	*S. Thomae de Aquino tractatus de veritate catholicae fidei contra errores infidelium		Dominicans
380	401	1200-1399	*Raymundi de Pennaforti Summa de poenitentia et matrimonio cum glosa		
/					
384	462	1200-1299	***Antiquae Decretalium collectiones et Gregorii IX Decretalium libri V		
386	391	1200-1299	Hugonis de Sancto Caro commentarius in quatuor Evangelia		Dominicans
387	392	1200-1299	Petri Manducatoris Historia Scholastica	Delaporte p.68	Dominicans
388	393	1200-1299	S. Bernardi sermons		Dominicans
/					
393	408	1200-1399	Opuscula medica		Chapter
/					
395	259	1200-1299	****Bible with preface by Jerome	Delaporte p.77	Saint-Père
396	402	1200-1399	Berardi de Neapoli epistolae, etc.		Chapter
397	407	1200-1299	****Lectionary	Delaporte p.69	
/					
401	413	1200-1299	Summa magistri Guillelmi, Altissiodorensis		Chapter

402	414	1200-1299	Catholic epistles, acts of the apostles and Apocalypse with marginal glosses		Chapter
/					
407	421	1200-1299	S. Thomas Aquinas quaestiones disputatae		
/					
410	432	1200-1299	****Bible	Delaporte p.53-57	Chapter
/					
430	466	1200-1299	Questiones principaliter ad IIIor libros Sententiarum		Chapter
/					
495	67	1000-1099	Biblia sacra	Delaporte p.21	Chapter of Dreux
496	108	1000-1099	****Biblia sacra	Delaporte p.13	Saint-Père
497	141	1100-1199	Theodorici Carnotensis Bibliotheca septem artium liberalium	Delaporte p.34	Chapter
498	142	1100-1199	Theodorici Carnotensis Bibliotheca septem artium liberalium 2nd volume	Delaporte p.34	Chapter
499	143	1100-1199	Lectionary containing homilies and sermons	Delaporte p.20	Chapter
500	190	1100-1499	Legendarium	Delaporte p.35	Chapter
501	192	1100-1199	Vita sancta	Delaporte p.25	Chapter of Dreux
503	471	1200-1299	Apparatus Accursii super textum Digesti veteris		Chapter
506	144	1100-1199	****Legendarium	Delaporte p.8	Chapter of Dreux
507	193	1000-1099	***Legendarium	Delaporte p.8	Chapter
520	222	1200-	***Missale ad usum ecclesiae Carnotensis	Delaporte p.51-52	Chapter


		1299				
		1200-				
521	231	1299	****Missale ad usum ecclesiae Carnotensis	Delaporte p.69-70	Saint-Père	
		1100-				
522	235	1199	S. Hieronymi epistolae, etc		Saint-Père	
		1200-				
525	400	1299	****Missal (incomplete)	Delaporte p.81	Dominicans	
		1200-				
555	245	1299	Tancredi et Bernardi Parmensis opuscula, etc.	Delaporte p.69	Chapter	
		1200-				
562	256	1299	Breviarium Carnotense		Saint-Père	
577	4	900-999	Sacramentarie	Delaporte pp.8-9	Saint-Père	
		1000-				
578	9	1099	Evangelia per annum	Delaporte p.14-15	Chapter	
		1100-				
579	121	1199	Breviarium		Saint-Père	
		1200-				
580	165	1299	Missale ad usum Sancti Petri Carnotensis	Delaporte p.53	Saint-Père	
		1200-				
582	229	1299	Breviarii Carnotensis homiliae et lectiones proprii et communis officii sanctorum per annum		Chapter	
		1200-				
583	233	1299	Missale Carnotense	Delaporte p.50	Chapter	
		1100-				
###	h.l.19	1199	Ivonis Carnotensis epistolae	Delaporte p.37-38	Chapter	
		1100-				
###	H.l. 25	1299	Necrology of the abbey of St Père	Delaporte p.38	Saint-Père	
		1100-				
###	H.l. 26	1299	Obituaries of the church of Chartres	Delaporte p.38-39	Chapter	
		1200-				
###	H.l.28	1299	Martyrology of Usuard		Chapter	
		1100-				
###	H.l. 52	1199	Obituary of St. Père		Saint-Père	





APPENDIX C

MASONS' MARK EVIDENCE

The thirty medieval narrative windows of the nave and choir that are at the lowest level of the structure of Chartres Cathedral may be divided into categories according to the overt simplicity and complexity of their narrative reading patterns. This appendix will complement Chapter Five and first categorize the windows which this author considers are accurately rendered according to the numbering scheme established by Delaporte and Deremble-Mahnes. I then suggest how the other continuous patterns of reading the windows may be understood by adding directional lines which have a similarity to masons' marks, whether intentional/substantial or accidental.

Table 41: Window Category----Windows----Masons' Marks

Ascending Vertical with Flanking Interplay	<ul style="list-style-type: none"> -Jesse Tree -St. John the Evangelist (out of order) -Glorification of the Virgin -St. Lubin 	Most of the locations are indicated in the Chart below
Regular Zigzag	<ul style="list-style-type: none"> -Passion of Christ -Simon and Jude -Prodigal Son -Life of the Virgin -Good Samaritan/Creation -Mary Magdalen -Thomas Becket -Anthony and Paul the Hermit -Savinian, Potentian, and Modesta -Miracles of Nicholas -Germain of Auxerre -Remi -Apollinare -Cheron -Belle Verrière -Nicholas-Polemical 	
Regular Zigzag with <i>faldstool</i> shape	<ul style="list-style-type: none"> -Zodiac -Stephen -Andrew 	

Regular Zigzag with “M-Shape”	-Charlemagne -James the Greater (out of order) -Martin	
Regular Zigzag with Hourglass Shape	-Martin	
Regular “Bowtie” Shape	-Noah	
Regular Zigzag with Five-Pointed Star	-Andrew -Nicholas-Life	

