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THE)EVELOPMENT OF THE LIBERAL ARTS CURRICULUM
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THE SEVEN LIBERAL ARTS IN THE MIDDLE AGES - THE DEVELOPMENT OF THE LIBERAL ARTS CURRICULUM AND THE THEME OF THE ARTS IN MEDIEVAL RELIGIOUS SCULPTURE

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ABSTRACT

THE SEVEN LIBERAL ARTS IN THE MIDDLE AGES - THE DEVELOPMENT OF THE LIBERAL ARTS CURRICULUM AND THE THEME OF THE ARTS IN MEDIEVAL RELIGIOUS SCULPTURE

By

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The seven liberal arts first appear in Medieval religious sculpture during the eleventh century and continue to appear in a consistent manner well into the Renaissance. This paper attempts to investigate the origins of these figures, the reason for their female nature and the possibility of a standard iconography emerging in the Middle Ages.

In the course of writing this paper, I have investigated the educational systems of ancient Greece and Rome as well as the schools of Europe in the dark ages through Medieval times. I have also studied a set of sculptural representations of the liberal arts, specifically those found at sites in France, Germany and Italy.

I have discovered the origins of the personifications of the liberal arts in the fifth century and revealed that there is a standard iconography in the sculpture of the Middle Ages. I have also endeavored to give a more detailed description of the arts in my examples, since they are generally not clearly described in the present literature.

ACKNOWLEDGEMENTS

I wish to acknowledge the assistance of my thesis committee, Dr. Susan Madigan, Dr. Eldon Van Liere and Dr. Webster Smith. Also, my thanks to the staff and students of the M.S.U. Art Library, particularly Pat Thompson, who assisted with translations and searching for necessary books. Finally, to my parents, who put up with my procrastination and saved the money to send me to college in the first place.

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INTRODUCTION

Paris and Orleans are at odds.
It is a great loss and a great sorrow
That the two do not agree.
Do you know the reason for the discord?
It is because they differ about learning;
For Logic, who is always wrangling,
Calls the authors authorlings
And the students of Orleans mere grammar-boys.[1]

So begins Henri D'Andeli's poem *The Battle of the Seven Liberal Arts*, a thirteenth-century work which describes the battle of two armies of liberal arts led by Grammar, who defended Orleans, and Logic, who attacked from Paris. While this work is of the thirteenth century, it demonstrates the enduring attraction of the mythology of the seven liberal arts across several centuries. Indeed, this poem may even reflect the culmination of medieval interest in the liberal arts, an interest which first flowered in the Carolingian Renaissance of the ninth century. In the twelfth and thirteenth centuries occurred the rise of the universities and a great expansion

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[1]Louis John Paetow, *The Battle of the Seven Arts* (Berkeley: University of California Press, 1914), 37.

of the intellectual horizons of the time.[2] It is at this point that we see the mind of European education and civilization teetering on the brink of the Renaissance, waiting expectantly for the tremendous explosion of knowledge about the world that was to occur within the next century.

Education in Europe up to this point was something of a limited affair. Following the collapse of the Roman Empire and the corresponding loss, or "forgetting,"[3] of knowledge, education of the sixth, seventh and eighth centuries was mainly confined to monastic institutions, as will be discussed below. The core of this education was the liberal arts, which represented the traditions of Greek education as interpreted and evolved by Roman scholars and conveyed to the medieval world by the works of a few Roman writers. The Carolingian Renaissance brought education to the palaces and to the secular elite of Europe. By the twelfth century, lay universities were beginning to emerge, though they were still tied to religion through their connections to the great cathedrals, such as Chartres.[4]

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[2]Ibid, 16.

[3]"Forgetting" of knowledge is what the Dark Ages represent. Rather than a calamitous, sudden loss of learning, the fall of the Roman Empire resulted in a gradual reduction of Roman influence in the outlying provinces of Europe. This reduction of governmental influence was accompanied by a gradual recession in learning and education. Over time, as Rome-educated figures died off, learning was forgotten in the day to day struggle for survival in the face of constant dangers from the surrounding world which were no longer constrained by the powers of Roman civilization.

[4]Raymond Klibansky, "The School of Chartres," in *Twelfth Century Europe and the Foundations of Modern Society*, ed. M. Claggett, G. Post and R. Reynolds (Madison: University of Wisconsin Press, 1961), 4.

Between the ninth and thirteenth centuries, medieval intellectual life was supported by three main pillars. These were education, religion and art. Central to these three movements were the themes of the liberal arts. In education, the seven arts were both the foundation and central themes. They organized one's educational life and directed the courses of study. In religion, the liberal arts were symbolic of the seven pillars supporting the house of wisdom, even as the knowledge of the ancients supported the contemporary knowledge of theology and philosophy.[5]

In art, the seven liberal arts were a common theme, often depicted as described in the fifth century work of Martianus Capella. They appear further on nearly anything one might imagine, including enameled boxes, ivory chalices, church frescoes, candlesticks and countless manuscripts. Perhaps the most significant, and most accessible, representations of the liberal arts are those found in the monumental decoration of churches: frescoes, mosaics and sculpture. This paper will focus on sculptural representations of the liberal arts, including those on the façades of the cathedrals of Chartres and Laon, and on the stone pulpits of the cathedral of Pisa and Siena. The seven liberal arts, as central foci of Medieval intellectual life, were conveyed to the lay public as essential mysteries of knowledge. Often, they were related to the mysteries of religion, which were an overwhelming force in the life of the average Medieval person. Therefore, both religion and the arts were dealt

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[5]Jean Favier, *The World of Chartres* (New York: Harry N. Abrams, Inc., 1990), 39-40. Thierry of Chartres, head of the cathedral school from A.D. 1150-55, called contemporary scholars "dwarfs sitting on the shoulders of giants," a theme which is reflected in the windows of the southern facade of the church, showing the four evangelists of the New Testament perched on the shoulders of Old Testament prophets.

with on an almost daily basis as the Medieval populace attended religious services and ceremonies.

CHAPTER ONE

The cycle of the liberal arts in Medieval times is a direct outgrowth of the Greek and Roman systems of education, though somewhat modified by Christian ideals. Early Greek education outside of Sparta, where it was controlled by the state, was often highly individualistic. Eventually, a uniform curriculum came to develop, but it was not directed by any state office, school board or law. In Athens, as early as 594 B.C., laws were written to govern the processes of the many private schools that existed at the time. These regulations determined the hours during which school should be in session, the number of students who could attend and the age at which one might begin formal schooling.[1] At the core of early Greek education were physical education and music, but this later broadened to include poetry and letters.[2] The growth of rationalism in Greek thought and society played a major role in the development and origins of each liberal art. Through the Greeks' quest to interpret their universe in rational terms, all of their ways of

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[1] J.F. Dobson, *Ancient Education and Its Meaning to Us* (New York: Longmans, Green and Co., 1932), 25-26.

2Paul Abelson, *The Seven Liberal Arts* (New York: Teachers' College Press, 1906), 1-2.

approaching and investigating the world around them became saturated with rationalist ideals.[3]

By 479 B.C., the itinerant scholars that came to be known as Sophists began to appear. These men came to Athens and other Greek cities claiming to answer the question, "What knowledge is of most worth?" Their response, "Knowledge of the art of presenting viewpoints in public," was of great interest to the Athenians in particular, since their political life had come to revolve around a public assembly. Thus, the orator who could speak most persuasively and present his viewpoint most eloquently was sure to have the greatest impact upon his fellow citizens. The Sophists, then, proposed to instruct the individual on the arts of public speaking: presentation and persuasion. At the same time, however, the Sophists were concerned not with the content or message of the speech they were preparing, but rather with the ideal form of the speech and with their payment for assisting in the preparation of the oration. This emphasis on ideal form over content became known as the art of Rhetoric.[4]

Socrates and his student Plato both objected to the opportunistic approach of the Sophists. Instead, these two men advocated a less individualistic approach which revolved around the search for Truth in all things. The Socratic method of education,

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[3]For a full discussion of the influence of rationalism on the liberal arts, see David L. Wagner, "The Seven Liberal Arts and Classical Scholarship," in *The Seven Liberal Arts in the Middle Ages*, ed. David L. Wagner (Bloomington: Indiana University Press, 1983), 2-9.

[4]E.H. Gwynne-Thomas, *A Concise History of Education to 1900 A.D.* (Washington, D.C.: University Press of America, Inc., 1981), 7-8.

which employed reasoning and discussion as a means of revealing falsehoods and eliciting truth came to be known as the Dialectic method. This method was expected to result in the development of a harmonious society, or one that was organized in such a way that its citizens could achieve happiness, truth and goodness. Plato's educational scheme was based partly on his ideal Republic, in which the upper, or "guardian" class was composed of an "aristocracy of talent"[5] which was responsible for directing the state. To this end, education was the means by which future leaders of the state were trained and selected.

Prior to Plato's time, the Athenian state was not involved in the education of its youth. Instead, the education of children was left to the individual family. Children were sent either to the palaestra, a school for physical education, the music school, or the school of the grammatist, which focused on basic reading, writing and arithmetic. Plato, unsatisfied with this system, devised a life-long plan of instruction divided into distinct stages. This plan began at age six and was preceded by family upbringing which was to focus on good health and social habits intended to bring order to the chaotic mass of conflicting impulses that make up a young child. From age six on, the child was to be involved in the prescribed course of study.

Elementary education, which lasted until age twenty, consisted of instruction in gymnastics, music and grammar, emphasizing virtue and beauty, as well as good character. Also, the youth spent two years in military service, since defense of the state

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[5]Gwynne-Thomas, *Concise History*, 10.

was often required, and young men at the peak of their physical ability could best provide that defense. Higher education then began at age twenty and consisted of a program of study directed toward eventually conducting affairs of state. This focused on arithmetic, geometry, astronomy and harmony, with the ultimate goal defined as the study of philosophy.[6] Here one can see what may be a foreshadowing of the Trivium and Quadrivium of Medieval times. Themes of study were divided by Plato into the arts of expression--grammar and music--and the arts of science--astronomy and mathmatics.

At age thirty, an examination determined which students should proceed to further studies and which should be given duties as civil servants in the state bureaucracy. Those students who continued on would focus their attention on advanced studies, especially in philosophy, through the age of fifty. At that time, the most accomplished of the lot were considered to have achieved a balance between theory and practise, and were given positions in the government as rulers or elder statesmen. They were expected to perform their duties according to the rules of Reason, without falling prey to any personal whim or prejudice.

The Roman Empire did not begin to adopt the ideals of Greek education until after the Second Punic War. At first, lessons were conducted in Greek, based in Greek literature and taught by Greek scholars. Eventually, though, there was a drive to develop a national

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[6]For a full examination of Plato's system of education, see Gwynne-Thomas, 11-17.

system of Roman literature and education. This drive was spearheaded by M. T. Varro (116-27 B.C.), who worked to build a nationalized system of education grounded in Greek ideals, but with lessons based in Roman literature and using texts written in Latin. Varro's lost work, the *Disciplinarum Libri Novem*, included treatises on many subjects taught in Greece in his day. These included grammar, rhetoric, dialectic, geometry, arithmetic, astrology, music, medicine and architecture.[7] Other authors, such as Seneca (B.C. 2 - 65 A.D.) and Quintilian (35 - 95 A.D.), included or omitted various subjects in their organization of the Roman Curriculum. For example, Seneca includes medicine as a liberal art, and Quintilian limited his curriculum to geometry, music, astronomy and grammar.[8]

Quintilian's system, like Plato's, began with a certain amount of training in the home, and was geared toward the development of the perfect orator. During his time at home, the child's parents were to be responsible for the development of language, both in Latin and Greek. Quintilian stresses that correct speech must be used around children, since undesirable language is hard to eliminate at a later date. Formal schooling was to begin at age seven, or, "when a boy has learned to read and write with ease..."[9] Primary education, under the tutelage of the grammarian, was to be conducted in both Greek and Latin, in small classes and including athletic play or gymnastic training each day, so as not to over-stress the mind. Secondary

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[7]Abelson, *Seven Liberal Arts*, 4.

[8]William M. Smail, *Quintilian on Education* (Oxford: Clarendon Press, 1938), 11-20, 34-44, 47-60, 69-72, for Quintilian's comments on grammar, music, geometry and rhetoric..

[9]Ibid, 34.

education focused on the development of reasoning and powers of analysis, as well as advanced studies in philosophy, astonomy, geometry and music. By age sixteen or seventeen or, as Quintilian puts it, "when he is ready for it,"[10] the boy passes on to the school of the Rhetor, where the disciplines are extended to include law, logic and ethics, and where the student will be instructed in the arts of the orator.

Like the Greeks, the Romans emphasized the link between politics and education. The Romans, too, had formed a citizens' Assembly to handle the affairs of state, and it was therefore necessary that participants in the Assembly were capable of presenting their viewpoints in an articulate, persuasive manner which could be easily understood by their colleagues. So, the arts of rhetoric became as significant in Rome as they had in Athens during its golden age.

Despite their use as topics for study by the educators of the Greek and Roman worlds, the seven liberal arts were not known as such. Through the fourth century A.D., the ideas of the seven arts were examined by the great minds of the church and eventually emerged as the medieval concept of the arts. By the fourth century, the curriculum of the pagan schools of Rome included the study of what would be known as the seven liberal arts--grammar, rhetoric, dialectic, arithmetic, geometry, music and astronomy. Throughout the second, third and fourth centuries, this curriculum solidified in the secular schools. However, since the roots of the curriculum of

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[10]Ibid, 70.

the arts were entirely pagan, it was often viewed as a threat to Christian religion during this same period.[11]

The first Christian school in Rome was founded in A.D. 160 by Saint Justin Martyr.[12] These early Christian, or catechetical, schools existed originally for the sole purpose of educating prospective church members, or catechumens, in the ways of Christianity. This education consisted mainly of moral and religious teachings designed to teach the Christian way of life to the converts, who, at this time, were mostly adults. As such, baptism was often deferred until the age of thirty, or until the catechumen had completed the introductory course of instruction. This consisted of teachings on morality, piety, church laws, creation and punishment of the wicked.[13]

By the third century A.D., however, the Christian schools had lost their wholly theological function, and instruction had advanced from the simple principles of religion to investigation of the mysteries of the gospels.[14] This transition involved the integration into the curriculum of education the works of pagan authors such as Plato and Quintilian. This, in turn, caused some consternation on the part of the church fathers, who took a dim view of such works. By the end of the fourth century, the conflict and concern had grown to

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[11]Abelson, *Seven Liberal Arts*, 6-7.

[12]Frank P. Cassidy, *Molders of the Medieval Mind* (Port Washington: Kennikat Press, Inc., 1966), 39.

[13]Cassidy, *Medieval Mind*, 36-38.

[14]Geraldine Hodgson, *Primitive Christian Education* (Edinburgh: T & T Clark, 1906), 107, 121.

such a point that the Fourth Council of Carthage, held in A.D. 398, expressly prohibited the reading of secular material altogether.[15]

Saint Augustine (A.D. 354-430), Bishop of Hippo and teacher of rhetoric in Rome, focused his writings intimately on the conflict of Reason and Faith in his *De Civitate Dei*, which he began in A.D. 413, after Rome had been conquered and sacked by Alaric the Visigoth. Under the influence of Plato and Aristotle, among others, Augustine eventually came to determine that Faith was superior, and that Reason followed as a natural consequence. Therefore, the entire goal of education should be to strengthen and reinforce Faith.[16] The fathers of the church eventually came to support a similar viewpoint, following the pagan scholars' philosophy that all learning leads to the study of philosophy. The church fathers took this one step further and declared that the study of philosophy was preparation for the study and understanding of theology.[17]

Despite this early resistence, the Christian church was to become the sole remaining bastion of culture and education in Europe after the fall of the Roman Empire. Though centered in Rome, the church managed to retain its prestige and power throughout the chaotic years following the fall of Rome. It maintained a certain

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[15]Gwynne-Thomas, *Concise History*, 38. In direct conflict with such edicts was the overwhelming concern of both pagans and Christians that the ongoing barbarian invasions of Roman lands would eventually destroy all culture. In attempts to preserve knowledge, efforts were made to publish and distribute both old and new writings

[16]Ibid, 41.

