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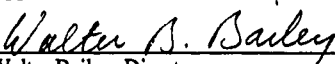
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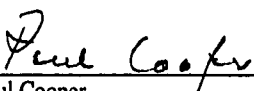
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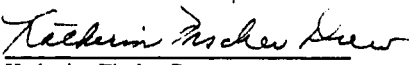
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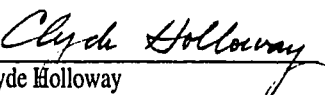
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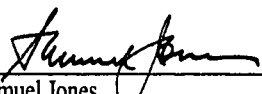
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## **ABSTRACT**

*Organa Doctorum: Gerbert of Aurillac, Organbuilder?*

by

Anna Marie Flusche

Gerbert of Aurillac lived at the end of the millenium preceding our own. He was born an obscure peasant. But by virtue of his excellent education, political acumen and good fortune, he ascended to the highest post in Christendom, becoming Pope Sylvester II at the end of the tenth century. His meteoric rise in power helped bring about the genesis of "the legend of Gerbert" after his death.

A renowned teacher, Gerbert was accomplished in all the liberal arts and distinguished himself in nearly every field of human endeavor.

It was in the context of his role as a teacher and a mathematician that he acquired a reputation as an organbuilder. Among his contributions in that area is a treatise on pipe measurements which is attributed to him in a 12th-century manuscript.

Gerbert's reputation as an organbuilder has rested mainly, however, not on any actual deeds he may have accomplished, but on the testimony of William of Malmesbury, a 12th-century English historian. William completed the legend surrounding Gerbert's life, which began in the eleventh century. In the course of his narrative, William credited Gerbert with having built a hydraulic organ in the cathedral of Reims. William's account of the organ is examined in its context, perhaps for the first time. This study reveals that William's account must be dismissed as pure fancy.

A feature unique to this study is the use of sources from a variety of disciplines. In order not to present a one-dimensional (and therefore false) appraisal of

Gerbert as an organbuilder, we have examined him in his various roles as letter-writer, mathematician, scientist, politician and churchman. Only when we know Gerbert in the context of his life and times can we make a valid assessment of his contribution to the art and craft of organbuilding.

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## ABBREVIATIONS

### USED IN THE NOTES AND IN THE BIBLIOGRAPHY

<u>Gerberti Symposium</u>	Atti del <u>Gerberti Symposium</u> . See entry under <u>Gerberto</u> in bibliography.
Jaffé	<u>Regesta pontificum Romanorum</u> . See entry under Jaffé in bibliography.
<u>MGH</u>	<u>Monumenta Germaniae Historica</u> .
<u>Briefe</u>	<u>Die Briefe der deutschen Kaiserzeit II: Die Briefsammlung Gerberts von Reims</u> . Berlin, 1966.
<u>Libelli</u>	<u>Libelli de lite imperatorum et pontificum saeculis XI et XII</u> . Hanover. II, 1892 III, 1897
<u>SS rer. ger.</u>	<u>Scriptores rerum germanicarum in usum scholarum</u> .
<u>PL</u>	<u>Patrologia latina</u> . See entry under Migne in bibliography.
Richer	Richer of Reims. <u>Historiarum libri IIII</u> , <u>MGH SS rer. ger.</u> Hanover, 1877.
Thietmar	Thietmar of Merseburg. <u>Chronicon</u> , <u>MGH SS rer. ger., nova series</u> , IX. Berlin, 1955.

## INTRODUCTION

He burst onto the scene in the middle of the tenth century, this paragon of human knowledge and intelligence. He had an apparently inexhaustible source of energy, which enabled him to accomplish things few people dream of doing in several lifetimes, never mind in a single span of some sixty years. Such extraordinary feats led, in the years after his death, to the conclusion that he must have been in league with the devil, for how could one person be capable of such knowledge and success?

He was born a peasant. Yet through intelligence, political skill and uncommon good luck, he came to be one of the most influential people in the Europe of his time. He was a power broker, launching a new French dynasty when the Carolingian line had exhausted itself. He was a Benedictine monk who participated energetically in the reforming spirit which then had all of western Europe, and England as well, in its grip. He was a member of the church hierarchy, becoming successively archbishop of Reims, archbishop of Ravenna, and finally bishop of Rome: Pope Sylvester II.

Virtually no aspect of 10th-century life was untouched by his activity. He electrified the Europe of his time with his teaching: kings and emperors, as well as scholars, were among his students. His fame spread far and wide, occasioning envy as well as admiration. He believed in "hands-on" experiences for his students, building models himself to demonstrate the principles he was trying to teach. He studied physics and meteorological phenomena, and invented a rudimentary telescope. Though he did not practice medicine, he understood the scientific principles upon which it was based.