C.1.1 Regular Zigzag


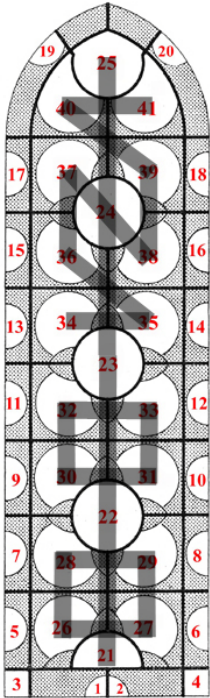
A good example of the regular zigzag reading is the Creation and Good Samaritan window. It has a tripartite division and four-part central medallion armature that is treated as a regular successive bottom to top horizontal-diagonal succession. This movement according to Deremble-Mahnes is a regular left to right movement connected diagonally to the next left to right set of successive panels above and so on. Likewise, St. Apollinare (the portion of his life), Cheron, Mary Magdalen, Germain of Auxerre, Simon and Jude, Anthony and Paul, and Savinian, Potentian, and Modesta are structured so as to be read in a regular zigzag motion. The Prodigal Son, Belle Verrière (narrative portion), Polemical Nicholas Window, Remi Window, Life of the Virgin, and Miracles of Nicholas are treated in a regular zigzag motion. This amounts to over one-quarter of the windows and is a pattern derived from the earlier west façade Passion Window.³⁰¹ With this overwhelming evidence and if windows like Lubin are considered special to Chartrains because of Lubin's status as a Chartrain, there seems to be no doubt that, as discussed in Chapter Five, Caviness may be correct and that there is a generalized reading pattern for the illiterate. But before considering Caviness the winner in this debate, perhaps the rest of the windows should be considered.

C.1.2 Windows with Masons' Marks

³⁰¹ Mahnes-Dereble, *Les vitraux narratifs de la cathédrale de Chartres: étude iconographie*. The west windows are *spolia* from the cathedral before the 1194 fire. For the most part, I will not be discussing these windows except to point out their influence on the current structure. For example, the Passion Window from the west façade seems to set a standard in the reading patterns with its simple left-to-right bottom-to-top direction.

Continuous reading as a zigzag motion is certainly one important way in which the narrative structure is played out in a substantial number of Chartres windows. However, I also explore several other approaches which seem to me to better explain the reading patterns in other windows. In Chapter Five by borrowing Kemp's notion of the window as a set of narrative units (as he does with the Prodigal Son narrative), I have attempted to come to the window as if approaching a completely new visual experience. It did not seem possible that a continuous pattern could be kept in the mind with unusual narrative orderings when the windows are not observed on a daily basis. I wanted to try to find ways of reading that would provide evidence for continuous reading patterns like if a particular trade were a signal for the viewer to apply certain forms to the reading of the window and my ultimate conclusion in Chapter Five that the postures are used to understand the windows. The Lubin window was instrumental to rethinking the continuous pattern theory. The Wine Criers are the trade shown at the base of the window and the wine criers are juxtaposed with the symbol of the ring and the rod in the painted panel. This was to me a possible sign that also appears in the *Grande Chronique de St Denis* that shows a ring and the rod and boots hanging from posts that represent the trade fairs. I found a masons' mark that was somewhat suggestive of this shape.

Table 42: Mason's Mark and the Lubin Window

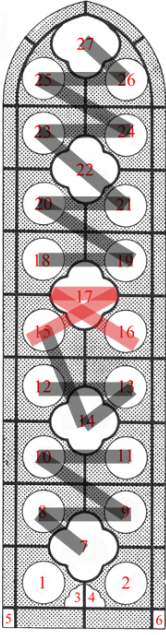
	<div> <h3>Chartres Cathedral Windows: Lubin</h3> </div> <div> <p>Deremble- Manhes no. 45, Delaporte no. 63</p> </div> <div>  </div> <div> <ol style="list-style-type: none"> 41. Lubin performs a miracle 40. Witnesses to Lubin's miracle 39. Lubin rides out on a pastoral visit 38. Lubin invested as bishop 37. Avit gives keys to Lubin 36. Avit blesses Lubin 35. Lubin leaves a monastery 34. Lubin arrives at a monastery 33. Lubin and monks 32. Lubin enters a monastery 31. Lubin studies 30. Lubin at school receives the rest of the alphabet 29. Lubin receives a belt with part of the alphabet 28. Lubin tends sheep 27. Priests and common people watch the group of riders 26. A group of riders 25. Christ in Majesty 24. A Mass 23. A deacon draws wine 22. Wine is transported 21. Donors: Wine crier and merchant offering wine to client 14-20. Wine offering 13. A pilgrim? 12. A merchant? 5-11. Wine offering 3-4. Donors: Wine criers 1-2. Donors: Wine merchant and customer </div> <div> <p><small>Diagram after Delaporte Vitroux, p. 407. Panel numbering from Manhes-Deremble. © June Vidual, 2005.</small></p> </div>
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I wondered if there were symbols for the trades that the lay community would know and could function as pointers to instruct the lay viewers on how to read the windows and so I began to study masons' marks. The traditional theory about masons' marks is that they allow the mason to mark the stones that he is producing to get paid for his work. Thus, they are bankers' marks. Masons were paid stone by stone. In recent years, other theories have emerged. Jennifer Alexander considers the marks as directions on how to assemble the building.³⁰²

³⁰² Jennifer Alexander, "Villard de Honnecourt and Masons' Marks," in *Villard's Legacy: Studies in Medieval Technology, Science and Art in Memory of Jean Gimpel*, ed. Marie-Thérèse Zenner (Ashgate Publishing, 2004), Jennifer Alexander, "The Uses of Mason's Marks and Construction Instructions in the Insular World and on the Continent," in *Roman, Runes, and Ogham: Medieval Inscriptions in the Insular World and on the Continent*, ed. John Higgitt, Kathryn Forsyth, and David Parsons (Stamford, 2001).