[17]Cassidy, *Medieval Mind*, 14. Conflict still existed, however, as at the end of the sixth century Pope Gregory the Great found it necessary to once again ban the classical works, as liberal studies were found to encourage dissent from the church doctrine.

structure and security against raiding barbarians, and eventually took up its obligation as a teaching institution as well as a religious one.[18] Throughout the fifth century and into the sixth, education was a main concern for scholars and religious figures of the time. Cassiodorus (A.D. 480-575) secretary at the court of Theodoric, king of the Ostrgoths, was influential in linking the church and education during this period. Though the foundation of a monastery with a scriptorium in southern Italy, Cassiodorus set a precedent for monastic institutions to become the major repositories of knowledge throughout the dark ages. His colleague, Boethius (A.D. 480-524), also at the court of Theodoric, attempted to translate the works of Plato and Aristotle. Though not entirely successful, he did manage to produce a sizeable body of translations.[19] Both of these men had a significant inpact on the acceptance of the liberal arts into the curriculum of the time.

It was Cassiodorus who first referred to the "seven liberal arts" as an independent body of knowledge. He used the term in conjunction with his argument supporting Augustine's own arguments in favor of the study of the liberal arts in preparation for religious studies. While Augustine only advocated six of the seven arts--excluding astronomy--Cassiodorus proposed a biblical proof that the number of liberal studies had to be seven.[20] Proverbs 9:1 can be interpreted as solid spiritual authority for the study of

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[18]Ibid, 32. Christ's declaration that his gospel be preached throughout the world implied an educational responsibility for the church.

[19]Gwynne-Thomas, *Concise History*, 40,

[20]Abelson, *Seven Liberal Arts*, 8-9.

specifically seven liberal arts, stating, "Wisdom has built her house and made seven columns for it." The enduring quality of this idea of the liberal arts as a supporting body for the knowledge of the church can be seen well into the twelfth and thirteenth centuries, when Nicola and Giovanni Pisano created pulpits for the cathedrals of Pisa and Siena. While each of the pulpits has more than seven supporting columns altogether, each has a centrally located column with the seven liberal arts at its base. This location of a depiction of the liberal arts as a physical support for the pulpit--where the wisdom of the church was given to the public--is an even closer association than the one which can be implied by the placement of the arts on church facades.

The works of Boethius served to construct a format for the seven liberal arts that was to become the standard for education--the trivium and quadrivium. Boethius writes a treatise on each subject of the quadrivium. Sadly, only two--arithmetic and music--have survived the Middle Ages.[21] This division of the arts into two groups will remain thoughout time. The quadrivium consists of music, arithmetic, geometry and astronomy. These are the arts through which one acquires and measures specific knowledge. The trivium, consisting of rhetoric, dialectic and grammar, are the arts which reflect the expression and ordering of knowledge.[22] Boethius ranks the quadrivium above the trivium and places philosophy at the

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[21]Michael Masi, "Introduction - Boethius and the Liberal Arts," in *Boethius and the Liberal Arts*, ed. Michael Masi (Berne: Peter Lang, 1981), 11.

[22]Jeffrey Huntsman, "Grammar," in *The Seven Liberal Arts in the Middle Ages*, ed. David L. Wagner (Bloomington: Indiana University Press, 1983), 60.

head of all the arts, much as the ancients had made philosophy the ultimate goal of education.

In his final work, *The Consolation of Philosophy*, which he wrote while awaiting execution for treason, Boethius describes his progress from despair and mental imprisonment to enlightenment and freedom. This is accomplished with the help and guidance of Philosophy, who visits his cell. She chases away the old-fashioned Muses in a show intended to demonstrate their lack of power. This is a fairly significant break with the attitudes of ancient educators. Whereas before, the nine Muses were the inspiring goddesses of song and poetry and presided over the arts and sciences, in the sixth-century hands of Boethius, the seven liberal arts replaced them as patrons of knowledge and expression. The Muses are dismissed by Philosophy as harlots who encourage a man's low and despairing thoughts.[23] The seven arts, then, are advocated as the path of enlightenment and reason throughout the course of his work.[24]

By far, the most well known and widely-used fifth-century authority on the liberal arts was Martianus Capella, who wrote a poetic account of the arts which served as the basis for both Medieval education and the iconography of the liberal arts. Capella's work dates to approximately A.D.439 and describes an allegorical marriage of science and eloquence, in the forms of Mercury and Philology. The seven liberal arts stand as handmaids to the bride.

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[23]Anicius Boethius, *The Consolation of Philosophy*, trans. William Anderson (Carbondale: Southern Illinois University Press, 1963), 28.

[24]Myra L. Uhlfelder, "The Role of the Liberal Arts in Boethius' *Consolatio*," in *Boethius and the Liberal Arts*, ed. Michael Masi (Berne: Peter Lang, 1981), 18.

They are represented by Capella as seven sisters, each of whom stands forth to present her discipline to the marriage couple and the assembled guests. In contrast to Boethius's later work, Capella's arts are all on an equal footing--no one art or combination of arts is of any more value or status than the others. They are, however, quite clearly the same seven arts put forth by Boethius almost half a century later. Though they are not named as such, Capella's seven sisters formalize the concepts which will later become the Trivium and Quadrivium. Moreover, they reflect the synthesis of classical learning and Medieval thought that is coming into play in the education and religion of the fifth and sixth centuries.

Capella's book was used as a text throughout the Roman Empire, particularly in North Africa, Italy, Gaul and Spain, along with works by such authors as Cassiodorus, Varro and Isidore of Seville. These other works either gave introductions to or in-depth descriptions of the arts at the time of their composition, and many of them proved to be standards for education throughout the medieval world. *The Marriage of Philology and Mercury*, however, became the predominant text addressing the liberal arts throughout the next five centuries. Cassiodorus refers to Capella's work twice in his own writings, as do other authors such as Gregory of Tours and Isidore of Seville.[25] One of the major revivals of interest in Capella's work took place during the Carolingian era, when it became one of the most commonly used textbooks in schools of the period.

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[25]William Harris Stahl, *Martianus Capella and the Seven Liberal Arts* (New York: Columbia University Press, 1971). Stahl describes a number of instances in which Capella's work appears to have had a direct influence on other authors, including Isidore of Seville.

This was due in part to the known interest of renowned scholars of the time such as John Scot Eriugena, Remigius of Auxerre and Martin of Laon.[26]

[26]Stahl, *Capella*, 63-4. See Stahl for references to the use to which these scholars put Capella's work.

CHAPTER TWO

The development of Christian education has been discussed above. The church continued to play a major role in the development of educational practises throughout the Middle Ages. The church itself took on the role of educator in the fifth through the eighth centuries, reflecting the command of Christ given in Matthew 28:19.

> Going therefore, teach ye all nations: baptizing them in the name of the Father and of the Son and of the Holy Ghost. Teaching them to observe all things whatsoever I have commanded you. And behold I am with you all days, even to the consummation of the world.

This commission reflects both Christ's role as the ideal teacher and the church's role as the originator of schools. From this commission, the church has become a patron of art and science and a supporter of architecture, sculpture, painting and learning. Throughout the Middle Ages, lay education took place in a rather unstructured manner. There were no formal schools for lay citizens, and people did not dedicate specific time to education as we do today. Rather, education focused on learning the scriptures, as conveyed through sermons and, significantly, through religious art--the decoration of the churches. The church was, as discussed in Chapter One, the main repository of the knowledge of the ancients

throughout the dark ages. This took form mainly in the monasteries, where the monks devoted their time to study, prayer and the copying of ancient texts. Formal education in the early years of the Christian church was mainly for the instruction of prospective members of the congregation.

Secular education was not required for those within the church. However, knowledge of Latin was necessary so that monks could read the scriptures and so that they might understand the words of their superiors' sermons and homilies.[1] Therefore, it was necessary, or at least it can be presumed, that the monks learned something of Latin grammar. By the eighth century, the monasteries of Europe had become the primary center for education of both the lay and the religious populations. There were, at this time, also village schools which existed separately from a monastic establishment, but these were under the direction of the parish priest and thus retained a close connection with the church. These institutions provided a strictly elementary education.[2]

Monastic schools were divided into two types, the interior school and the exterior school. The interior school was responsible for the education of those boys who were destined to become members of the order. The exterior school, as well as the cathedral schools, held the position of educating those destined for life in the secular world, including priests and the lay children of aristocrats. Aside from the rigors of monastic life which were required of the

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[1]M.M. Hildebrandt, *The External School in Carolingian Society* (Leiden: E.J. Brill, 1992), 21.

[2]Andrew Fleming West, *Alcuin and the Rise of the Christian Schools* (New York: Charles Scribner's Sons, 1892), 56.

religious children, there was no difference between the curricula of the internal and external schools.[3]

The Carolingian Renaissance was truly a rebirth of learning, although more in terms of a rebirth of education itself, rather than the return of knowledge which characterized the Renaissance of the fifteenth century. Education had been lacking and neglected under the Frankish kings before Charlemagne, and only monks isolated in their monasteries had any learning at all.[4] The religious orders had long been a source for both aristocratic education and for competent, intelligent court administrators. Religious reforms of the eighth century put the orders and their holdings firmly in the grasp of the head of state, and the monasteries became pawns in the political dealings of the Frankish kings as income from church land was often given to reward allies of the state.[5]

After Charlemagne's ascension to the throne in A.D. 768, there was a clear return to secular education which was led by the emperor himself. Charlemagne had acquired some learning as a boy from a man by the name of Peter of Pisa, who had served as a palace instructor under Pepin, Charlemagne's father. Some scholars take this to mean that the palace school was founded somewhat earlier than Charlemagne's time.[6] However, since the focus of this

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[3]West, *Alcuin*, 57.

[4]J. Bass Mullinger, *The Schools of Charles the Great* (New York: G.E. Stechert & Co., 1932), 37-9.

[5]Hildebrandt, *External School*, 50-51, 59.

[6]Eleanor Shipley Duckett, *Alcuin: Friend of Charlemagne* (Hamden: Archon Books, 1965), 85.

education was on manners, court procedure and etiquette rather than on expanding the mind of the student, it seems quite clear that the court school founded by Charlemagne was a very different type of institution.

The court's interest in education grew at this time not so much out of a thirst for knowledge, but rather because of a need for educated administrators to run the day to day affairs of the court and empire.[7] To fill this administrative need, Charles the Great turned first to the monasteries. His family's long-term connections with the church had endowed Charles with a tradition of drawing advisors, ambassadors and bishops from the ranks of the monastic aristocracy, and Charles simply continued this tradition into his own time. Eventually though, Charles saw the need for more thoroughly educated administrators, and so he developed what has come to be known as the Palace School. The original curriculum of this school focused on Latin literacy and administrative skills, not education for a career. In time, however, Charlemagne's interest expanded. He craved both knowledge and efficiency of operation. He felt strongly that the king of a land must be able to speak with authority on various subjects, and also that his administrators of both church and state must be well-educated, as they are representatives of the king.[8] Therefore, the focus of the school shifted from administration to scholarship, and the court began to recruit foreign scholars. Perhaps the most significant scholar to come to Aachen

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[7]Mullinger, *Schools of Charles*, 71. Hildebrandt, *External School*, 59.

[8]Duckett, *Friend of Charlemagne*, 86. Hildebrandt, *External School*, 57-59.

was Alcuin of York, recruited by Charlemagne to come from York, where he was master of the cathedral library, to Frankland. Charlemagne and Alcuin met in Italy in A.D. 780-1, and Alcuin was installed as palace instructor at Aachen by A.D. 782.[9]

Alcuin was born in A.D. 735 near York. By A.D. 766 he was master of the cathedral school, and by A.D. 780, he was master of the library. Most research and education at this time was conducted in Latin. Greek had fallen out of favor as a scholastic language, and therefore the Greek scholars of the arts were dropped as well. Alcuin had been educated at the monastery school of York, an institution which maintained the traditions of Theodorus and Paulinus. His placement at Aachen represented a distinct shift in the curriculum of the Palace School from an emphasis on administrative learning to an emphasis on more general, scholarly learning that was available to a broader base of students.[10]

The basis of Alcuin's instruction was his own learning at York. This included Boethius, Cassiodorus and Bede, and focused on grammar, rhetoric and logic. He began the basic education at Aachen with grammar and then expanded it to arithmetic, rhetoric, dialectic and astronomy, which was the king's favorite subject.[11] A notable exception from Alcuin's curriculum was the work of Martianus Capella, which was found to be distinctly at odds with the Christian teachings of the time because of Capella's speculations on the

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[9]Mullinger, *Schools of Charles*, 47, 50.

[10]Hildebrandt, *External School*, 57-59.

[11]West, *Alcuin*, 45.

nature of mankind and the universe. Significantly, Capella's work was not to be found at the York library, where Alcuin had been educated, and this may be another reason for his absence from the curriculum of the Palace School.[12] Despite this rejection by the foremost educator of the Carolingian era, Capella's work remained popular throughout the period. Even if it was not being taught by Alcuin, it was used as a text by other scholars, including Martin of Laon, Remigius of Auxerre and John Scot Eriugena.[13]

The members of court who attended the school included both Charlemagne and his queen, Liutgard, as well as Charles's sister and his five children--three sons and two daughters. It is interesting to note the mixture of male and female students at this school in a time when most women were denied access to intellectual pursuits. This mixture is due, no doubt, to the aristocratic position of these women. Gisela, the sister of Charles who attended the school had been abbess of Chelles and no doubt already had some skill at reading, writing and numbers, as well as knowledge of scripture, thanks to her position. Also attending the school were several of Charlemagne's cousins, again both male and female, and certain highly-placed court figures, including Arno, the archbishop of Salzburg and Theodulf, archbishop of Orleans, who was to become a close friend of Alcuin's.[14] It is clear from the mix of different

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[12]Ibid, 37.

[13]Mullinger, *Schools of Charles*, 65-66. William Harris Stahl, "Introduction," *Martianus Capella and the Seven Liberal Arts*, ed. W.H. Stahl, R. Johnson and E.L. Burge (New York: Columbia University Press, 1971), 61-64.

[14]West, *Alcuin*, 43.

types of students Alcuin faced--young and old, male and female, royal, religious and lay--that he was a skillful and energetic instructor. This also becomes clear from the widespread success of the Palace School. Its population increased steadily and it eventually drew students from throughout Europe.[15]

Charlemagne himself was apparently an apt, able-minded student who readily applied himself to his studies. According to Einhard, a close friend and biographer of the king,

> He paid the greatest attention to the liberal arts...Charles spent much time and labor in learning rhetoric and dialectic, and especially astronomy, from Alcuin. He learnt, too, the art of reckoning, and with close application scrutinised most carefully the course of the stars. He tried also to learn to write, and for this purpose used to carry with him and keep under the pillow of his couch tablets and writing-sheets that he might in his spare moments accustom himself to the formation of letters.[16]

Charlemagne lavished funds upon the Palace School, so supportive was he of the education of his court. Supplies, such as books, ink and parchment, never ran low and the pupils paid no tuition and were given room and board at the king's expense.[17] Admittedly, since most of the early students were related to the king or his household, they would not have been charged in any case. However, this

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[15]Patrick Joseph McCormick, *Education of the Laity in the Early Middle Ages* (Washington, D.C.: Catholic Education Press, 1912), 29.

[16]Einhard, *Life of Charlemagne*, trans. A.J. Grant (London: Chatto & Windus, 1926), 41.

[17]E.M. Almedingen, *Charlemagne: A Study* (London: The Bodley Head, 1968), 148.

penchant for providing free education was to continue through the rest of Charlemagne's career as king and Holy Roman Emperor.