He had occasion to come into close contact with the Moorish culture then flourishing in the Iberian Peninsula. From that experience he brought a wealth of new knowledge to the West, including the use of Arabic numerals.

It was in the context of his role as teacher, scientist, mathematician and inventor that he acquired a reputation as a builder of yet another kind of mechanical device: the organ.

Who was this *Übermensch*, this medieval Renaissance man? His name was Gerbert. Gerbert of Aurillac, he has come to be called.

This paper will examine two interrelated facets of the multi-talented Gerbert: his times, life and the legend which grew up around him, and the claims that he practiced the art and craft of organbuilding.

Why a biography? The reasons are simple. First, as we have already had occasion to see briefly, the role of organbuilder--if indeed he assumed such a role--arose out of Gerbert's activities in other fields. Second, his persona as a monk, bishop and politician is inextricably linked with that of alleged organbuilder. Any picture of Gerbert which does not include a study of all the facets of his life risks being not only incomplete but inaccurate and distorted as well. Many studies of Gerbert as an organbuilder have demonstrated only too amply the truth of this statement; by singling out this sole aspect of his life, such studies have arrived at disembodied facts and false conclusions.

The fact that Gerbert was a Benedictine had everything to do with the question of whether he was an organbuilder: it accounted for the fact that he was able to get an education, it led him to Spain, and it resulted in his appointment to the rich monastery of Bobbio.

His political connections led to ecclesiastical appointments which became the locus of his alleged organbuilding activities.

Finally, the legend which grew up in the centuries following Gerbert's death figured importantly in the accounts of his reputed organbuilding activity. William of Malmesbury, an English Benedictine, brought the legend to its completion in the twelfth century. And he has been, for the past eight hundred years, perhaps the one source most

often cited as evidence of Gerbert's organbuilding activity. The validity of William's testimony will be carefully scrutinized.

"One can feel that nothing known about churches and monasteries in the year 1000 is irrelevant to the question of how some of them came to have an organ."<sup>1</sup> In the same way, one can suppose that no aspect of Gerbert's life--one might almost say of life in the tenth century--is unrelated to his reputed organbuilding activity. For that reason, this study of Gerbert will draw upon the work of scholars in all areas of Gerbert's endeavors, not just on the researches of organ historians.

Gerbert the monk, bishop and pope, Gerbert the politician and king maker, Gerbert the teacher, mathematician and inventor, Gerbert the person behind the legend--all these "Gerberts" form part of the answer to the question: was he an organbuilder?

#### Title of the Paper

A word about the title of this paper: *Organa Doctorum*. It is a phrase from one of Gerbert's poems. The translator, T.E. Moehs, has rendered the expression in English as "the instruments of the learned":

*Quisquis opaca velis sophie scandere regna  
Istius in pratis pocula carpe libri.  
Potatus citimum flectes per gramina gressum,  
Organa doctorum quo sua castra comunt; . . .*

Whoever drinks deeply in the meadow of that book of yours  
To raise the curtains of wisdom's obscure realms  
Having drunk, you direct (their) excited steps through the grass.  
Whither the instruments of the learned adorn wisdom's fortress; . . .<sup>2</sup>

The title was chosen to underscore the imprecision of the term *organa* in the Middle Ages. This is one of the difficulties scholars face when trying to force the documents of the time to yield up their secrets. The word *organa* (or *organum* in the

singular) could mean things as diverse as a musical instrument or ensemble singing, a psalter or a plow.<sup>3</sup>

Another difficulty which scholars encounter is the maddening inconsistency of references to the instrument. For instance, the Regularis Concordia, containing "the oldest known example of the liturgical Easter play,"<sup>4</sup> is regarded as a standard musical reference work from the medieval period. Yet it makes no allusion to the great 10th-century organ of Winchester--an actual, not an allegorical, instrument. Our knowledge of that organ comes from the "metrical prologue . . . to a poetic life of St. Swithun."<sup>5</sup>

The combination of these factors--the varied use of the word *organa* and the sporadic nature of medieval references to the instrument--prompts Peter Williams to write that "conditional tenses and subjunctive clauses are inevitable in any history of the early organ."<sup>6</sup>

#### The 10th-Century Organ

It is probably safe to say that more is unknown than known about the medieval organ. Yet new research is continually turning up more information. One recent conclusion is that organs in the period around the tenth century were probably more numerous than once thought. At one time it was supposed that the only organs in existence were those mentioned in documents of the time--church dedications, state records and the like. Now scholars have reasoned that, if some small towns and monasteries had organs (and the records show that they did), then surely large cities and wealthy abbeys had them also, even though no record of such instruments is to be found.