There are three windows that have a regular zigzag with a *faldstool* type shape: the Zodiac Window, the Stephen Window, and the Andrew Window.³⁰³

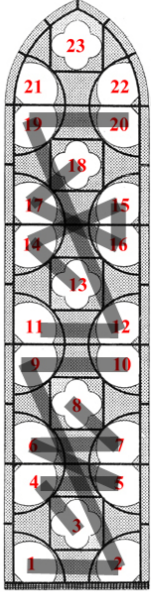
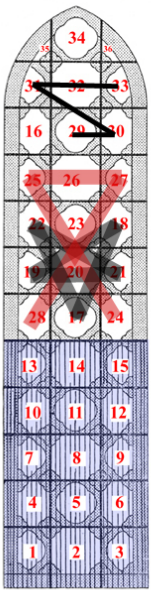
Table 43: Mason's Mark and the Zodiac Window

Chartres Cathedral Windows: Signs of the Zodiac and Labors of the Months	
	
	27. Christ between Alpha and Omega 26. Capricorn 25. December - Feasting 24. Sagittarius 23. November – Butchering a Pig 22. October - Pouring Wine / Scorpio 21. Libra 20. September - Wine Making 19. Virgo 18. August - Threshing Grain 17. July - Harvesting Grain / Leo 16. Cancer 15. June - Mowing 14. May - Hunting? / Gemini 13. Taurus 12. April - Flowers 11. Aries 10. March - Pruning Vines 9. Pisces 8. February - Warming in front of a fire 7. January - Man with three faces / Aquarius 4-6. Donors: Vintners 3. Donor: Bell Ringer 2. Donor: Count Thibaut 1. Donors: Vintners
<p>The Zodiac Window has some glass panels that are out of chronological position, but this must be the original form of the window because the shape of certain pieces prohibit them being organized any other way. The armature is of four circles in the corner of each unit with a central quatrefoil. On the left half of the window are represented the labors of the month and on the right half of the window are represented the zodiac signs. The labors of the month appear in their own panel except in the case of Aquarius, Gemini, Leo, and Scorpio (Notably, Air, Fire, and Water signs. See Chapters Three and Four) where they are shown also with a labor of the month. All have the correct month labels except Leo, Cancer, and Sagittarius.</p> <p>The quatrefoil begins with January and Aquarius, then in the two circles, the left is February and the right is Pisces. Next is March on the left circle and Aries on the right. Following is the first chronological problem. May and Gemini are combined in the quatrefoil instead of Taurus and April. April and Taurus are the next set of circles followed by July and Cancer. June is supposed to be the labor with Cancer, but something has been done to create an alternative reading pattern. In the quatrefoil above is June and Leo. The rest is fairly typical except Sagittarius is represented with December and Capricorn is also represented with December.</p>	

³⁰³ The Infancy Window on the west façade also includes this reading pattern.

Cancer moves diagonally to June (left portion of quatrefoil) and then horizontally to Leo and finally diagonally down to July. This creates a *faldstool* shape.

Table 44: Masons' Marks and the Stephen and Andrew Windows

<p>Chartres Cathedral Windows: Stephen</p> <p><small>Dereemble- Manhes no. 13, Delaporte no. 41</small></p>  <ol style="list-style-type: none"> 23. Elevation of Stephen's soul 22. A procession greets the arrival of the relics 21. The relics are transported 20. A crowd views the arrival of the relics in Constantinople 19. The relics arrive in Constantinople 18. A tempest 17. A king leads horsemen 16. A demon appears to a sleeping king 15. Juliana and relics depart for Constantinople 14. The relics are transported 13. Stephen's body is disinterred 12. Juliana asks for her husband's body 11. Burial of Stephen 10. Stoning of Stephen 9. Saul holds the garments of executioners 8. Stephen is lead to the place of execution 7. Stephen is inspired 6. Stephen before the High Priest 5. King and Jews 4. Stephen with an angel 3. Stephen between two apostles 2. Donors: Cobblers present the window 1. Donors: Cobblers at work <p><small>Diagram after Delaporte Vitreaux, p. 332. Panel numbering from Manhes-Dereemble. © Jane Vidnal, 2005.</small></p>	<p>Chartres Cathedral Windows: Andrew</p> <p><small>Dereemble-Manhes no. 2, Delaporte no. 33</small></p>  <p>Modern</p> <ol style="list-style-type: none"> 35-6. Censing angel 34. Christ in Majesty 31. A saint before a magistrate? 32. Andrew crucified sideways 33. Punishment of Aegeas 16. Andrew speaks to a blind beggar 29. Andrew is nailed sideways to a cross 30. Two men point out Andrew's torture to Aegeas 25. Proconsul Aegeas and his attendants 26. Andrew in prison 27. Andrew condemned to death 22. Andrew leads a youth and a man with a sword 23. Andrew announces his future martyrdom to his disciples 18. Andrew raises a man from the dead 19. Andrew and the serpent that vomits blood 20. A woman raises a child from the dead 21. Peter and John appear to Andrew 28. Andrew prays before his execution 17. Andrew gives a mantle to the blind beggar 24. Andrew celebrates Mass <p>1-15. Modern replacements</p> <p><small>Diagram after Delaporte Vitreaux, p. 290. Panel numbering from Manhes-Dereemble. © Jane Vidnal, 2005.</small></p>
<p>The Stephen Window and the Andrew Window also share this <i>faldstool</i> shape.</p>	

Other marks similar to masons' marks found in the window can be isolated in the Charlemagne, James the Greater, Julian the Hospitaler, and Martin Windows. The example found in these windows is the sideways "M"-shape.