Once Charlemagne had been exposed to the wonders of knowledge, he decided to civilize his kingdom and establish Christian learning throughout the land. In A.D. 787, Charlemagne issued a now-famous proclamation delineating the development of a new system of education for his people.[18] This takes the form of a letter to the abbots of the various monasteries, requiring them to engage not just in a manner of life that is regular and "conformable to holy religion," but also to engage in the study of letters. Charlemagne equated pleasing God with both living right and with right speaking. He admitted that, while right action was preferable to right speech, one must have knowledge of what was right before one could behave in a right manner. He exhorted his abbots to not "neglect the study of letters, but to apply [themselves} thereto with perserverance and with that humility which is well pleasing to God...."[19]

The result of this charter was the development of a scholastic system which was to last through the ninth century. Theodulf, bishop of Orleans and attendee of the Palace School, responded to the instructions of his king most thoroughly by organizing a school for each parish which would be available to all children. He followed in the footsteps of Charlemagne by making these

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[18]See Mullinger, *Schools of Charles the Great*, for a commonly-used translation of Charlemagne's words. All quotes in this paragraph are taken therefrom.

[19]West, *Alcuin*, 51.

institutions free of charge.[20] Charlemagne himself continued to encourage the growth of education throughout his reign. In A.D. 802, another proclamation of his suggested that all men should send their sons to school, and that the sons should study with diligence. He never went so far, however, as to attempt to force or compel his people to learn.[21] Charlemagne's schools lasted into the tenth century, but after another intellectual crash, education was not to see another great revival until the rise of the universities in the twelfth century.

Eventually, Charlemagne would install Alcuin at the monastery of St. Martin of Tours, where Alcuin founded yet another school. Over time, the monasteries gradually withdrew from the world of education, except for those within the order itself, and, in A.D. 817, the Council of Aachen forbade public access to monastic schools. However, further church councils continued Charlemagne's expansion of schools to the public. In A.D. 826, the General Council of Pope Eugenius commanded bishops to establish schools to teach the liberal arts, stating that, " in these...the commandments of God are manifested...."[22] Also, in A.D. 853, the Council of Rome stated that each cathedral should establish a school for teaching the liberal arts. These religious proclamations make it quite clear that the church recognized the value of secular knowledge in understanding scripture.

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[20]Ibid, 55. West gives a translation of Theodulf's own words, which reflect the sentiments of Charlemagne's charter of 787.

[21]Ibid, 58.

[22]Gwynne-Thomas, *Concise History*, 45.

While monasteries faded from the educational world, in northern Europe particularly, one sees active schools still attached to the great cathedrals such as those at Paris, Reims, Laon and, particularly, Chartres. While in the eleventh century, instruction at the cathedral school was not arranged systematically, the twelfth century brought a new organization for which the school of Chartres may be used as an example. Eleventh century instruction depended on the interests of the *scholasticus* or primary teacher, who was appointed by the cathedral chancellor.[23]

Originally, the bishop of a cathedral held primary responsibility for instruction given at the cathedral school, but as the power of the bishops increased and their time became more commonly absorbed by temporal affairs, the responsibilities of the school were taken on by the chancellor of the chapter. Such was the organization of the school of Chartres throughout the eleventh and into the twelfth centuries. However, with Bishop Bernard of Chartres came a new hierarchy within the school. In A.D. 1115, Bernard abandoned his teaching duties altogether and gave total control of the school over to his chancellor.[24] This transfer of power becomes significant at Chartres some twenty-five years later when Thierry of Chartres, who may have been Bernard's brother, became chancellor of the school. In addition to his educational

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[23]Urban T. Holmes, Jr., "Transitions in European Education," *Twelfth Century Europe and the Foundations of Modern Society*, ed. M. Claggett, G. Post and R. Reynolds (Madison: University of Wisconsin Press, 1961), 16.

[24]Raymond Klibansky, "The School of Chartres," *Twelfth Century Europe and the Foundations of Modern Society*, ed. M. Claggett, G. Post and R. Reynolds (Madison: University of Wisconsin Press, 1961), 4.

duties, the chancellor was also responsible for managing the physical fabric of the cathedral. It is most notable that A.D. 1141, the year in which Thierry became chancellor, is the same year in which construction of the west facade of the cathedral was begun.[25] Thierry's philosophy of education and its possible effect on the design of the west facade will be discussed later.

The renaissance of the twelfth century witnessed an explosion in education and knowledge comparable to that which occurred under Charlemagne three hundred years before. Sidney Packard feels that the twelfth century is a time of tremendous development which precedes and leads to the Renaissance in the fourteenth and fifteenth centuries.[26] This development, he claims, is based in population growth, agricultural surplus and freedom from invasions in western Europe. These characteristics allowed the populace more free time to devote to learning. Contact with Muslim-occupied Spain, to be discussed below, was essential for the development of this intellectual explosion, as it gave Europe access to the works of Classical Greek society. Significantly, most of the translated manuscripts were works on science and philosophy. This is possibly one reason for the abandonment of the humanistic tendencies in education of the first half of the century.[27]

The twelfth-century episcopal schools were not completely separate from the monastic schools of the time. They were,

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[25]Ibid, 13.

[26]Sidney R. Packard, *Twelfth Century Europe* (Amherst: University of Massachusetts Press, 1973), 151-153.

[27]Packard, *Twelfth Century Europe*, 152.

however, immersed in the growing cities of the day, and this, too, had a profound effect on the character of education. Urban growth stimulated the growth of new problems in areas such as law, sanitation, housing and resource distribution. The close involvement of the cathedral schools and the cities stimulated growth of both the cities and the schools. Solutions to the growing problems of the urban areas depended, to some extent, on the ideas of the scholars for solutions, and, no doubt, the university students and masters were able to provide some aid in solving urban difficulties.

The texts of the first half of the twelfth century were fairly standardized. For grammar there were Donatus and Priscian, rhetoric had Cicero, Quintilian, Ovid, Vergil and others. Dialectic had the translations of Porphyry given by Boethius, who also had prepared a text on music. Bede was used for arithmetic, and Albinus for geometry.[28] A list of texts from the close of the twelfth century, probably compiled by Alexander Neckam, includes the *Metaphysics* of Aristotle, Euclid's works on arithmetic and Ptolemy's canons on astronomy. This list is subsequent to the work of Thierry of Chartres, who compiled his own works on the liberal arts, and includes most of the works employed by Thierry as well as some others.[29] After the mid-point of the century, however, when the flood of information from Spain was being assimilated, much of the list was altered. Perhaps the most significant alteration was in the use of Aristotle as a text for dialectic. This transition served to

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[28]Holmes, "Transitions," 17.

[29]Charles Homer Haskins, "A List of Text-Books from the Close of the Twelfth Century," *Harvard Studies in Classical Philology* 20 (1909): 85-89.

alter the style of grammar used and also changed the common teaching form to include a disputation between students and masters at the end of the lesson.[30]

A chief twelfth-century proponant of the arts was Alan of Lille, a scholar of French origin born around A.D. 1128. He appeared in Paris around 1155, and later worked for Count William VIII of Montpellier.[31] He was an educated man who gave lectures and held debates. He was also the author of several books, including the *Anticlaudian*, an epic poem which describes the voyage of the virtue Prudence as she travels to Heaven to ask God for a soul to animate the perfect man which has been created by Nature with the help of the virtues and the seven liberal arts. The seven liberal arts endow this perfect man with all of their knowledge.[32]

The seven arts take on the role of building the chariot which will carry Prudence to Heaven. As in Capella's work, they are seven sisters, all beautiful virgins, and Alan describes them in great detail. Grammar, who builds the tongue of the chariot, is dressed in a papyrus gown inscribed with the rules of her art.[33] Dialectic builds the axle of the chariot and is lean and covered with "simple skins."[34] She also carries with her a bunch of flowers and a

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[30]Packard, *Twelfth Century Europe*, 160.

[31]John M. Trout, *The Voyage of Prudence: The World View of Alan of Lille* (Washington, D.C.: University Press of America, 1979), 4-5.

[32]Ibid, 40.

[33]William Hafner Cornog, *The Anticlaudian of Alain de Lille* (Ph.D. Dissertation, University of Pennsylvania, 1935), 74-75.

[34]Ibid, 77-78.

scorpion. Rhetoric makes the chariot platform and carries a trumpet and a horn.[35] The quadrivium is responsible for fashioning the four wheels of the chariot. Arithmetic brings with her the Pythagorean table, Music plays a cithara, Geometry displays the arts of measuring and Astronomy holds a sphere and explains various astronomical mysteries.[36] Thus, the seven liberal arts take their place in the mind of the twelfth-century scholar as the means by which the mind is able to travel to the divine.

The school at Chartres can serve again as an example of this transitional period in the twelfth century. In the Carolingian era, Chartres was already a center of learning. Clerics came from all over Europe to study arts such as theology or medicine. By the twelfth century the school had been host to such scholars as Gerbert of Aurillac, who would be elected pope in A.D. 1000, and St. Yves of Chartres, a bishop who was to become one of the foremost legal minds of the eleventh century. Under his influences, as well as in response to the growing complexity of European social and administrative machinery, the school of Chartres became a primary center for administrative education.[37] Chartres was distinguished by a trend to replace the emphasis on rhetoric with a focus on the sciences, which accounted for the popularity of Martianus Capella and a new interest in Platonism at that school.[38] And yet, despite

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[35]Ibid, 81.

[36]Ibid, 84-92.

[37]Favier, *World of Chartres*, 38.

[38]Stahl, "Introduction," 67.

its popularity and early primacy, the school of Chartres never developed into a full university. Instead, it faded in the shadow of Paris, which was only about fifty miles away. Paris, no doubt, benefitted as much from being a royal city as from being the scholarly seat of Peter Abelard, who is often credited with founding the University of Paris.[39]

Perhaps the most significant twelfth-century development is the new focus on scholarship in education which is reflected in the later development of the Medieval university system. The Medieval university had little of the physical structure we see today. Instead, the university was a collection of masters and students living in an urban area in an arrangement not unlike a trade guild.[40] The development of universities was undoubtedly an outgrowth of the Carolingian revival of education and Charlemagne's establishment of schools outside the monasteries. Also a factor was the arrival of a new surge of knowledge from the Arabic scholars of Spain. A world which had still been working with Roman numerals now had access to Arabic numbers, the concepts of solid geometry and the writings of Aristotle, Euclid and Ptolemy. These revivals, as well as the growth of the universities, served to remove education from the confines of the monastery and created professions, such as medicine and law, which were outside the realms of church and court and therefore led to education and

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[39]Packard, *Twelfth Century Europe*, 164. Packard gives a good deal of commentary on the attraction a scholar such as Abelard would have for students and on the effects this type of gathering would have on the formation of universities.

[40]Charles Homer Haskins, *The Rise of the Universities* (Ithaca: Great Seal Books, 1923), 2, 8-9.

schools which existed outside of those settings in the thirteenth century.[41]

The twelfth century was a time of renaissance much like that found in the ninth century under Charlemagne. This period is characterized by an expanding population, linked with agricultural revolution, urban expansion, religious institutionalization and growth of regional political units. Other notable twelfth-century events include the further separation of the eastern and western churches, the Crusades and, significantly, the development of education in the form of publicly accessible episcopal schools and universities. Out of these events came the developments of the twelfth and thirteenth centuries in architecture, art and literature. Many of these particular happenings have even had an impact upon today's society. The Church, for example, which was such a potent force in the Medieval world, is still a significant part of today's world for millions of people.

By the end of the twelfth century, the liberal arts had lost some of their prestige in the world of education. Universities, which solidified in the thirteenth century, still taught the seven arts, but they were no longer the supreme focus of education. Rather, they were seen as a means to an end--a ladder which the student could use to climb to the rarified heights of philosophy, theology or law. The seven arts were seen as a unit, but only in their commonly introductory nature. They no longer corresponded to an arts course of their own, but instead were replaced by the study

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[41]Haskins, *Universities*, 4-5.

of the three philosophies--natural, moral and metaphysical.[42] This new classification of the arts is due in part to the new use of Aristotelian philosophy in this period, which interacts with the traditional ideas of the arts. From this interaction comes the conclusion that the seven liberal arts are only a partial division of philosophy.[43] The work of Martianus Capella, long the standard text of the liberal arts, did not survive the transitions of the twelfth century intact. While the allegory of the marriage which gives the setting for the piece remained popular, the sections dealing with the seven disciplines were no longer used.[44]

The twelfth century was also the time of the construction of the great Gothic cathedrals. I have already briefly touched on the relationship between education and cathedral decoration in the case of Chartres. It is tempting to see the church as an entity separate from the pulls of secular society. Especially during the Middle Ages, however, this was definitely not true. The people of the Middle Ages relied on their churches not just for guidance in their spiritual lives, but for guidance in their secular lives as well. In the twelfth century in particular, the Christian church was a major formative force in the lives of the people and can perhaps be considered the single most powerful institution of the day.

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[42]Gordon Leff, "The *trivium* and the three philosophies," in *A History of the Universities in Europe*, ed. Hilde de Ridder-Symoens (Cambridge: Cambridge University Press, 1992), 308.

[43]Ralph McInerny, "Beyond the Liberal Arts," in *The Seven Liberal Arts in the Middle Ages*, ed. David L. Wagner (Bloomington: Indiana University Press, 1983), 253.

[44]Stahl, "Introduction," 70.

The church, mainly in the form of the monasteries, was largely responsible for the continuance of education from before the time of Charlemagne. By the twelfth century, the church was nothing short of an ecclesiastical monarchy whose officials were a highly educated elite. This connection with education and learning is clearly reflected in the art of the church, especially in those churches affiliated with schools, such as Chartres or Laon.

CHAPTER THREE

As discussed above, it was the work of the fifth century author Martianus Capella that gave the Medieval world a visual interpretation of the seven liberal arts. In his work, Capella introduces the arts as the seven handmaidens of Philology, who was to wed Mercury. Capella's descriptions gave Medieval artists a basis from which to draw their attributes and iconography for representations of the seven arts.[1]

The work is set in the Olympian sphere, and involves all of the ancient gods. This setting accomplishes two purposes. First, Capella is able to allude to the traditions of epic poetry which extend back to Homer. Secondly, and perhaps more significantly for this paper, the heavenly setting suggests that the study of the liberal arts is sanctioned by an authority that is something more than human.[2] In this case, the author speaks of pagan gods, but

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1Martianus Capella, "The Marriage of Mercury and Philology," in *Martianus Capella and the Seven Liberal Arts*, vol. 2, translated by W.H. Stahl and E.L. Burge (New York: Columbia University Press, 1971). All descriptions of the setting of the allegory and the seven arts themselves are found in this work. Specific quotations will be noted individually as they occur.

2Richard Johnson, "The Allegory and the Trivium," in *Martianus Capella and the Seven Liberal Arts*, vol. 1, ed. W.H. Stahl, R. Johnson, E.L. Burge (New York: Columbia University Press, 1971), 83-89. Johnson gives a convincing discussion of Capella's use of varying theological systems, including Neoplatonism, Hermeticism and Ehyptian religion, as well as traditional Olympian mythology.

Capella was a Christian, and it is quite easy to transfer the sanction of pagan gods to that of the Christian God. As we have seen[3], the study of the liberal arts, and with them their pagan authors, had to be seen as a stepping-stone to the study of a higher subject, namely theology, in order for them to be acceptible to the Christian church. Thus, by associating the goal of knowledge and the liberal arts--the means by which that goal was attained--with a superhuman audience, Capella provided the world of the fifth century, both secular and sacred, with a means to accept pagan literature.

At the marriage of Mercury and Philology, the seven liberal arts are given as a gift to Philology from Mercury. They are brought forward into the company of the gods by Apollo, and Capella characterizes them as "women who shone with a beauty in every way equal to their raiment."[4] It is interesting to note that Philology is accompanied by the Muses, the nine deities of the arts in the ancient Greek world, who sing and dance at Olympian festivities. These nine figures may be precursors for the seven liberal arts, but no direct influence has been found. Neither is there a known iconographic corollary between the Muses and the arts.[5] It is also noteworthy

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[3]See Chapter One, p. 6.