Table 45: Mason's Mark and the Charlemagne Window

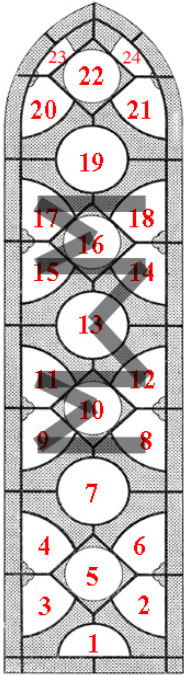
Chartres Cathedral Windows: Charlemagne	
Deremble-Manhes no. 7, Delaporte no. 38	
	<p>23-4. Angels 22. Mass of St. Giles 21. Baudoin tells Charlemagne of Roland's death 20. Baudoin tends the dying Roland 19. Roland breaks his sword and sounds his horn 18. Charlemagne leaves Spain 17. Roland pierces the giant Ferragut in the navel 16. Combat between Roland and King Marsile 15. Battle of Sahagun 14. Miracle of the flowering lances 13. Charlemagne orders the construction of a church 12. Battle for a city 11. Charlemagne prays 10. Charlemagne departs for Spain 9. Charlemagne looks at the Milky Way 8. St. James appears to Charlemagne in a dream 7. Charlemagne gives relics to Chapel at Aix 6. Constantine presents relics to Charlemagne 5. Constantine greets Charlemagne at Constantinople 4. Charlemagne battles the Saracens 3. Constantine's letter presented to Charlemagne 2. Charlemagne appears to Constantine in a dream 1. Donors: Furriers</p>
Diagram after Delaporte Vitreux, p. 314. Panel numbering from Manhes-Deremble. © Jane Vidual, 2005.	
<p>Events eight through twelve create the first M in the Charlemagne window and adjoining to the long upper stem is an M facing the other direction from eleven through fifteen. Finally in the same direction as the original M is another that is fourteen through eighteen.</p>	

Table 46: Mason's Mark and the James the Greater Window

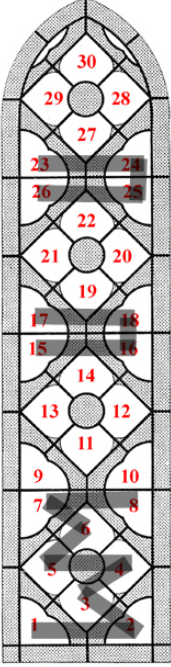
Chartres Cathedral Windows: James the Greater	
Dereemble-Manhes no. 5, Delaporte no. 37	
	<ol style="list-style-type: none"> 30. Christ blessing 29. James is beheaded 28. Josias is beheaded 27. James and Josias led to their execution 26. Josias is beaten before the high-priest 25. The paralytic thanks James 24. James cures a paralytic while being taken to be martyred 23. James before Herod 22. James, in prison, speaks to two men 21. James is imprisoned 20. Hermogenes converts his disciples to Christianity 19. Hermogenes destroys an idol 18. Hermogenes and Philetus kneel before James 17. Hermogenes throws his books into the sea 16. Hermogenes prepares to burn his books 15. Hermogenes and James converse 14. Demons bring Hermogenes to James 13. Hermogenes seized by demons 12. James and demons 11. Hermogenes between two demons 10. Philetus cured by a shirt that James has sent him 9. Hermogenes' servant goes to James 8. Hermogenes casts a spell on Philetus 7. Philetus announces his conversion to Hermogenes 6. Philetus and James 5. Hermogenes sends Philetus to James 4. James preaches 3. Christ gives an object to James 2. Donors: Drapers- a draper shows customers a piece of cloth 1. Donors: Furriers- a furrier shows customers a piece of fur
Diagram after Delaporte Vitraux, p. 308. Panel numbering from Manhes-Dereemble. © Jane Vadral, 2005.	
<p>The problem with the James the Greater Window is that Delaporte tells his readers that it was reordered during the Lorin restoration in 1921. So it is impossible to know if the Ms in its reading pattern are original or not.</p>	

Table 47: Mason's Mark and the Julian the Hospitaler Window

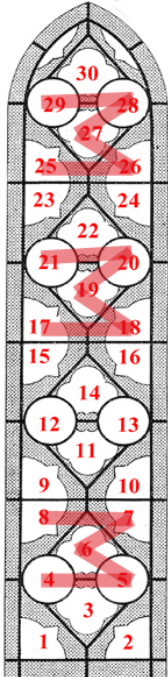
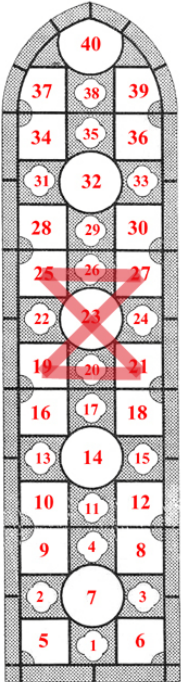
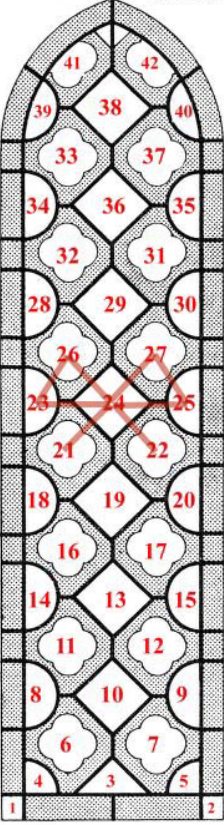
Chartres Cathedral Windows: Julian the Hospitaler	
Deremble- Manhes no. 21, Delaporte no. 45	
	<p>30. Deaths of Julian and his wife 29. Julian's wife holds a lamp to guide his boat 28. Julian in his boat 27. Christ on the riverbank 26. Julian washes travelers' feet 25. Julian and his wife greet travelers 24. Julian and his wife build a hospice 23. Julian and his wife cross a river 22. Julian and his wife leave for pilgrimage 21. Funeral of Julian's parents 20. Julian mourns his parents 19. Julian meets his wife 18. Julian kills his parents 17. Julian enters his castle 16. Julian departs for home 15. Julian sleeps in his tent 14. Julian and his troops in front of a city gate 13. Battle 12. Julian and his companions leave for war 11. Julian's wedding feast 10. Julian is married 9. A man on his deathbed 8. A man receives the last rites 7. Julian's lord gives him a scepter 6. Julian serves his master 5. Julian's parents present him to a lord (?) 4. Julian with his parents (?) 3. Donors: Joiners 2. Donors: Wheelwrights and Coopers 1. Donors: Carpenters</p>
Diagram after Delaporte <i>Histoires</i> , p. 351. Panel numbering from Manhes-Deremble. © Jane Vadnal, 2005.	
The Julian the Hospitaler Window has Ms from four through eight, seventeen to twenty-one, and twenty-five to twenty-nine.	