[4]Martianus Capella, "The Marriage," 63.

[5]I would tend to think that there is some type of connection between these two groups of women. The Muses were patrons of pursuits such as music and astronomy, two of the arts, as well as philosophy and literature, which may tenuously be interpreted as grammar. However, the possibility of such a relationship was not the focus of my research. Katzenellenbogen, in his article "The Representation of the Seven Liberal Arts," says that Carolingian depictions of the arts are "obviously" based on the tradition of portraying the muses, but he does not extend an argument supporting that point. Adolf Katzenellenbogen, "The Representations of the Seven Liberal Arts, " in *Twelfth Century Europe and the Foundations of Modern Society*, ed. M. Claggett, G. Post and R. Reynolds (Madison: University of Wisconsin Press, 1961), 41. Likewise, Michael Evans characterises the arts as "the muses of the middle ages." Michael Evans, "Allegorical

that Capella states that the seven arts were "chosen members" of Mercury's household,[6] suggesting that they were already known to the gods and, in particular, to Mercury. This further supports the use of the arts as a path to joining eloquence (Mercury) and learning (Philology). It seems that before the arts became the seven pillars of wisdom, they were the handmaidens of eloquence.

Capella's allegory sets a fanciful stage for his treatises on the liberal arts. Throughout the work, Capella discourses with his muse regarding various points of consistency and also speaks directly to the reader, stating his purpose in writing. His treatises begin with a description of each art and her attributes and then develop into rather tedious discourses by each art on the details of her skill. Grammar, for example, is described as an old woman "of great charm,"[7] dressed in a Roman cloak and carrying a beautiful box. From this box she takes a pruning knife to remove faults in pronunciation, a black powder - ink - which could restore children to grammatical health, and several other herbal remedies which could be used to remove ignorance or corrupt pronunciation. She could sweeten unpleasant voices, clean out lungs, assist memory and cleanse the teeth and tongue of poor grammatical residue. Grammar goes on to speak at length on her art, giving great detail on consonants and vowels, and pronunciation. She discusses the method of pronouncing letters and goes on at length regarding the

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Women and Practical Men: The Iconography of the *Artes* Reconsidered," in ***Medieval Women***, ed. Derek Baker (Oxford: Basil Blackwell, 1978), 309.

[6]Capella, "The Marriage," 63.

[7]Capella, "The Marriage," 64-105.

development of syllables and the various parts of speech. The other six arts follow a similar format, though at this point I will only address their attributes and physical appearances. At the end of each section, another god or goddess who has become bored with the recitation, suggests to the speaker that she complete her commentary. Capella himself admits that these subjects can become complicated, obscure and even boring in some cases.[8]

Dialectic, the second art to come forward, is described as "a woman whose weapons are complex and knotty utterances."[9] Capella describes her as pale and sharp-eyed, with an elaborate hairstyle. She is short and dark-skinned, with "thick, bushy hair on her limbs."[10] She wears Greek dress and carries in her left hand a large coiled snake which symbolizes an opponent's overthrow in argument. In her right hand she holds a set of beautiful, mesmerizing patterns, which she offers to the assembled company. These represent that which draws the opponent in and throws him off his guard, since they are held by a concealed hook. When one is "hooked," or drawn in, by the patterns, one is then pulled toward the snake, which is hidden in Dialectic's robe. The snake then bites the victim with sharp and venomous teeth and grips the victim in its coils until he is compelled to accept Dialectic's arguments. She, like Grammar, presents a long speech on the divisions and disciplines of her art.

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[8]Capella, "The Marriage," 105, 153.

[9]Ibid, 106.

[10]Ibid, 107-110. See p.107, notes 8 and 9 for the significance of her hairstyle, which Stahl feels reflects the complete nature of logical argument. See p.108, note 14 for Stahl's discussion of Dialectic's body hair.

Next, Rhetoric comes forward, on her own and unescorted by any deity. She is the patron of the Roman rhetors and the Sophists, who used words as a method of attack and defense. Capella describes her as a beautiful woman clad in a helmet, a wreath and holding arms which shone like lightening. Rhetoric wears a robe of Latin style which is decorated with jewels and various devices. She is characterized as tall, beautiful and self-confident. Her voice is awe-inspiring, and she is accompanied by "a mighty army of famous men,"[11] the foremost of whom are Cicero and Demosthenes, who had both been great orators. She is preceded by a crow, which suggests to the assembled gods that she is somehow related to Apollo.[12] The speech of Rhetoric is said to have controlled the senate of Rome and the theaters of Athens, and certainly she enthralled the assembled guests of Capella's scene.

Geometry is the first representative of the Quadrivium to appear to the wedding assembly. Capella describes her as "distinguished-looking."[13] She carries with her a sphere containing a diagram of the heavenly bodies. In this model, the earth is presented as a stationary point, central to the rest of the universe. In her right hand, Geometry carries a geometer's rod, which is a measuring tool. She wears a peplos marked with various figures such as the dimensions and orbits of the planets and ther heavenly bodies, the sun, the moon and even the shadow of the earth. Capella

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[11]Capella, "The Marriage," 157.

[12]Ibid, 159 n. 26. Apollo was the god of prophecy and the crow was traditionally a prophetic bird.

[13]Ibid, 218-220.

says that this peplos may be of use to Geometry's sister, Astronomy, as well, since it pertains to the heavenly bodies. Geometry is known as a traveler who wanders the earth, measuring its size and shape. She gives her discourse near an abacus board which had been brought to the assembly by Philosophy and Learning. This abacus is most likely a wooden tray filled with sand that could be put to use by both geometricians and arithmeticians for the purpose of drawing figures and diagrams. The arithmetician would use it divided into an equal grid for representing problems of arithmetic.[14] Geometry completes her discourse by offering Jupiter and his company a set of texts for the study of her art. Capella, unfortunately, does not reveal the authors of these books. Knowing the names of the authors would be invaluable in determining the identity of figures accompanying the arts as at Chartres. Geometry is then recognized as the most generous of the seven bridesmaids.

Capella's Arithmetic is a stately lady "of striking appearance."[15] A number of light rays extend from her forehead, symbolizing mathmatical properties such as the monad, which is the beginning of numbers. Like Geometry, Arithmetic wears a garment which is covered with aspects of her art. In this case, Arithmetic's robe holds "the operations of Universal nature." She greets Jupiter by calculating the number 717 on her fingers and bathes him in the light of the rays coming from her head. Pythagoras, who has been standing with the other philosophers to this point, escorts

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[14]William Smith, *Dictionary of Greek and Roman Antiquities* (New York: Harper & Brothers, 1850), 9.

[15]Capella, "The Marriage," 274-276.

Arithmetic to the abacus and holds a torch for her to see by. Arithmetic is greatly honored by the assembled gods, who acknowledge her as the procreator of the gods and a number of philosophers.

Astronomy, the third representative of the quadrivium, appears in a glowing ball of light. The glow of this light revealed the orbits of several planetary figures and the material of the celestial sphere. Astronomy herself is described as a winged female with sparkling hair and golden crystal wings. She is decorated with gems and holds in her hands a sextant, the tool of navigation, and a book containing the dimensions of the orbits of planets and heavenly bodies, much like the peplos of her sister Geometry. It is not known how the gods reacted to Astronomy's recitation of her skills since part of this book is lost.

Finally, as the assembled deities grow tired and the marriage torches begin to flicker and dim, Mercury becomes consumed with passion for Venus, and wants to abandon the rest of the ceremony. Jupiter, however, decides to complete the ritual and asks how many bridesmaids remain. Medicine and Architecture remain, but are not allowed to speak, as they are described by Apollo as mundane and mortal subjects which can be examined by Philology at her own leisure. Also remaining are seven further women to be presented by Phronesis, the mother of the bride. These seven are the representatives of the prophetic arts such as horoscopes and omens. However, led by Luna, goddess of the moon, the gods agree to postpone recitations by these seven women until a later time, when

"the audience is wide awake and thirsting to hear."[16] At this point is brought forth Harmony, "that most iminent of ladies...the particular darling of the heavens."[17]

She is introduced by Apollo, the god of music, and escorted in to the strains of Hymen singing the song of wedding. Many of the lesser gods, such as the three Graces, join in a musical performance that includes dancing to the combined music of various instruments. Finally, Harmony approaches, escorted by Apollo and Athena. She is ornamented with gold headpieces and wears a garment of stiff gold cloth that makes music at every step. In her right hand she holds a circular object which rings forth with divine music. In her left she holds a number of small golden models of musical instruments. These represent the earthly music made by mankind, as compared to the divine harmony in her right hand. Finally, Harmony escorts the marriage couple into their wedding chamber and hums a lullaby for them.

So ends Martianus Capella's treatise on the seven liberal arts. Though often the object of controversy, this work did, indeed, serve as an iconographic source and a textbook throughout the Middle Ages. In the paragraphs to follow, I will discuss the common Medieval iconography and significance of the seven arts. Finally, this work will conclude with an investigation of the liberal arts as seen on several specific religious monuments, as well as the iconography and the artistic context in which these depictions are found.

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[16]Capella, "The Marriage," 348.

[17]Ibid, 346 n.8, 349.

As I shall demonstrate, there does develop by the twelfth century a fairly standardized iconography of the seven liberal arts. There is no concrete evidence, short of Capella's own descriptions, for the origins of this iconography. I have already discussed briefly the possiblilty of an iconographic connection to images of the nine muses of Classical mythology. Many authors, including Emile Mâle[18], have discussed images of the seven arts with respect to their relationship to Capella's characterizations.

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[18]Emile Mâle, *Religious Art in France: the Thirteenth Century* (Princeton: Princeton University Press, 1984), 81-82.

CHAPTER FOUR

Prior to the twelfth century, pictorial images of the seven arts are rarely seen. In general, they were confined to manuscript illuminations decorating the works of Boethius or Martianus Capella, two of their chiefest exponents.[1] In opposition to Emile Mâle, who has already been cited, Michael Evans claims that there is no direct relation between Capella's descriptions and the iconographic tradition which develops in the Middle Ages.[2] In fact, there is such variety in the iconography of early images of the arts, as demonstrated by Evans, that there is little evidence that a uniform tradition is even developing. However, once the twelfth century is reached, as will be demonstrated later, it is clear that a standard iconographic form is used for depictions of the seven arts in religious sculpture.

From the time of Capella to the fifteenth century, the liberal arts are represented as female figures. Evans claims that this is due to the feminine gender of the Latin names of the arts,[3] and this

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[1]Evans, "Allegorical Women," 306.

[2]Evans, "Allegorical Women," 308-309. Evans convincingly demonstrates the lack of relation between Capella's words and the drawings found even in Capella manuscripts. It may be noted that Capella's descriptions were perhaps too esoteric for the medieval artist to translate literally into pictorial form.

[3]Evans, "Allegorical Women," 305.

reasoning is entirely plausible. Also, there is a long tradition of female personifications of abstract concepts, both in art and in literature. Virtues, Vices, Fortune and Philosophy are also generally represented as female, and the liberal arts themselves tend to remain female until the fifteenth century when the actual personifications of the arts are sometimes replaced by the figures of their scholarly exponants.[4]

They are commonly represented in twelfth century art as queenly young women in classical robes, holding instruments as attributes or engaged in activities which reveal their nature, as at Chartres. Often, they are associated with the biblical virtues on church facades, a relationship which suggests that knowledge and virtue are connected somehow in raising mankind above our mean existence.[5] Medieval encyclopedic works such as the *Didascalicon* of Hugh of St. Victor and the *Speculum Majus* of Vincent of Beauvais attempted to explain the means by which mankind could once again know the Divine Wisdom of God. These works, and others like them, propose that the Original Sin of Adam and Eve released three great evils upon the world. These are sin, ignorance and mortality. To offset these evils, God provided mankind with the remedies of virtue, wisdom and practicality. To Medieval authors, these divine gifts are represented by the seven virtues, the seven liberal arts and the seven mechanical arts.[6]

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[4]Ibid., 311. This type of replacement happens most generally in manuscripts.

[5]Katzenellenbogen, "Representation," 45.

[6]James Hall, *A History of Ideas and Images in Italian Art* (London: John Murray, 1983), 196.

From this linkage in purpose, it is easy to suggest a further relationship in terms of appearance or form. After all, if we look at twelfth century art as a whole, we see that individuals are not made recognizable by physical features such as curly hair or a large nose, but rather by attributes, such as St. Peter's keys or the shells of St. James the Greater. To the medieval artist, a woman's body was a woman's body and virtues, liberal arts and even biblical figures were differentiated from one another only by their attributes. Indeed, Michael Evans states that the appearance of the arts in the twelfth century is probably related to the established formula of portraying the virtues as female figures with specific identifying attributes.[7]

In the ninth century, when Charlemagne's great educational renaissance occurred, architecture enjoyed a time of prosperity as well. Specifically, Charlemagne made use of a particular type of state-ordered and -sponsored architecture which declared the ideals of the new king. quite a bit of this new style was borrowed from the art of antiquity. The palace of Charlemagne, for example, was based more on the style of a Roman basilica than on the old Merovingian palace which it replaced.[8] For architectural decoration, Carolingian style involved a great deal of mosaic on floors, walls and domes, patterned masonry, as seen on the arches of the Palatine Chapel, and also wall paintings, as seen at the church of Saint-Germain-en-Auxerre. The figural motifs of the mosaics and frescoes include

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[7]Evans, "Allegorical Women," 309.

[8]Jean Hubert, "Architecture and its Decoration," in *The Carolingian Renaissance*, ed. J. Hubert, J. Porcher and W.F. Volbach (New York: George Braziller, 1970), 46. Hubert gives an excellent explanation of the design and decoration of Carolingian architecture, including a discussion of influences from north Italian wall painting.

biblical scenes such as God and the twenty-four elders of the apocalypse. Also, there are floor and vault mosaics in geometric and floral patterns and floral decorations in paint as well.

The world of sculpture, however, was not so widely populated. Unlike the great Gothic cathedrals, Carolingian structures were not ornamented with sculpted stone decoration. Exteriors were plain and heavy, with monumental forms, thick columns and numerous small windows. Sculpted decoration was in the form of plaster, which has since been lost to the elements or covered by later decorations. Charlemagne focused on the monumentality of form for impression, rather than on elaborate decoration. Interiors, where they were not painted or decorated with mosaic, were plain as well. The sculpted forms of the Carolingian era are mainly closure slabs, which separated the choir of a church from the nave. Often, these were decorated with carved foliate forms and interlace designs. Some, like one found at Metz, have cross and arch motifs comparable to some themes in early Christian art.

So, where are the liberal arts in Carolingian decoration? According to a poem by Theodulf of Orleans, the palace at Aachen contained a mosaic depicting the seven arts, in company with some of the virtues.[9] This mosaic showed a tree growing from a globe toward the stars. At the root of the tree sat Grammar, holding a whip and a sword. Rhetoric and Dialectic sat on a branch to the right, balanced by the four Cardinal Virtues on the left. Arithmetic

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[9]Julius von Schlosser, *Schriftquellen zur Geschichte der Karolingischen Kunst* (Vienna: Verlag von Carl Graeser, 1896), 377-380. Roger Hinks, *Carolingian Art* (Ann Arbor: The University of Michigan Press, 1962), 152.

embraced the trunk of the tree, while Music and Geometry sat among the upper branches and Astronomy clung to the middle stem. Roger Hinks, who comments on this work, points out that it may not be a product of the ninth century at all, but rather a late-antique work from Rome or Constantinople or a copy of such an artifact. Hinks points out that Charlemagne owned a table topped with a plan of Constantinople and says that other such artifacts may have been products of Byzantine artists, rather than Carolingian ones.[10]

Given Charlemagne's international connections and educational leanings, it is easy to suggest that he may have hired a Byzantine mosaicist to design and execute such a work, perhaps based on Charlemagne's own conceptions. Indeed, it is well known that Charlemagne visited Italy, an area imbued with Byzantine influences, and probably saw the work of Byzantine artists while there.[11] Kurt Weitzmann states that artistic connections between East and West were closely maintained throughout the Carolingian and Ottonian years. Also, Weitzmann claims that the art of the East was considered superior to that of the West because of its virtually unbroken connection to the Greek past, so it is entirely conceivable that Byzantine artists were well known at Charlemagne's court, and

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[10]Hinks, *Carolingian Art*, 153. Michael Evans argues this point as well, claiming that Theodulf's words are only literary in inspiration. Evans says that it is impossible to visually realize Theodulf's descriptions, but does not say why. Evans, "Allegorical Women," 306-307.

[11]Magnus Backes and Regine Dölling, *Art of the Dark Ages* (New York: Harry N. Abrams, Inc., 1969), 8. Charlemagne made as many as seven journeys to Italy.

they would have known of any such prototypes in the Byzantine empire.[12]

The liberal arts were known to the scholars of the Byzantine empire, but it seems that they may not have held the same high position in the world of art as they did in the West. In philosophy, the ultimate goal of the Byzantine thought as in the West, religious faith was essential and secular learning was not as necessary to reaching that goal.[13] Even so, the liberal arts were a part of secular education. Constantine VII, who came to the throne in 913, restored the study of the quadrivium at the University in Constantinople and searched for and hired masters in the appropriate subjects.[14] In 1045, when the University was reopened, the head of the Philosophy School was Michael Psellus, whose curriculum was similar to those found in the schools of the West, and began with the study of the trivium.[15]

However they arrived, the seven liberal arts eventually crossed over into the world of sculpture. By the end of the eleventh century, the arts appeared on column capitals from the third basilica at Cluny, which was begun in A.D. 1088. This rebuilding was undertaken by Abbot Hugh of Semur, who ruled the abbey and the

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[12]Kurt Weitzmann, "Byzantium and the West Around the Year 1200," in *Art in the Medieval West and its Contacts with Byzantium*, ed. Kurt Weitzmann (London: Variorum Reprints, 1982), 54.

[13]Constantine Cavarnos, *Byzantine Thought and Art* (Belmont: The Institute for Byzantine and Modern Greek Studies, Inc., 1968), 30.

[14]J.M. Hussey, *Church and Learning in the Byzantine Empire, 867-1185* (New York: Russell & Russell, Inc., 1937), 24.

[15]Ibid., 61.

Cluniac order for sixty years. According to Kenneth Conant, long the foremost scholar of Cluniac art and archaeology, this structure must be viewed as a devotional focus for the entire Cluniac order.[16] Accordingly, it was built large enough to accommodate the entire membership of the order, had it been assembled. The church was of Romanesque style, with a long, narrow nave, a transept and a rounded apse with radiating chapels. Conant claims the plan of Cluny III to be the first to include a double transept.[17] True to Romanesque form, the church was not elaborately decorated, as the Gothic cathedrals would be in the next two centuries. Instead, the walls are thick and heavy, plain both inside and out, and are pierced by small windows. The capitals of the nave columns were nearly all of the Corinthian type. Figural sculpture was confined almost entirely to the west facade and the capitals of the apse. The decoration of the west portal, now lost, was completed around A.D. 1113, and is thought to have contained an allegorical scene, perhaps of the Last Judgement, like those found at Vezelay or Autun.[18]

The sculptural decoration of the apse is where the images of the seven liberal arts were to be found. The carved capitals of the eight freestanding apse columns have been the subject of much debate over the years. Kenneth Conant identifies their iconography

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[16]Kenneth John Conant, *Carolingian and Romanesque Architecture 800-1200* (London: Penguin Books, 1987), 199.

[17]Ibid, 200.

[18]Ibid, 209.

and arrangement from the north end around to the south (Figure 1).[19] The first column has a Corinthian capital, with no symbolic meaning whatsoever. Column Two displays the first four tones of the liturgical plainsong, while the last four are found on column eight. The third column, though damaged, has one identifiable figure, which Conant calls a wind or harvest symbol. Peter Diemer, however, argues for a representation of the four winds on this capital.[20] Capital Four shows either the theological virtues or possibly the quadrivium (Figures 6-9), and the trivium and Philosophy are seen on Capital Six, which Conant claims displays two images of Prudence and two seasons (Figures 2-5). The fifth capital is decorated with the Four Rivers of Paradise and the seventh Conant identifies as either sporting diversions or more seasons, and Diemer calls the Four Seasons.[21]

I would suggest an alternate arrangement which pairs the columns. The northernmost and southernmost would be the two capitals depicting the tones of the plainsong. Next would follow the plain Corinthian capital paired with the capital depicting the four seasons. I pair these two only because of the overwhelmingly foliate decoration on the seasons capital. Third come the four winds

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[19]Kenneth John Conant, "The Iconography and the Sequence of the Ambulatory Capitals at Cluny," *Speculum* 5(1930): 278-287. To my mind, Conant relies too much on what looks "handsome" or "satisfactory" in determining placement of the capitals. He mentions occasionally the effects of the collapse of the apse vault as evidence for arrangement, and should rely more fully on that.

[20]Peter Diemer, "What does *Prudentia* Advise? On the Subject of the Cluny Choir Capitals," *Gesta* 27(1988): 150. Diemer contradicts Conant with evidence from Porter and Panofsky, as well as arguments of his own.

[21]Ibid, 160-162.

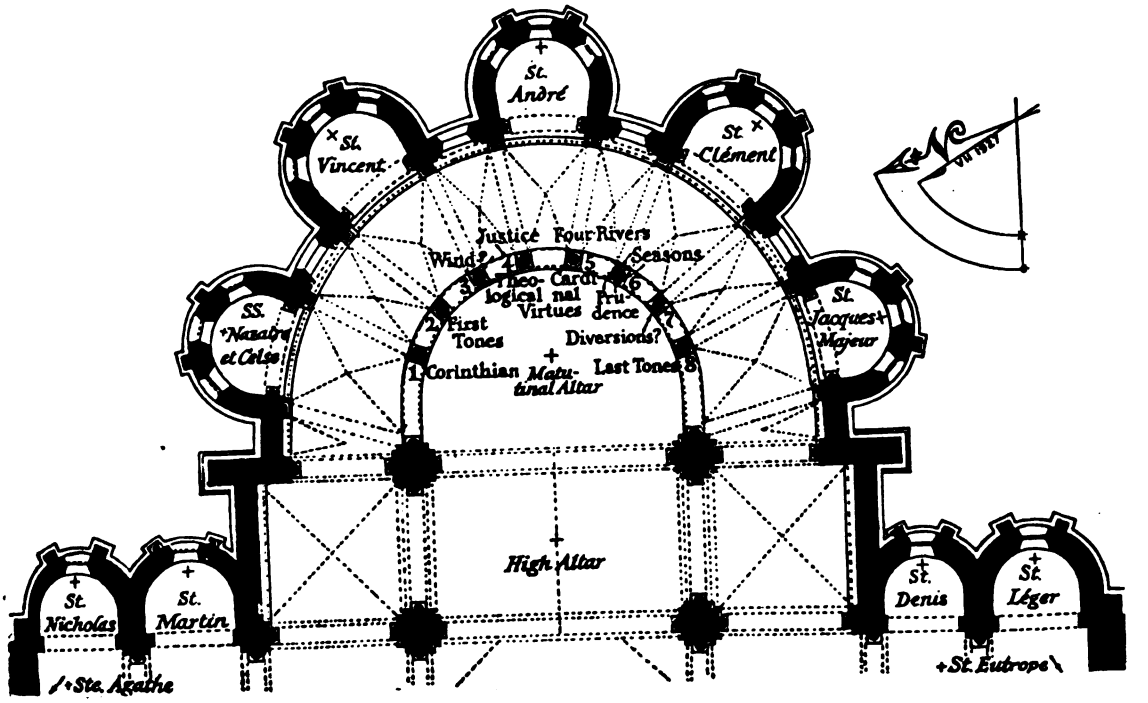

Figure 1: Apse of Cluny III

and four rivers, two cosmological themes which are common to Medieval sculpture. Finally, at the peak of the arch are the liberal arts. Although I have no concrete proof for this arrangement, I would argue that my proposed pairings seem logical.

Peter Diemer gives solid reasoning for his identifications of the seven arts, so I will forego a lengthy description and instead attend only to a few salient points.[22] Grammar has lost much of her attribute, but still retains the fragments of a whip or flail and a child crouched at her feet (Figure 5). This follows the standard representation of Grammar, much as seen at Chartres. Rhetoric also lacks any item she may have been holding, but she is clothed in a coat and cap of mail as in Capella's account (Figure 4). The figure identified as Dialectic is badly damaged, and her attribute is almost entirely missing, but points of attachment remain and are widely spaced and numerous enough to suggest that this figure held the enthralling and dangerous serpent of Capella's Dialectic (Figure 3). The figure on the fourth side of this capital is identified by Diemer as Philosophy, the higher goal of all those who study the seven arts. Philosophy is often shown as a central figure in depictions of the arts, with the other seven gazing up at her in a worshipful manner. This figure does not pose in the frontal stance of most other depictions of Philosophy, but she does seem to be more graceful than the other arts, and her robes are certainly longer and more flowing

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[22]Ibid, 153-160.

Figure 2: Philosophy

Figure 3: Dialectic

Figure 4: Rhetoric

Figure 5: Grammar

(Figure 2). She holds open a book which she displays to the viewer.[23]

Diemer places the arts of the quadrivium on the capital which Conant identifies as displaying the three theological virtues of Faith, Hope and Charity, and a figure of Justice, one of the cardinal virtues. Conant selects Justice as the fourth figure because the Abbott of Cluny had judicial jurisdiction over the town of Cluny, thus making Justice an appropriate virtue to be placed in the church.[24] These four figures are extremely difficult to identify with any certainty, since the column is highly damaged and many of the emblematic attributes have been lost. Though Diemer argues for the quadrivium, the attributes he uses do not fit the standard iconography as neatly as do those of the trivium.

One figure holds a small box or casket. This is identified by Diemer as Arithmetic, and he claims the casket is an artistic misinterpretation of a model in which Arithmetic displayed an abacus or demonstration tablet (Figure 8). Conant, however, calls this figure Charity, who may be represented carrying a box out of which she distributes alms to the poor.[25] Diemer's Geometry holds a rod or scepter which is flowering at the end (Figure 6). This attribute is known from manuscripts, such as the one of the late eleventh century found in paris, and may be an allusion to the

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[23]Ibid, 157. Diemer gives an explanation for the departure from the standard iconography of Philosophy which revolves around a supposed confusion of terminology on the part of a reader of Capella at Cluny.

[24]Conant, "Capitals of Cluny," 282.

[25]Adolf Katzenellenbogen, *Allegories of the Virtues and Vices in Medieval Art* (Toronto: University of Toronto Press, 1989), 56.

measuring rod which Geometry carries in Capella.[26] The potential virtue is Hope, who carries an olive branch.

The remaining two figures are somewhat more problematic. A kneeling figure with hands extended is identified by Diemer as Astronomy, possibly holding a book of astronomical dimensions. He gives no explanation for her kneeling position (Figure 9). Conant calls the figure Faith, who kneels to receive the sacrament of Holy Communion.[27] An alternate identification of this figure is Justice, who is generally shown with a balance or scales.[28] In this case, she may be weighing two opposing options in her outstretched hands. The final figure which Diemer calls Music, is almost entirely lost, with only bits of hands and feet remaining (Figure 7). One can only speculate on the attributes this figure may have held. If Music, perhaps it was the bells or harp which she held. If Faith, it may have been the symbolic font.[29] Justice would have been shown with her balance.

In all, it seems entirely probable that these two columns represent both arts and virtues, with the trivium and Philosophy on one and theological virtues plus Justice on the other. Given the close relationship of the virtues and the arts in Medieval scholarship and art, such depictions at Cluny are well within the realm of possibility, especially when one considers again the educational role

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[26]Diemer, "*Prudentia*," 162. This image was too difficult to copy.

[27]Conant, "Capitals of Cluny," 282.

[28]Katzenellenbogen, *Allegories*, 55.

[29]Ibid, 56.

Figure 6: Geometry/Hope

Figure 7: Music/Justice/Faith

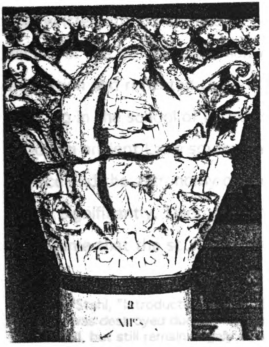

Figure 8: Arithmetic/Charity

Figure 9: Astronomy/Justice/Faith

of the monasteries at the time. As to the partial representation of each of these two themes, Conant says that it is common for the Four Rivers of Paradise, depicted on another capital, to represent the four cardinal virtues, and one might safely consider that the arts of the trivium would perhaps be more known to a monastic community thatn those of the quadrivium.

As we have already seen, the twelfth century was a time of great development, both in education and in architecture. This is the era of the construction of the great cathedrals, including Chartres and Laon. During this century, the seven arts were still a central facet of any school's curriculum, including that at Chartres, where they were codified by Thierry, who was master of the school, chancellor of the cathedral and is thought to have been the brother of Bernard, grammarian and chancellor of the church from 1114-1124. Thierry's treatise on the seven liberal arts, the *Heptateuch*, was written around the middle of the century and gives a clear record of the basic ideas which were involved in twelfth century education and reflected the proto-humanist attitudes which were budding in the school of Chartres.[30] Thierry's work was based solidly in ancient Latin sources, with a few ideas pared from ancient Greece and the astronomy of the Arabs.[31]

Significantly, Thierry was completeing his *Heptateuch* at the same time that the sculptural program of the Royal Portal was

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[30]Stahl, "Introduction," 68 n.68. The remaining original manuscript at Chartres was destroyed during World War II. Microfilm copies had been made and distributed, but still remain largely inaccessible.

[31]Favier, *Chartres*, 39.

conceived and begun. It is possible that Thierry even suggested the placement of the liberal arts on the portal.[32] Thierry's curriculum focused closely on the liberal arts and the works of the ancient giants of philosophy and education. He felt that the new learning of the twelfth century was nothing without the support of the ancient scholars--the "dwarfs on the shoulders of giants" philosophy mentioned in the introduction. Thierry used Plato's *Timaeus* to demonstrate how the quest for secular knowledge could be incorporated into a religious education. In his interpretation, the fact that God ordered the cosmos created a reason to understand it. Therefore, the search for knowledge and understanding of the world, which is the work of God, is done in the service of God.[33] Since the seven arts were seen as the means by which mankind could gain knowledge of the world, and thereby knowledge of God, it does seem logical to suggest the placement of the arts and their classical representatives on the Royal Portal, especially in light of Katzenellenbogen's Divine Wisdom argument, which will be discussed later.

The seven liberal arts at Chartres Cathedral are placed on the archivolts of the southern portal of the west facade (Figures 10,11). This entire program, including the decoration of all three western portals, is commonly known as the Royal Portal and includes scenes of the Ascension of Christ, the Second Coming and the Incarnation. These

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[32]Adolf Katzenellenbogen, *The Sculptural Probrams of Chartres Cathedral* (New York: W.W. Norton & Company, 1959), 18-19.

[33]Klibansky, "School of Chartres," 7.