Table 48: Mason's Mark and the Martin Window

Chartres Cathedral Windows: Martin	
Dereemble-Manhes no. 20, Delaporte no. 24	
	<p>40. Christ (?) between two angels 39. Bishop of Tours greets Martin's relics 38. Martin's soul carried to Heaven 37. Martin's corpse carried towards Tours 36. Martin's corpse transported on a boat 35. Censing angel 34. Martin's corpse lowered out a window 33. Censing angel 32. Death of Martin 31. Censing angel 30. Miracle of the vase that fell without breaking 29. Censing angel 28. Martin embraces a leper 27. Two men bring a madman to Martin 26. Witnesses to Martin' miracle 25. Martin goes to Tetradius' house 24. Witnesses to Martin' miracle 23. Martin cures a paralyzed girl 21-2. Martin preaches 20. Witnesses to Martin' miracles 19. Martin cures a madman 18. Martin' resuscitates a child 17. Witnesses to Martin' miracles 16. Martin investigates a venerated tomb 13-5. Martin is consecrated as bishop 12. Martin and the pagan's sacred tree 11. Two robbers 10. Martin is tied to a tree and beaten 9. Martin raises a dead man 8. Hilaire blesses Martin. 7. Martin is baptized 6. Martin dreams of Christ 5. Martin gives half of his cloak to a beggar 1-4. Donors - the leather workers</p>
Diagram after Delaporte Vitraux, p. 243. Panel numbering from Manhes-Dereemble. Copyright Jane Vialat.	
<p>Finally, the Martin Window has two masons' marks, the M at the base of the window and an hourglass shape when Dereemble-Mahnes's order is contested. The exchange with Martin and the madman should be reordered as Dereemble-Mahnes has the madman cured before being brought to Martin. Thus, the window can easily read twenty-five, twenty-six, twenty-seven, nineteen, twenty, and twenty-one, which creates an hourglass shape.</p>	

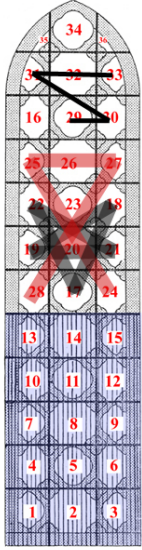
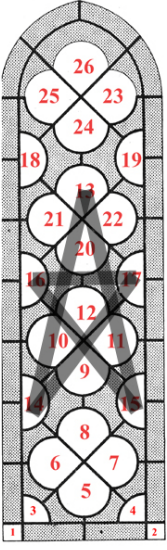
The Noah Window has a regular bowtie shape in its reading because the scenes are fairly general and some suggest that they can be repeated.

Table 49: Mason's Mark and the Noah Window

Chartres Cathedral: Noah Window	
Deremble-Mahnes no. 47, Delaporte no. 64	
	<p>39-42 Angels with censers 38 God makes a covenant with Noah and his wife 37 Noah's sons and their wives kneel 33 Cultivation of grape vines 35 Noah drinks 36 Noah curses Chem 34 Wine making 32 Noah's sons and their wives 29-31 The animals leave the ark 28 A crow pecks at the eyes of a corpse 26-7 Victims of the flood 25 Doves fly above the flood 24 Noah releases a dove 20-3 Victims of the flood 19 The Ark floats on the flood 15-8 Animals arrive to enter the ark 14 A Man and a woman converse 12 Noah's wife and daughters-in-law 11 Sons of Noah 10 God speaks to Noah 6-9 Giants, sons of God and daughters of Men (?) 1-5 Donors – carpenters, coopers, wheelwrights</p>
After Delaporte <i>Vitraux</i> , p.401. Copyright Jane Vialdal.	

For example, there is only one scene of Noah letting the bird fly to find land and Noah does this three times. With the bowtie shape as seen in its imposition, the action can take place beginning at 21 and moving once to 24 then to 26 and 23. Then it moves once again to 24, then to 25 and 27. Finally, it crosses 24 one last time and moves to 22. This accomplishes the narrative episode's multiple scenes into one panel of glass.