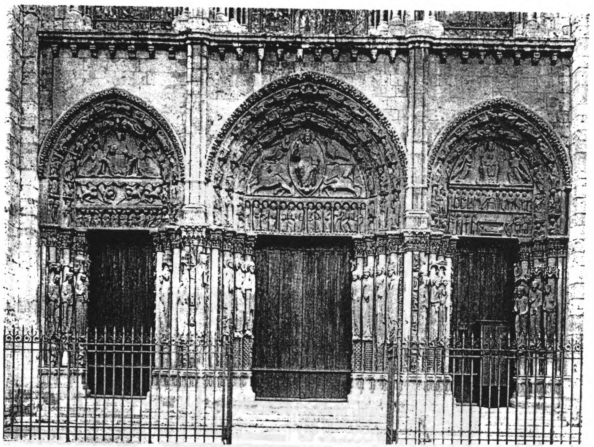

Figure 10: Chartres Cathedral, Royal Portal

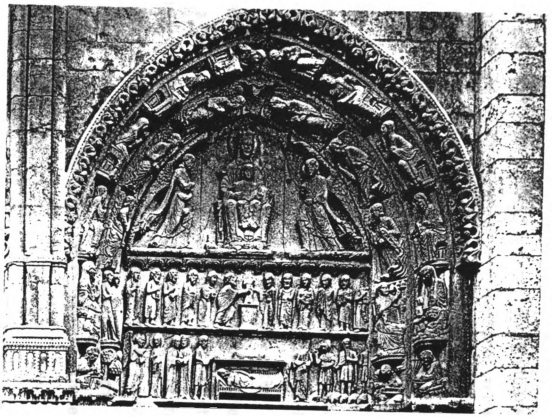

Figure 11: Royal Portal, South Entry

three themes work together on the west facade to show the lineage of Christ and His life from infancy to His rise to glory.[34] There is no Last Judgment, a scene commonly found on the west facade of a cathedral, and it seems that the program at Chartres is designed to inspire confidence in Christ and eternal life, rather than fear of judgment.[35] The west facade is also a part of the sculptural and decorative program which covers the rest of the interior and exterior of the church. The programs of the north and south transept portals include the Marian cycle of the north transept and, on the south transept, scenes of the Church and the Last Judgment. In all, these sculptural programs serve to glorify both Christ and the Virgin Mary, to whom the cathedral is dedicated.

The west facade itself remains from a cathedral begun by Bishop Fulbert after a fire of A.D. 1020. The towers of the facade were constructed after another fire of 1134. The sculpture of the Royal Portal was installed with this construction and this entire westwork was incorporated into yet a third reconstruction of the church after a fire in 1194 destroyed the choir and nave. The church was finally dedicated by King Louis in 1260. The archivolts of the south doorway of the Royal Portal frame the scenes of the Nativity and Presentation in the Temple, which are on the lintel, and the enthroned Virgin and Child on the tympanum (Figure 11). These are

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[34]Wilhelm Vöge, "From *The Beginnings of the Monumental Style in the Middle Ages*," in *Chartres Cathedral*, ed. Robert Branner (New York: W.W. Norton & Company Inc.,1969), 126-127.

[35]Alan Priest, "The Masters of the West Facade of Chartres," in *Chartres Cathedral*, ed. Robert Branner (New York: W.W. Norton & Company Inc., 1969), 150.

scenes of the incarnation of Christ, who is enthroned on the typanum as godhead incarnate.

The liberal arts are placed in a roughly circular arrangement. Six arts and their representatives rest in the outer archivolt, with Music and her master on the right end of the inner archivolt. The remaining space on the archivolt is occupied by six angels and two signs of the zodiac, Gemini and Pisces.[36] Each art is represented by an author whose writings contributed to that art. These figures are found beneath the representation of each art and are shown in the act of writing. The series begins on the bottom right end of the outer archivolt with Grammar and Priscian and moves clockwise across the portal to Dialectic and Aristotle and then continues up one side of the tympanum and down the other in this order: Rhetoric and Cicero, Geometry and Euclid, Arithmetic and Boethius, Astronomy and Ptolemy and finally, Music and Pythagoras. The representatives of all the arts except Music are identified according to the *Heptateuch* of Thierry, but Music's delegate is identified by the instruments she holds, which are those which tradition said allowed Pythagoras to develop his system of intervals. The specific sequence of the arts differs slightly from that in Thierry's *Heptateuch*, but corresponds exactly to the order ascribed to by Martianus Capella.[37]

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[36]Vöge says that this is an intentional linkage of the north and south portals. Vöge, "Monumental Style," 127.

[37]Katzenellenbogen, *Sculptural Programs*, 20-21. This arrangement places Geometry and Arithmetic at the apex of the arch. According to Katzenellenbogen, Thierry used these two arts to explain the equality of Chirst and God.

Grammar is seated with two small boys figeting at her feet (Figure 12). All three of these figures, and the rest of those related to the arts, wear classical robes. Grammar holds a sheaf of plant stems, bound together, which may be birch rods, a symbol of both purification and punishment which she probably used to keep her young charges in line and as an inducement to correct pronunciation. Dialectic is characterized by an interpretation of the symbols she carried in Capella's work, but in opposite hands (Figure 13). Her left hand holds a flower and the right a dragonlike beast which some have identified as a scorpion.[38] Rhetoric is not armed, as seen at Cluny, but clothed in a beautifully pleated robe. She is shown speaking, in the act of her art, with one hand raised in an oratorical gesture (Figure 14).

Following this group is the quadrivium, beginning with Geometry, to the left of the point of the archivolt (Figure 15). She sits, tracing, figures on a tablet. Arithmetic, facing Geometry, has lost her attribute (Figure 16). She may have been shown using an abacus or counting on her fingers in the universal symbol of simple addition, as she does so well in Capella.[39] Astronomy at Chartres is not the glowing, winged maiden of Capella's story (Figure 17). Instead, she is simply seated with her head tilted back. One hand is raised as if holding something to her eye, such as her sextant. The angle of her gaze is such that, if she were holding her navigational tool, it would be aiming directly at the enthroned Madonna and Child.

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[38]Mâle, *Religious Art: Thirteenth Century*, 85.

[39]See p.38 above.

Figure 12: Grammar

It is possible that this figure represents the search of mankind for Divine Wisdom as discussed below. Finally, Music sits beside Grammar (Figure 18). She is playing a set of bells, which have both symbolic and biblical meaning. Bells were used as a call to worship and, in their Christian significance as the voice of Christ, as a means of driving away demons or plagues. They also symbolize joy and insistent preaching. The Old Testament King David, known for his musical skill, was long considered to be a personification or incarnation of music and is often shown striking a set of bells with hammers, much as Music is here.[40] Music also holds a type of lap harp, which is symbolic of the celestial realms and heavenly bliss. It is the instrument of angels and typifies the praise of God. In this case it may also symbolize man's praise of Divine Wisdom through the growth of human wisdom. Psalms 33:2-3 directs mankind to praise God with music, specifically with the harp.

> Give thanks to the Lord with harps, sing to him with stringed instruments. Sing a new song to him, play the harp with skill, and shout for joy!

Musicians played a very special role in the Medieval connection between heaven and earth. According to Pseudo-Dionysius, the musician is the means by which the hymns of heaven are transmitted to earth and made audible and understandable to mankind.[41]

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[40]Male, *Religious Art: Thirteenth Century*, 88.

[41]Theodore C. Karp, "Music," in *The Seven Liberal Arts in the Middle Ages*, ed. David L. Wagner (Bloomington: Indiana University Press, 1983), 176.

Figure 13: Dialectic

Figure 14: Rhetoric

Figure 15: Geometry

Figure 16: Arithmetic

Figure 17: Astronomy

Figure 18: Music

The depictions of the liberal arts on the west portal of Chartres cathedral may seem somewhat out of place, located as they are on a major Christian monument. However, when one understands the close relationship of the cathedral and the cathedral school, the reasoning behind this positioning becomes clear. As discussed above, Thierry of Chartres was chancellor of the cathedral in the mid-twelfth century. This put him in charge of both the cathedral itself and the cathedral school, and we have already explored that relationship. This makes it clear that the issues of education and secular learning raised by the liberal arts do belong on the facade of Chartres. The central equation here is the relationship of Divine Wisdom to human wisdom--the relationship of God to man. Christ, at Chartres, is seen as the wisdom of the Lord, a characterization rooted in the writings of Boethius, on which Thierry had written commentaries. Boethius, like Thierry, advocated the study of the liberal arts as the means to gain wisdom--both the human and the Divine.[42] Thus, the seven arts, enthroned as they are around the image of Christ, are clear representations of man's search for divinity and the wisdom of the Lord. The fact that some of the arts, particularly Astronomy, gaze toward Christ further emphasizes the fact that they are the path by which wisdom can be reached. In the case of Astronomy, this is even more clear as she is the navigator who helps mankind find its way, both on the earth and in heaven.

At Laon Cathedral, the seven liberal arts appear with some additions. They are still found on the west facade, but are

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[42]Katzenellenbogen, *Sculptural Programs*, 16-17.

somewhat removed from the main portals and, therefore, from the casual view of those entering the church. From the ninth century, Laon had a cathedral school which was to become one of the foremost in Europe. Laon was notable for its large contingent of Irish scholars, including John and Martin Scotus. These scholars were clearly familiar with the standard texts used in instruction, including the work of Martianus Capella.[43]

The liberal arts of Laon are placed in the second story of the facade, this time in archivolts around the lancet window to the north of the central rose window (Figure 20). In this situation, they are placed without their accompanying masters. Instead, the seven arts are joined by three new figures, one of whom has been seen before in manuscript illuminations. The sequence begins with a personification of either Philosophy or Theology, and continues up the left side of the arch with Grammar, Dialectic, Rhetoric and Arithmetic. Then, beginning at the bottom of the right side, Medicine, a figure identified as either Painting or Architecture, Geometry, Astronomy and Music.

From where do these additions come? As previously stated, the ultimate goal of the study of the arts was either philosophy or theology. Katzenellenbogen identifies this first figure as Philosophy with theology, the highest part of that art, symbolized by the clouds surrounding her head.[44] Since Philosophy has long been seen as the ultimate goal of those studying the arts, the inclusion of Philosophy

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[43]John J. Contreni, *The School of Laon from 850-930: Its Manuscripts and Masters* (Ph.D. dissertation, Michigan State University, 1971), 138-143.

[44]Katzenellenbogen, "Representation," 43-44.

in the cycle of the liberal arts is a logical development of the theme which is seen not only at Laon, but also at Deols and Sens. Medicine is traditionally included among the seven mechanical arts, which only become popular artistic subjects in the thirteenth and fourteenth centuries. These arts are addressed by Hugh of St. Victor in his *Didascalicon* of c. 1130.[45] In addition, to Medicine, these arts include Architecture, Metallurgy, Hunting, Agriculture, Commerce and Theatrics. Significantly, the mechanical arts are generally represented by male personifications, though at Laon Medicine is female.[46] Medicine is probably included in this cycle of the arts in part because of the importance of medical studies at the school of Laon, and also as one of the two bridesmaids at Capella's marriage who are not allowed to present their arts.[47] The third addition to the cycle is a male figure who can be identified as Architecture in light of the appearance of Medicine. Like Medicine, Architecture is a bridesmaid in Capella and is also a mechanical art.

Here we find the appearance of a male art in a usually female grouping. Male personifications of the liberal arts appear also at the cathedral of Sens, where there are two male figures included in the cycle, and seem to be at least acceptable, if not commonplace, by the end of the thirteenth century when the facade at Laon was being

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[45]Hugh of St. Victor, *Didascalicon; A Medieval Guide to the Arts*, trans. Jerome Taylor (New York: Columbia University Press, 1961),74-79.

[46]Sue A. Levine, *The Northern Foreportal Column Figures of Chartres Cathedral* (Frankfurt: Verlag Peter Lang, 1984), 132.

[47]Contreni, *School of Laon*, 8.

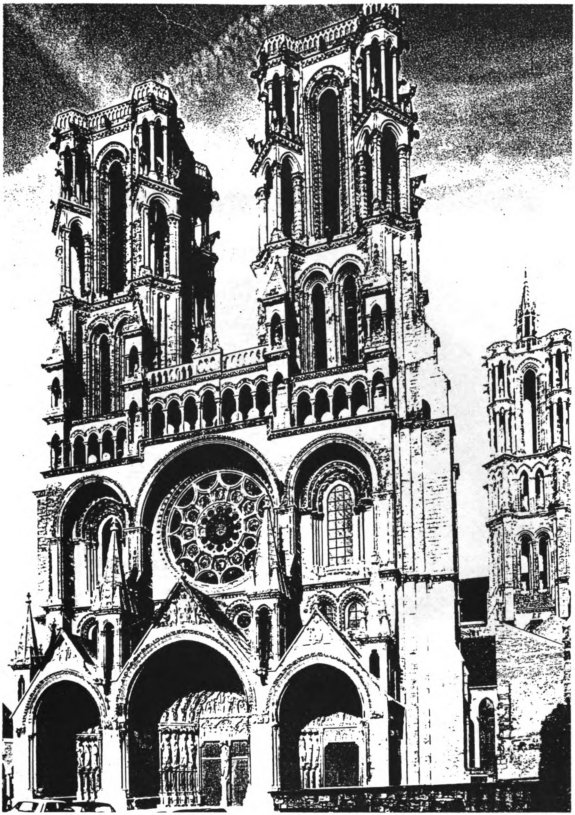

Figure 19: Laon Cathedral, West Facade

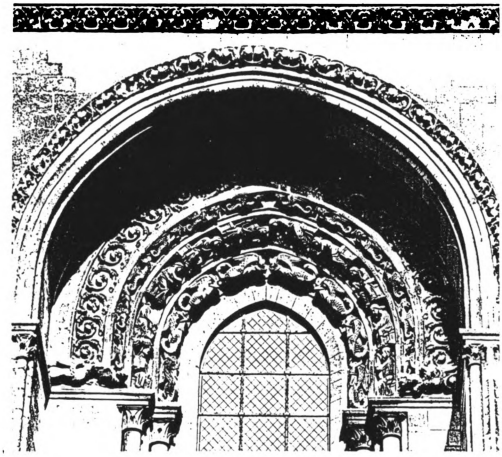

Figure 20: Laon Cathedral, Liberal Arts Window

completed.[48] Male representations of the arts were known in twelfth century manuscripts as well, and it may be that these figures are a more literal interpretation of the written word and my well have served as a model for the sculpted forms, particularly with regard to the arts of Medicine and Architecture, which were not fully described by Capella.[49]

Eventually, male arts become the norm, as at the fourteenth-century relief on the cathedral at Clermont-Ferrand, and the seven mechanical arts put forth by Hugh of St. Victor are generally represented as male. Perhaps these twelfth century men are echoes of manuscripts. It is also possible that they are in some way a reflection of society. After all, it was the men of the time who were the doctors and astronomers and architects, and this may be reflected in the art of the time.

The attributes of the arts at Laon have some similarities and some differences to the iconographic type I have thus far discussed. Grammar has lost her head, but the child at her feet remains (Figure 22). Instead of holding a bundle of switches, she points to a passage in the book the child holds, while he gazes attentively up at her. Dialectic gestures with both hands and has a large snake coiled about her body, a clear reference to the description in Capella (Figure 23). Rhetoric makes an oratorical gesture with one hand (Figure24). Arithmetic, at the point of the arch, holds three small balls in each hand (Figure 29). These are probably symbolic of the

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[48]Evans, "Allegorical Women, " 314.

[49]Ibid., 317.

beads or stones used in old abaci and counting boards.[50] Geometry, on the opposite side of the arch, makes use of a compass (Figure 26). Astronomy holds out an image of the world divided by a jagged horizontal line (Figure 27). This does not appear to be a globe, but rather a disk, and so could be the astrolabe commonly used in Medieval times for navigation. Finally, Music is shown playing a set of five bells (Figure 28). Medicine, who anchors the opposite end of the archivolt, holds up a jug or vase of some type (Figure 30). This is apparently intended to be a glass vessel used by Asclepius, the Greek god of healing, to study bodily fluids.[51] Architecture, the only male figure in this group, is shown drawing on a five-sided tablet with a stylus (Figure 25).[52]

Philosophy is represented by a very stern female figure who holds an open book in her right hand (Figure 21). A ladder with nine rungs rests against her chest. The iconography of this figure is taken almost directly from Boethius' *Consolation of Philosophy*, where Boethius is visited by a majestic woman who could "touch with her crown the very heavens" and had the symbols Π and Θ woven into her gown with the rungs marked between them.[53] The rungs

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[50]Auguste Bouxin, *La Cathedrale Notre Dame de Laon* (Laon: A. Cortilliot, 1890), 100-101.