Table 50: Mason's Mark and the Andrew and Life of Nicholas Window

Chartres Cathedral Windows: Andrew	Chartres Cathedral Windows: Life of Nicholas
<p>Dereble-Manhes no. 2, Delaporte no. 33</p> <p>Modern</p>  <p>35-6. Censing angel 34. Christ in Majesty 31. A saint before a magistrate? 32. Andrew crucified sideways 33. Punishment of Aegeas 16. Andrew speaks to a blind beggar 29. Andrew is nailed sideways to a cross 30. Two men point out Andrew's torture to Aegeas 25. Proconsul Aegeas and his attendants 26. Andrew in prison 27. Andrew condemned to death 22. Andrew leads a youth and a man with a sword 23. Andrew announces his future martyrdom to his disciples 18. Andrew raises a man from the dead 19. Andrew and the serpent that vomits blood 20. A woman raises a child from the dead 21. Peter and John appear to Andrew 28. Andrew prays before his execution 17. Andrew gives a mantle to the blind beggar 24. Andrew celebrates Mass</p> <p>1-15. Modern replacements</p> <p>Diagram after Delaporte Vitreux, p. 290. Panel numbering from Manhes-Dereble. © Jane Vodnal, 2005.</p>	<p>Dereble-Manhes no. 39, Delaporte no. 60</p>  <p>26. A Jew beats the statue of Nicholas 25. Death of the debtor, crushed by cart 24. Debtor swears he has repaid his death before statue of Nicholas 19. Innkeeper and his wife murder three young men 18. Innkeeper meets three young men 13. Nicholas is consecrated Bishop of Myra 23. A man receives a loan from a Jew 22. Nicholas returns the child to his parents 21. Child with cup falls into the sea 20. A woman and her child 17. Men carrying sacks 16. Nicholas speaks to three men 12. Nicholas is chosen to be Bishop of Myra 11. Nicholas is thanked by the father of the girls 10. Nicholas provides dowries for three poor girls 9. Nicholas at school 15. Sailors in their ship 14. Nicholas asks sailors for aid during a famine 8. Infant Nicholas refuses his mother's milk 7. Bath of infant Nicholas 6. Birth of Nicholas 1-5. Donors: Grocers, Apothecaries, Haberdashers</p> <p>Diagram after Delaporte Vitreux, p. 302. Panel numbering by Julia Wozniak. Diagram © Jane Vodnal, 2005.</p>

The Nicholas and Andrew Windows have the five-pointed star shape that is also found as a mason's mark. The Andrew Window is half restoration glass as the lower half was destroyed, but the upper half has both a *faldstool* from twenty-four to twenty-eight and a five-pointed star from twenty-four thru twenty-nine. The same shape is found in the Nicholas Window which on the whole is fairly chaotic. Fifteen, sixteen, seventeen and eighteen can be reinterpreted as the order thirteen, fourteen, seventeen, sixteen, and fifteen because the story sequence that this author proposes follows a more logical progress.

C.1.3 Conclusion

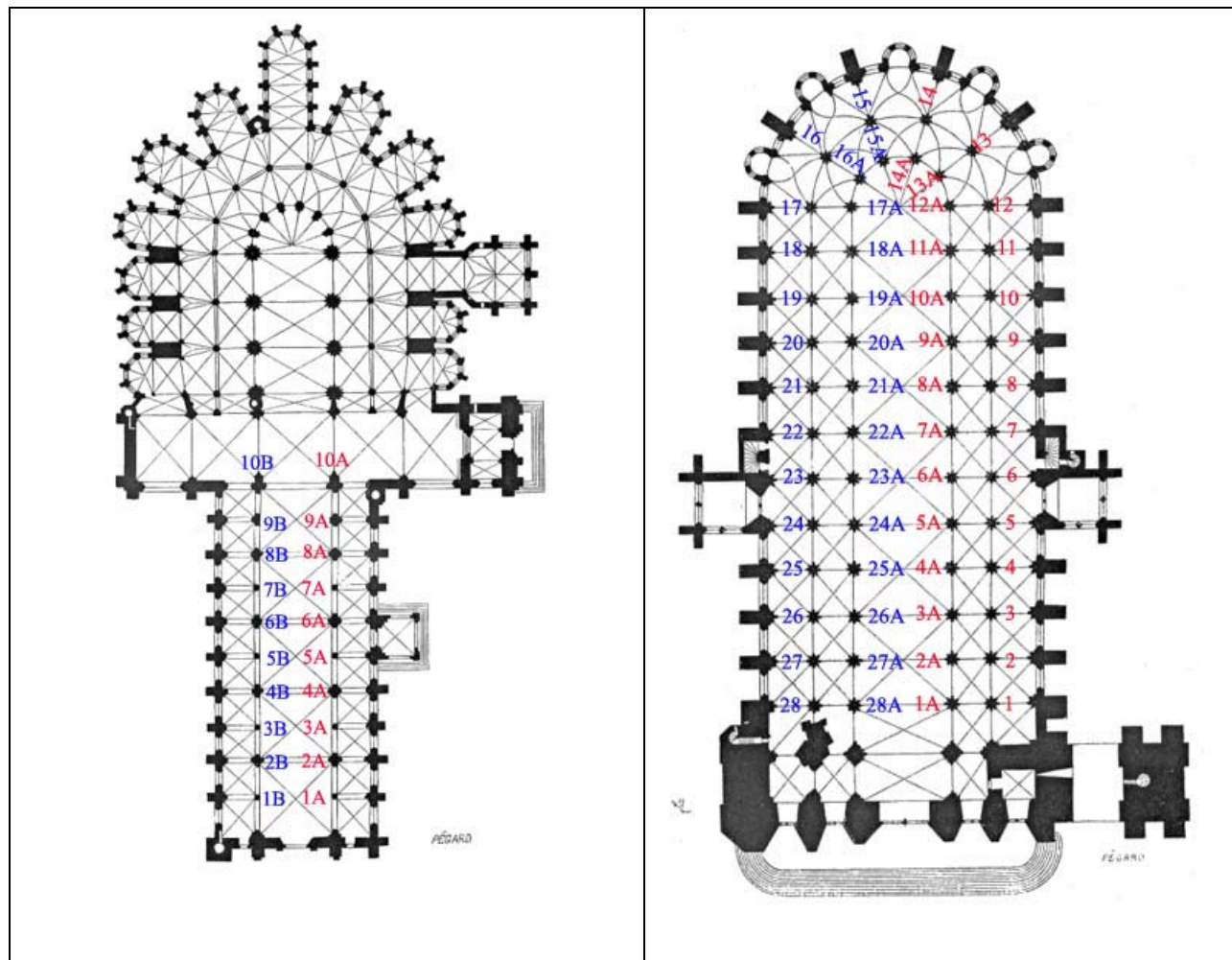
The masons' mark theory in window reading is inconsistent in its application to all the windows, unlike the posture theory. The information is presented here as an incomplete project that provides a methodology that may be useful in understanding masons' marks as more than marks to elicit payment for the masons.