[51]Bouxin, *Notre Dame de Laon*, 101. "...élevé à contre-lumière le fameux urinal de verre se souvent employé et questionné par les Esculape des vieux âges."

[52]The alternate identification of this figure is as a personification of Painting. This does not fit since Painting is neither a mechanical art, nor is it included in Capella. Architecture, however is more logical, especially during the Gothic period, at which time architects were responsible for the construction of the great cathedrals.

[53]Boethius, *The Consolation of Philosophy*, ed. W.V. Cooper (Chicago: Regnery Gateway, 1981), 4. Π denotes Practical philosophy and Θ Theoretical philosophy.

Figure 21: Philosophy

Figure 22: Grammar

Figure 23: Dialectic

Figure 24: Rhetoric

Figure 25: Architecture

Figure 26: Geometry

Figure 27: Astronomy

Figure 28: Music

Figure 29: Arithmetic

Figure 30: Medicine

would allow one to ascend from the lower levels of philosophy up to the higher levels and, ultimately, to the heights of theology. Presumably, one could ascend through the study of the liberal arts. Significantly, at Laon, the ladder of Philosophy has nine rungs, corresponding to the number of arts found on the archivolt as well as the original number of arts in the work of Martianus Capella. The number nine has further symbolism in the works of Pseudo-Dionysius the Areopagite, the sixth century author of *The Celestial Hierarchy*, a work that was well known in the Middle Ages. In this work, Pseudo-Dionysius specifically considers the problem of angels, their nature and arrangement. It was undoubtedly a major influence on Medieval theology.[54]

Pseudo-Dionysius breaks the angels into three groups of three, for a total of nine, corresponding to the number of arts and rungs of Philosophy's ladder at Laon. The nine ranks of angels are arranged in ascending order from angels to seraphim. In the Middle Ages, Pseudo-Dionysius's system of angelic arrangement had a significant impact on the study of angels by authors from Pope Gregory the Great to Dante, and even affected Abbot Suger's design for his abbey church at St. Denis.[55] Essentially, the nine ascending ranks of angels in *The Celestial Hierarchy* rise toward God, the ultimate goal of religion, much as the seven, or nine, liberal arts allow man to rise toward the study of Philosophy.

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[54]Paul Rorem, *Pseudo-Dionysius: A Commentary on the Texts and an Introduction to Their Influence* (Oxford: Oxford University Press, 1993), 73.

[55]Ibid, 74, 81-83.

There is a second cycle of arts at Laon which exists in the glass of the rose window of the north transept, which dates to the early thirteenth century (Figure 31). Here, Philosophy is enthroned in the central roundel, with eight others surrounding her in separate small windows. These are Rhetoric, Grammar, Dialectic, Astronomy, Arithmetic, Medicine, Geometry and Music. Architecture is missing. This window was restored in 1856, at which time Philosophy, Rhetoric, Medicine and Music had been lost. It is interesting to note that the iconography of the arts here is extremely similar to that seen on the church facade. Medicine holds her jug and Arithmetic her counting balls. Philosophy is enthroned with her nine-runged ladder, as on the facade (Figure 32).

Depictions of the liberal arts do not appear only in French sculpture. At Freiburg Cathedral in Germany, it has been said that a cycle of the seven arts appears in the enclosed porch of the west facade. Instead of the standard tripartite Gothic facade, the church at Freiburg has a single western portal capped by a tall tracery spire (Figure 33). The porch is deep and almost fully enclosed, with only a single entry (Figure 34). This portion of the church dates from 1260 to 1340, and it is clear from the sculptural style that the figures enclosed within it are of late Gothic manufacture.

Enclosed within the porch are thirty-six sculpted figures approximately two feet in height and mounted above a blind arcade some six feet above the floor. They have been identified by Otto Schmitt in his 1926 work *Gotischen Skulpturen des Freiburger Münsters*. The series of figures includes vices, angels and biblical figures such as Zachariah, Abraham and Mary Magdalen. Also

Figure 31: Laon Cathedral, North Transept, Rose Window

Figure 32: Philosophy

depicted are the wise and foolish virgins--six wise and five foolish--and the Virgin and Child stand on the trumeau of the doorway into the nave. Along the south wall supposedly stand the seven liberal arts (Figure 35).

Viollet-le-Duc says that the names of the figures are painted on the pedestals on which they stand, but at the time of Schmitt's photographs, no such inscriptions appear to be in evidence.[56] Schmitt lists the figures in the following order: Grammar, Rhetoric, Arithmetic, Geometry, Music, Dialectic, Astronomy.[57] Unfortunately, he gives no evidence for his attribution. It is clear that this order deviates distinctly from that previously seen. However, when one examines the attributes of these figures, it becomes clear that they are not, after all, a complete cycle of the liberal arts.

The attributes of Grammar, Rhetoric, Geometry and Music follow the standard pattern, as we have seen above. These figures all carry a clear indication of their identity, such as Music's bell (Figure 37). The figure Schmitt calls Arithmetic, however, is something of a mystery. Viollet-le-Duc calls this figure Rhetoric, and says she holds a bundle of flowers,which we have not seen Rhetoric do before (Figure 36).[58] A possible interpretation for this figure will emerge shortly. Dialectic, according to Schmitt, was at one time misidentified as the personification of Painting. She does

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[56]Eugene-Emmanuel Viollet-le-Duc, *Dictionnaire Raisonné de L'Architecture Francaise du XIe au XVIe Siecle*, vol. 2 (Paris: A. Morel, 1875-82), 9.

[57]Otto Schmitt, *Gotische Skulpturen des Freiburger Münsters* (Frankfurt am Main: Frankfurter verlags-anstalt, 1926), 2: XIII, n.117,118. All references to Schmitt's identifications are from this section.

[58]Viollet-le-Duc, *Dictionnaire*, 10.

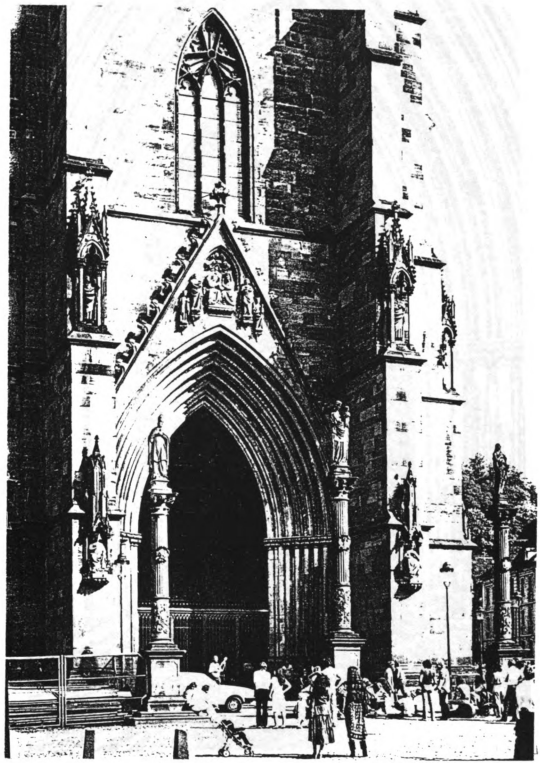

Figure 33: Freiburg Cathedral, West Facade

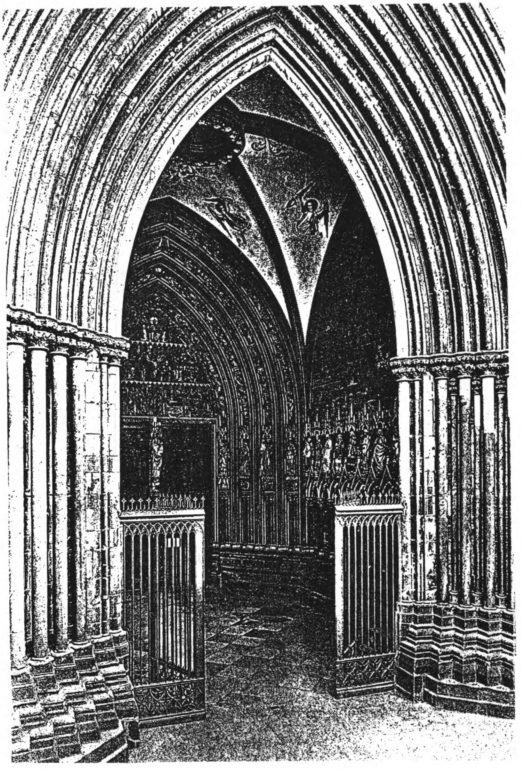

Figure 34: Freiburg Cathedral, West Portal

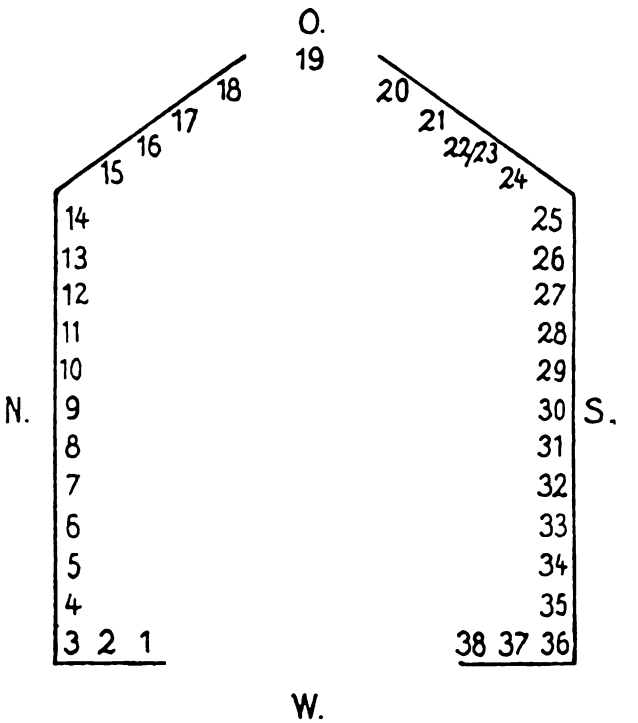

Figure 35: Portal Sculpture Arrangement

hold what appears to be a bunch of brushes and a small palette (Figure 37). It is also possible that this figure represents Astronomy holding a sextant, as would be consistent with the proposed theme of the arts and the well-known iconography of the same. However, close examination of the image reinforces the theory that she does, indeed, carry a palette and brushes and that she is, then, Painting. Schmitt's title of Astronomy for the final figure in the series is almost laughable. This figure quite obviously holds the specimen jar of Medicine (Figure 37)!

In light of the re-identification of Schmitt's Dialectic and Astronomy as Painting and Medicine, we may now look back at Schmitt's Arithmetic. If this figure does hold a bundle of flowers as Viollet-le-Duc says, is it possible that she is a personification of Agriculture, one of the seven mechanical arts? This would create an integrated grouping of four liberal arts and three mechanical arts. Given the mid- to late-thirteenth century date of these figures, the popularity of Hugh of St. Victor's *Didascalicon* and the growing popularity of the seven mechanical arts as an artistic theme, it seems entirely logical to suggest that this group does not represent the seven liberal arts, as reported by both Schmitt and Viollet-le-Duc. Rather, it is a grouping of figures representing both liberal and mechanical arts which, in turn, reflects the changing sentiments and interests of the late Medieval era.

Representations of the liberal arts appear in Italy as well. Prior to the eleventh century, these images are limited, but there is a mosaic pavement at Ivrea which dates to that century and shows

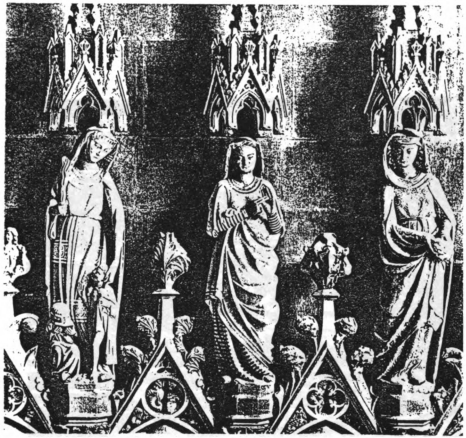

Figure 36: Grammar, Rhetoric, Agriculture

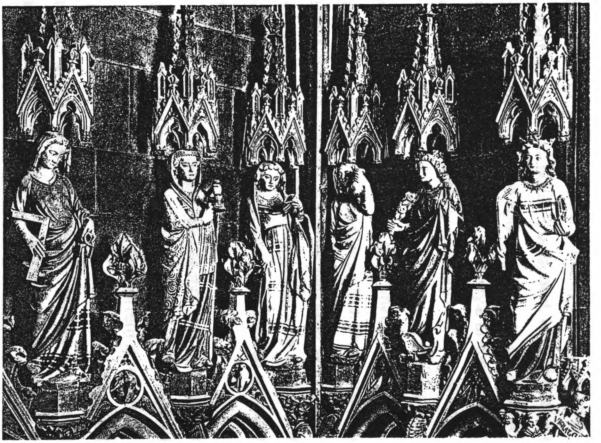

Figure 37: Geometry, Music, Painting, Medicine

Philosophy and the seven arts.[59] The next significant appearance of the seven arts in Italy occurs in Siena, on the pulpit carved for the cathedral there by Nicola Pisano (Figure 38).

Nicola Pisano agreed to a contract for the construction of a pulpit with the authorities of the Duomo in 1265. The Sienese wished their pulpit to rival that of the baptistry in Pisa, and their wish was granted. The Siena pulpit is octagonal, while that at Pisa is hexagonal. Both have sculpted figures over much of their surface, but the Siena work represents a shift in the style of the artist. While the figures at Pisa are strongly enclosed in frames divided by grouped colonnettes and there are relatively few of them, those at Siena are packed into their spaces in a somewhat friezelike arrangement. Also, at Siena, the elements which divide one panel from the next are not columns, but larger figures of Christ, the Virgin and angels. Other minor changes include inlay work and more elaborate decorative elements, such as the birds which appear in the foliage of the column capitals.

On the Pisa baptistry pulpit, the columns rest alternately on plain pedestals and the backs of lions. At Siena, where there are necessarily more supporting elements, this pattern is repeated, but with lions and lionesses. The central column at Pisa has fantastic animal and human figures around its base, while the central support at Siena is decorated by the liberal arts. As stated in the Introduction, this placement of the arts is especially significant, since the pulpit is where the wisdom of God is disseminated vocally

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[59]Pietro Toesca, *Storia Dell'Arte Italiana*, vol. 1 (Torino: Unione Tipografico-Editrice Torinese, 1927), 450-451.

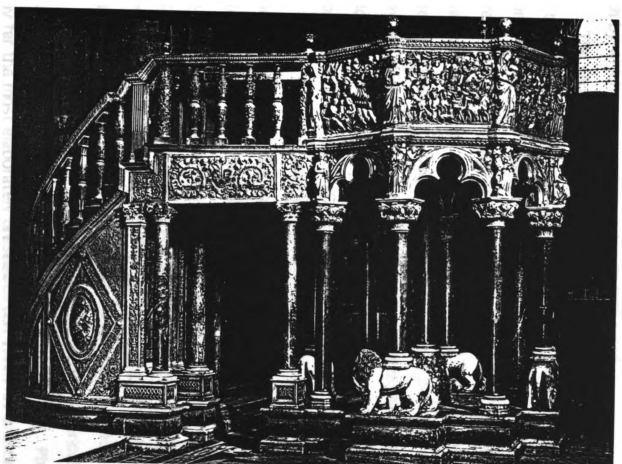

Figure 38: Pulpit, Siena Cathedral

to the people through the sermon of the priest. The placement of the seven arts on a supporting element for this dissemination indicates the interests of educated Italians in the thirteenth century. We see here a pattern here similar to that which occurred at Chartres. The seven liberal arts have become support for the word of God and the path by which one gains knowledge of that word.

The sequence at Siena includes a figure of Philsophy as well as the seven arts, and each art is distinguished by her attribute. The figures are carved in high relief in a circular arrangement, as if they were seated on a bench around the trunk of a tree. They are not separated by framing elements, but rather they seem to flow together through the overlap of their robes into a seamless whole. They are placed in the following order, beginning to the right of Philosophy: Rhetoric, Dialectic, Grammar, Astronomy, Music, Geometry and Arithmetic (Figures 39-41).

Once again, the arts are represented by attributes which should by now be familiar to the reader. Grammar teaches a child, Astronomy gazes at the sky, Arithmetic counts on her fingers, Music holds a lyre and Geometry a tablet. There are, however, some discrepancies from the apparently standard iconography. The figure commonly identified as Dialectic is an aged woman with a wrinkled, sagging face. In Capella, it is Grammar who is characterized as an old woman.[60] Rhetoric, instead of making her usual oratorical gesture, points to a passage in an open book on her knee. Philosophy is by far the most elaborately dressed of the group, as is fitting,

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[60]See p. 35 above.

Figure 39: Geometry, Philosophy, Arithmetic

Figure 40: Astronomy, Grammar, Dialectic

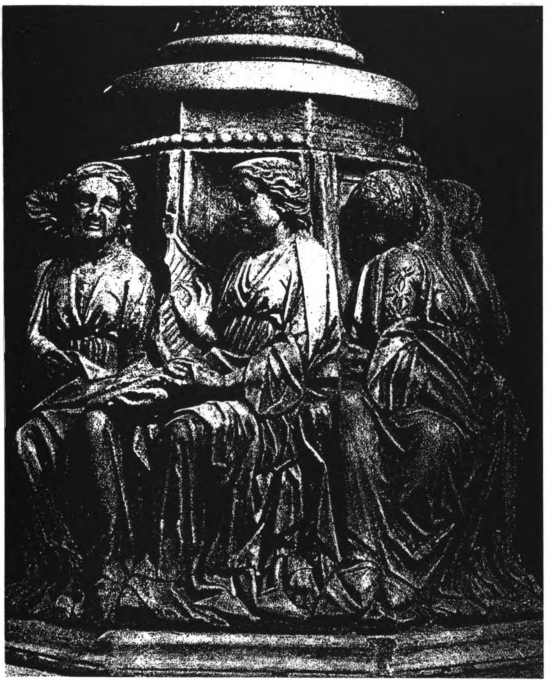

Figure 41: Rhetoric, Music, Astronomy

since she is their leader and the ultimate goal of education. Her gown is covered with detailed patterns, embroidery, and fringe. She gazes directly out at the viewer and holds a curved horn with flames coming out of its top. This probably symbolizes the illuminating nature of Philosophy and the knowledge gained through study of the liberal arts, which serves to aid in illuminating the mysteries of God for mankind. Further, the horn itself is symbolic of intelligence, salvation and divine strength. In the Hebrew tradition, a flame-shaped horn appears at the four corners of the Altar of Burnt Offerings which symbolizes the light and might of God.[61] Christ is considered the light of the world that shines on all mankind, as knowledge serves to illuminate the world. Finally, the Bible verses of John 1:4-5, 9 comments on light and darkness and the illuminating power of God.

> The Word is the source of life, life brings light to mankind. The light shines in the darkness, and the darkness has never put it out.

In short, God's Word lights the way of man in the darkness of Satan, much as the liberal arts light man's way through the earthly world and toward the Divine Wisdom of God.

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[61]Gertrude Jobes, *Dictionary of Mythology, Folklore and Symbols* (New York: The Scarecrow Press, Inc., 1962), 787-8.

CONCLUSION

So, in conclusion, it is clear that the seven liberal arts are a significant part of the history of education. Though they were not always grouped together or considered as a group by ancient scholars, they were often, indeed almost always, included individually in scholastic curricula from Plato until the time of Charlemagne. From the time of the emergence of the Christian church to the time of Charlemagne, the position of the liberal arts in the eyes of religious leaders was generally rather tenuous, due to the connection of the arts with pagan educators and philosophers of the past.

Under Charles the Great, the arts were elevated to a new status in his Palace School, where Charlemagne himself studied. Charlemagne also developed a system of schools which made education, and therefore the liberal arts, available to the public. This system was to last until the tenth century and its close ties to the church allowed the liberal arts to become more accepted, especially since they could correspond to the biblical seven pillars of the house of Wisdom.

Finally, we see this union of secular learning and religious devotion come to a great bloom in the cathedral schools of the twelfth century, specifically that of Chartres. Scholars of the

twelfth century, such as Thierry of Chartres and Hugh of St. Victor, were able to use the knowledge returning from Muslim Spain to further justify the study of the liberal arts by both religious and secular figures. In their eyes, the liberal arts were the path which led to the study and understanding of Theology and the word of God. It became acceptable, and even necessary, for these men to study the world around them, since the world was the work of God, and understanding of God's works could lead to understanding of God.

At Chartres cathedral, we find a remarkable combination of the two previously diverging paths of religion and knowledge. Here, the liberal arts, joined by pagan scholars are placed on the archivolts of one entry in the Royal Portal on the west facade - the heart of secular learning included in what is perhaps the most famous cycle of Christian iconography in the world. This placement represents the nature of the school of Chartres and is the seed of the great humanist monement which would flourish there in the Renaissance of the fourteenth and fifteenth centuries.

This paper has investigated the origins of the liberal arts curriculum and the effect that curriculum had on the arts of the Medieval world, specifically the art of sculpture. Depictions of the arts were, however, not restricted to sculpture, but can be found in manuscripts, mosaics, frescoes and decorative works such as candlesticks and enameled boxes. Neither are the arts confined to France. They are found throughout Europe, in Germany, Italy and, significantly, on the painted ceiling of Peterborough Cathedral in England, which this paper did not investigate. The arts emerge in sculpture in the eleventh century in France at the monastery church

of Cluny and are consistent members of the artistic imagery of Europe from that time into the Renaissance, when they become especially popular in Italy and are depicted on the campanile of Florence Cathedral.

The iconography of the arts also goes through a developmental stage in the Middle Ages. It can be argued that the origins of this iconography are found in the fifth century work of Martianus Capella, the African scholar. As seen in most Medieval sculpture, the iconography of the liberal arts is as follows. Grammar is shown teaching at least one child. Dialectic carries a flower and a snake. Rhetoric gestures in the fashion of an orator. Geometry has a compass or draws figures on a tablet. Arithmetic holds some counting machinery or counts on her fingers. Astronomy gazes at the sky through an astrolabe or sextant. Music carries a lyre or plays bells. Philosophy, who is seen as the leader of the arts, as well as their ultimate goal, holds a book and scepter and has a ladder propped against her. Of course, there are some departures from these attributes, but for the most part, Medieval sculptors seem to have followed a standard plan for making the identities of the arts known to their viewers.

In the thirteenth century, another set of arts becomes popular. These are the seven mechanical arts, including Architecture and Medicine. Sometimes, even in the twelfth century, mechanical arts appear in cycles of liberal arts, as at Laon Cathedral. However, these confluences can be explained through the appearance of Architecture and Medicine in the allegory of Martianus Capella. At Freiburg Cathedral, the mechanical arts take a more prominent

position, usurping the appearance of three of the seven liberal arts and reducing their membership to Grammar, Rhetoric, Geometry and Music.

Despite the appearance of the second group of arts, the seven liberal arts remain popular, and their iconography remains standard throughout the Middle Ages and into the Renaissance. They were, and remain today, the basis of education and that on which higher knowledge is based. In the final words of Henri d'Andeli,

For thirty years this will continue,
Until a new generation will arise,
Who will go back to Grammar,
Just as it was the fashion
When Henri D'Andeli was born,
Who gives it us as his opinion
That one should destroy the glib student
Who cannot construe his lesson;
For in every science that master is an apprentice
Who has not mastered his parts of speech.[1]

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[1]Paetow, *Seven Arts*, 60.

APPENDICES

APPENDIX ONE

In the late 1120's, Hugh of St. Victor composed his *Didascalicon* as an orientation to the world of education for the students of the school of the Abbey of St. Victor in Paris.[1] This work emerged at a time in the twelfth century when education was shifting from the rural monasteries to the urban schools of the cathedrals and set out to enforce the necessity of the entire complex of the traditional arts. This was in direct contrast to the emerging educational specializations such as law and medicine and the other educational philosophies such as the humanism of John of Salisbury or the Platonism of the Chartrian school. Hugh advocated instead the pursuit of the arts as a means to overcome the weaknesses and hardships of mortal life and to reunite mankind with the Divine Wisdom of God.[2]

In the *Didascalicon*, Hugh addresses the four branches of knowledge: theoretical, practical, mechanical and logical and specifically comments on the seven liberal arts and seven mechanical arts.[3] Unlike Capella's allegorical account of the fifth

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[1] Jerome Taylor, *The Didascalicon of Hugh of St. Victor* (New York: Columbia University Press, 1961), 3.

[2] Ibid, 4.

[3] Ibid, 60.

century, Hugh's work is a completely scholarly text which describes the nature of the various arts. For example, he lists the art of commerce as dealing with the purchase, sale and exchange of domestic and foreign goods.[4]

This development of an alternate cycle of arts and sciences does have an effect on the iconography of the later Middle Ages. For example, as discussed above, the cycle of the arts at Laon cathedral include Medicine, a mechanical art, and a male figure identified as Architecture. Architecture has a double significance in the Middle Ages as a mechianical art and the science by which the great cathedrals were constructed. Later, in the thirteenth and fourteenth centuries, the mechanical arts as represented by male figures are commonly seen in sculptural decorations. On the campanile of Florence cathedral, they are shown in a series of relief panels carved around the facade of the structure. Included in the series are not only the liberal and mechanical arts, but also groups of planets, virtues, holy sacraments and biblical scenes relating man's history from creation to the time of Noah and the Flood.[5]

In the thirteenth century, Vincent of Beauvais completed his own encyclopedic work, the *Speculum Doctrinale.* Like Hugh of St. Victor, Vincent of Beauvais addresses the restoration of man's divine nature after the Fall from Grace. This restoration is

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[4]Ibid, 76.

[5]Evans, "Allegorical Women," 314, 324.

accomplished through the study of the arts and sciences with the assistance of Reason.[6]

In contrast to the work of Hugh, Vincent's thirteenth century composition reflects not the order and organization of the twelfth century, but rather a new sense of searching which emergences in Vincent's time.[7] This is in response to the further emergence of study aids such as indices and marginal notes, which begin to develop in the face of the vast numbers of books which appeared during the previous century. Memory and recitation by rote were replaced by study of and lecture from written material.

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[6]Sue Levine, *The Northern Foreportal Column Figures of Chartres Cathedral* (Frankfurt am Main: Verlag Peter Lang, 1984), 121.

[7]E.R. Smits, "Vincent of Beauvais: a Note on the Background of the *Speculum*," in *Vincent of Beauvais and Alexander the Great*, ed. W.J. Aerts, E.R. Smits and J.B. Voorbij (Groningen: Egbert Forsten, 1986), 2.

APPENDIX TWO

In Jan van der Meulen's bibliography of Chartrian literature, there is mentioned several times a second cycle of the liberal arts at Chartres cathedral.[1] These figures supposedly exist on the socles of the northern foreportal and are not mentioned in any of the literature I have read in the course of researching this paper.

The second cycle of arts at Chartres is found on the socles of four of the monumental column figures of the western bay of the northern foreportal. These are a total of ten male figures separated by columns topped with trilobate arches. According to Sue Levine, these figures were identified as Arts and Sciences by Marcel Bulteau in 1850, an attribution to which scholars have adhered until the present day.[2] Five of the ten figures are identified by inscriptions.

The cycle begins on the eastern side of the bay and progresses inward to the portal and then continues out on the west side. The cycle begins with and elderly man presumed to be Adam paired with a young shepherd identified as Abel. On the next column are found Cain, Jubal and Tubalcain, all identified by inscriptions. Across the bay are a damaged figure holding a book and plants, which is

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[1]Meulen, Jan van der, *Chartres: Sources and Literary Interpretations: A Critical Bibliography* (Boston: G.K. Hall, 1989), 572.

[2]Levine, *Northern Foreportal*, 127.

presumed to be Medicine. The second figure holds a square and was originally identified as either Geometry or Architecture. The third holds a brush and palette and is therefore Painting. On the final column stand a bearded figure identified by inscription as Philosophy, and a figure with a dragon also identified by inscription as the art of Magic or Alchemy

Adam, Cain and Abel together represent Agriculture, one of the Seven Mechanical Arts of Hugh of St. Victor. Jubal, a descendant of Cain, plays a lyre, and Genesis 4:21 records him as the originator of music, so he can be read as a personification of the art of Music.[3] Tubalcain, a descendant of Jubal, is recorded in Genesis 4:22 as a maker of "all kinds of tools out of bronze and iron" and can therefore be seen as a personification of Metallurgy, another Mechanical Art. However, these attributions are somewhat doubtful for several reasons. Specifically, the combination of Adam, Cain and Abel as a personification of Agriculture is not fully understandable. After all, after Cain killed Abel, God told him, "If you try to grow crops, the soil will not produce anything...," thus making it difficult to see this figure in particular as a representative of Agriculture.[4] Also, these three figures are not contained on the same socle, and only Cain is identified by an inscription. It is more likely that the figures of this Eastern socle zone are not personifications of Arts and Sciences, but rather reflect a biblical geneology from the first man

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[3]Ibid., 128-31. All attributions are taken from this section of Levine's work, where she cites Marcel Bulteau.

[4]Genesis 4:12.

to the time of Noah. This is a geneology of the degradation of man that stems from the original fall from grace of Adam and Eve.[5]

On the Western socle zone, we find what are more likely to be a gathering of Arts and Sciences. A damaged figure closest to the doorway holds a book and various plants grow up and around his feet. This is probably a figure of Medicine, although the iconography here differs from that usually found.[6] Next, there is a male figure holding a set square, a tool for drafting. Based on the male gender, which was usually used in representations of the Mechanical Arts, this figure can be called Architecture. Painting is represented by a figure with a brush and palette, a fairly straightforward arrangement. On the final socle are two figures who are identified by inscriptions. First, there is a bearded male figure in a contemplative pose whose inscription names him as Philosophy, a figure usually represented as female.[7] Finally, at the outermost end of this zone is another male figure identified by inscription as "Majus"--either Magic or Alchemy. He holds a banner, which may have originally had a painted symbol or inscription, and stands with a winged dragon at his feet. The dragon is a standard alchemical

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[5]Levine, *Northern Foreportal*, 136, 141.

[6]See Chapter Four above, Laon Cathedral and Freiburg Cathedral. Leine claims that there is no standard for the depiction of Medicine in the Middle Ages, but we have seen differently. Levine, *Northern Foreportal*, 130.

[7]See Chapter Four above, Laon Cathedral.

symbol of transmutation, and so this figure may be called Alchemy rather than Magic.[8]

These figures form a combined set of Arts and Sciences, which fits in with the philosophies of both Hugh of St. Victor and Vincent of Beauvais, who connected the arts, both Mechanical and Liberal, with the salvation of mankind. In short, these are the means by which mankind is restored to the grace of God. So, we do not have a second cycle of Liberal arts here, but rather a set of figures which personify both the fall and rise of Mankind, based probably on the work of Vincent of Beauvais.[9]

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[8]See Levine, *Northern Foreportal*, 132-4 for an explanation of the inclusion of Painting and Alcnemy in this cycle. Also, see pp. 141-45 for a possible dating of these figures to the fourteenth century.

[9]Ibid., 124-4.

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