C.1.4 Tables



In the chart that follows, details are given for each masons' mark: Location, Course, Size, and Distance. In the information from Chartres Cathedral, the locations in the chart are confined to masons' marks from the North Tower. The Location is based on steps from the bottom of the staircase to the step where these marks cease to occur. The course is counted from bottom to top, the size is the longest segment of the mark, and the distance is from the floor or step to the top of the mark.

On the left below is a plan of LeMans Cathedral and its masons' marks are confined to the Romanesque nave. These marks are also counted from bottom course to top course, the size is the longest segment of the mark, and the distance is from the floor to the top of the mark.

Table 51: Plans of Le Mans Cathedral and Bourges Cathedral with Shorthand for Mason's Mark Locations

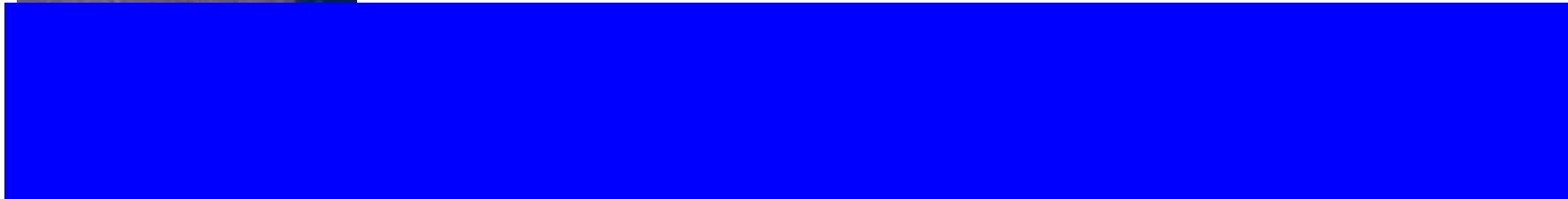




Similarly on the right, this is a plan of Bourges Cathedral and like the other structures the courses are read from bottom to top. The size is also the longest segment and the distance is from the floor to the top of the mark.



Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	3											
		9	9	195								
	4	5	9	112								
	4	9	8.5	198								
	8	6	8	113								
	3	5	9.4	94	Col 8A	1	4	97	Col 13	2		
					Col 8A	2	4.5	142	Col 15	5	2.5	
					Col 6B	3			Col 15	7		
					Col 8B	1			Col 17	2		
	73											
		10	7.5	208	Col 1A	3	5	139	Col 7	3	3	153
	83	5			Col 4A	1	9	78	Col 7	4	5	176
	128	11			Col 4A	2			Col 8	4	6	
	141	7	9		Col 1B	2			Col 13 A	5		
	142	5	7	153	Col 1B	5			Col 13 A	7		
	4	7	3.5	179	Col 2B	3			Col 15 A	5		
	46	12			Col 4B	4	6	167				
	85	12										
	90	10	9	201								
	108	5										

Symbol

Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
Chartres North Tower				LeMans				Bourges			
4	7	3.5	179	Col 2A	2	12	99	Col 11	4	5.5	167
46	12			Col 2A	3	12	132	Col 12	5		
85	12			Col 2A	4	10	174	Col 13	4		
90	10	9	201	Col 2A	5	13	204	Col 15	4		
				Col 3A	1	10	76				
108	5			Col 6A	6			Col 16	4		
				Col 6A	7						
				Col 7A	5						
				Col 1B	6						
				Col 1B	7						
				Col 1B	7						
				Col 1B	7						
				Col 1B	8						
				Col 3B	4						
				Col 3B	5						
				Col 3B	10						
				Col 4B	7						
				Col 6B	3						
				Col 7B	13						
				Col 8B	3						
				Col 9B	4						



Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	4	3	21	50								
	17	4	14.5	73								
	131	6	12	109								
	19	9			Col 1B	9						
	19	11			Col 3B	6						
	36	10	5	197	Col 6B	2						
	41	9	4	184	Col 7B	1						
	95	6										
	105	5										
	108	rt window	9	62								
	109	5										
	122	2	8	32								
	124	6										

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	18	It window	9	63	Col 2A	3	9	138	Col 9	5		
	81	3	9	48	Col 2B	3			Col 10	7		
	131	7	6	135					Col 7A	3		
									Col 10A	2		
	23	12										
	28	5	9	97								
	41	8	8	163								
	42	5	19	117								
	44	5	20	98								
	46	2	14	32.5								





Symbol




Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
Chartres North Tower				LeMans				Bourges			
35	2	9	34								
43	7	16	139								
45	5	15	98								
46	3	15	32								
53	11										
62	rt window	16	94								
128	8	10	154								
29	5	9	95.5								







Symbol



Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
Chartres North Tower				LeMans				Bourges			
36	9	3.5	181	Col 3A	3						
				Col 3A	3						
				Col 3A	3						
				Col 3A	5						
37	6	5	120					Col 7A	4		
37	10	4.5	201					Col 8	5	3.5	211
131	6		stair-c.								



Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	54	9	11	169					Col 12A	6		
	129	8	8	174					Col 17A	3		
									Col 18A	8		
	65	7	7	157								
	69	9	11	185	Col 8A	4						
	73	41	10	76	Col 8A	6						
	102	10	8	202	Col 9B	3	3.5	97				




Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	69	5	11.5	105								
	79	5										
	82	10	8	205								
	87	10	9	201								
	99	11										
	112	5	9	101								
	120	8	8	156								
	121	2	7	34.5								
	133	1	9	12								
	172	6	10	206								
	71	9	3.5	182								
	71	11										
	72	10	9	207								



Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	74	10	8	207	Col 2B	3	4	155				
	72	12										
	78	rt window	13	92								
	127	7	7.5	129								
	131	3	7	45								
	138	2	10	27.5								

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	71	stair col	9.5	138	Col 6B	4	13	178	Col 9	2	4.5	110
	82	7	12.5	142	Col 6B	6			Col 9	3	6	136
	82	9	15	183	Col 7B	4						
	112	8	9	176	Col 8B	1						
	112	10	12	201	Col 8B	3						
	122	Lt window	14.5	73								
	81	98	8	158	Col 7B	1	8	89				
	86	9	7	182	Col 7B	5						
	90	7	6.5	137								



Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	84	6	8	116					Col 12	5	to measure	
	81	13										
	88	6	10	114								

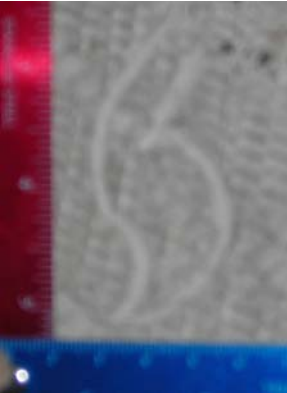

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	87	8	10.5	154								
	114	2	9	23								
	119	8	7	161								
	122	rt window	6.5	53.5								
	87	12							Col 9	7		
	136	9	3	181					Col 9	8		
									Col 10	5		

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	89	8	5.5	156								
	139	7	7	134								
	96	9	9.5	102								
	100	10										
	100	11										
	102	9	12	185								
												
	107	It window	17.5	74								

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	125	10	5.5	168								
	129	7	7	150								

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	98	9	7.5	177								
	125	4	6	82								
	131	8	7.5	153								
	0	3	5	52					Col 9A	2		
									Col 11	3	4.75	133

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	100	9	11	164								
	107	window	14	49.5								
	125	2	14	25								

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
	84	9	12.5	184					Col 7	1	7	75
									Col 7A	3		
									Col 19	1		
									Col 19	3		
									Col 15A	1		
									Col 21A	1		
									Col 22A	2		
									Col 22A	4		
	66	6							Col 14A	5		
									Col 15A	4	9	148
									Col 16A	4		



Symbol

Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
Chartres North Tower				LeMans				Bourges			

Col 21 3 9 193

Col 1A 4 5.5 166
Col 2A 3 4 138
Col 2A 3 4.5 141
Col 2A 3 4.5 142
Col 2A 4 5.5 180
Col 2A 4 5 178
Col 2A 5 4 208
Col 2B 5
Col 2B 6
Col 3B 2

Col 4B 3



Symbol



Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
Chartres North Tower				LeMans				Bourges			
				Col 1A	2	4	103	Col 11	1	4.5	
				Col 4A	1	7.5	88	Col 15	4	4.5	
				Col 1B	6	6	205	Col 15	8		
				Col 2B	2						
				Col 2B	3						
				Col 3B	2						
				Col 3B	3						
				Col 3B	3						
				Col 4B	2						
				Col 4B	3						
				Col 4B	4	6	167				
				Col 5B	5						
				Col 6B	4						
				Col 2A	4	9	177				
				Col 2A	5	10	208				

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
					Col 6A	3	10	169				
					Col 6A	3						
					Col 6A	5						
					Col 8B	1						
					Col 4A	1						
					Col 4A	3	7	172				
					Col 4A	4						
					Col 4B	5						



Symbol

Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
Chartres North Tower				LeMans				Bourges			
				Col 6A	1	9	85				
				Col 6A	4	6	206				
				Col 2B	5						
				Col 4B	5						
				Col 6B	4						
				Col 4A	2						
				Col 4A	3						
				Col 4A	4	8	200				

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
					Col 7B	3	6.5	162				
					Col 4A	1	10	88				
					Col 4A	3	8	161				
					Col 4A	5						
					Col 7A	3						
					Col 4B	4						
					Col 4B	5						
					Col 4B	6						
					Col 7B	2						
					Col 7B	2						
					Col 7B	4						
					Col 7B	7						





Symbol

Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
Chartres North Tower				LeMans				Bourges			

Col 4A 5

Col 8 3 8 168

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
					Col 6A	3	10	169				
					Col 6A	4	9	188				
					Col 7A	1	6	105	Col 6A	3		
									Col 25A	4		
									Col 27A	4		





Symbol



Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
Chartres North Tower				LeMans				Bourges			

Col 8A 3 6 197

Col 1B 9



Col 2B 3 8 156



Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
									Col 7	4	5.5	180
									Col 7	5		
									Col 9A	3		
									Col 7	1	5.5	87
									Col 7	5		

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
									Col 9	11		
									Col 11	4	4.5	164

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
									Col 11	2	3.5	105
									Col 12A	3		

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
									Col 13A	4		
									Col 16A	1	5	66

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
									Col 18A	5		
									Col 19A	4	8	190

Symbol	Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
	Chartres North Tower				LeMans				Bourges			
									Col 19A		2	
									Col 13A		1	



Symbol

Location/Step	Course	Size cm	Distance step/ledge	Location	Course	Size cm	Distance	Location	Course	Size cm	Distance
Chartres North Tower				LeMans				Bourges			

Col 7A 5 8 251

Col 20 4

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