As for the instruments themselves, no trace of them remains. Aside from late Roman fragments, the oldest vestiges of early instruments date only from the fourteenth century. Our chief source for characteristics of the medieval organ, therefore, is the abundant supply of pipe-measurement treatises which the Middle Ages spawned.<sup>7</sup>

### The Tenth Century

The late tenth century was the dawn of the second millenium of the Christian era. (There is a certain timeliness about this discussion, living as we do on the threshold of the third millenium.) We will consider this era under three aspects: reform, renaissance and apocalypse.

#### Age of Reform

The tenth century was a time of great reforming energy, especially on the ecclesiastical and monastic fronts. Among the monasteries, the most active reform centers included Gorze and Ghent in Lotharingia, Winchester in England, and Cluny in France. These three currents of monastic thought converged in the council at Winchester which produced the great reform document, the Regularis Concordia, to which we have already referred.

*. . . accitis Florensis beati Benedicti necnon praecipui coenobii quod celebri Gent muncupatur uocabulo monachis, quaeque ex dignis eorum moribus honesta colligentes . . .*

. . . they summoned monks from St Benedict's monastery at Fleury and from that eminent monastery which is known by the renowned name of Ghent, [and] gathered from their praiseworthy customs much that was good . . .<sup>8</sup>

The importance of this renewal of religious energy cannot be overemphasized for the effect which it had on the spread of the organ at that time.

The instrument owed a great deal to Benedictine cultural centres, not only in their literacy and scholarship but also in the opportunities which their large churches gave to the advancement of music. The monastic revival in the late 10th century must itself have been a factor in the appearance of organs, which had become ingenious objects for the use of the clergy, not the people.<sup>9</sup>

### Age of Renaissance

Scholars speak of a 10th-century renaissance.<sup>10</sup> Already at the end of the ninth century, western Europe began to emerge from "political disorder, economic depression, and intellectual obscurantism."<sup>11</sup> The tenth century was marked by an increase in commerce.

Scandinavian trade was developing . . . The Slavonic economy was stimulated both by Norse commerce and Judaeo-Arab trade along the route which linked Cordoba to Kiev by way of central Europe. The lands on the Meuse and the Rhine began their rise. Northern Italy, above all, was already prosperous.<sup>12</sup>

Intellectual stimulation came mainly from the southern part of the Continent. "About the end of the first millenium a refreshing breeze blew from Moorish Spain through the monasteries of Europe, which had gradually sunk into torpid stagnation by merely collecting and copying the same things over and over again."<sup>13</sup>

### Age of Apocalypse

As the year 1000 approached, people wondered: what would happen at the end of 999? They imagined the worst.<sup>14</sup> Yet there was little panic. "Europe--illiterate, diseased and hungry--seemed . . . one of the planet's most unpromising corners, the Third World of its age. . . . what terrors could the apocalypse hold for a continent that was already shrouded in darkness?"<sup>15</sup>

This then was the tenth century: a period teeming with life, agitating for reform, poised on the brink of the second millenium. Into this world came "the redeeming intellect of the last part of the tenth century," Gerbert of Aurillac.<sup>16</sup>

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## EARLY YEARS

For a man who ascended to such heights, we know pitifully little about Gerbert's origins.

### Aquitaine

Exactly when Gerbert was born, no one knows.<sup>1</sup> We know some details about his early life, however, and can make a few cautious conjectures. Regarding the date of his birth, it has been postulated as some time in the mid-10th century. Some scholars place it as early as 938,<sup>2</sup> others as late as 950. Still others place it around 944.<sup>3</sup>

There is general agreement that Gerbert was born sometime before 950.<sup>4</sup> The only bit of information which helps situate his date of birth with any exactitude is Richer's comment that he left France in 967 as *puer* or *adolescens*.<sup>5</sup> These are "elastic" terms, and prevent us from making any progress in establishing a definite date for Gerbert's birth.

The place of birth is not known either. Richer tells us that he was Aquitanian in origin.<sup>6</sup> One source says of him *obscuro loco natus*.<sup>7</sup>

All are in agreement that he was of peasant origin. Hence his dramatic ascent in the powerful world of kings, emperors, archbishops and popes was accomplished solely by dint of his intellectual powers.<sup>8</sup> Or to be more correct, intellectual powers aided by incredible good fortune, as we will see throughout this account. His humble upbringing was a source of some grief and contention in his rise to social, hierarchical and political power: when he was named archbishop of Reims, his peasant origins occasioned pejorative comment.<sup>9</sup>

While still a boy (again we know neither the date nor his age at the time), Gerbert entered the monastery of St. Gerauld in Aurillac. "Aurillac was in the vanguard of the Cluniac reform of Benedictine practices."<sup>10</sup> The great Odo of Cluny himself had been

the third abbot of Aurillac, reforming it after the Cluny model about the year 925.<sup>11</sup> The Cluniacs made sweeping changes: stricter observance of silence, elaborate liturgies, emphasis on splendid architecture.<sup>12</sup> Gerbert's interests in his adult life reflected "the Order's expansive approach both to traditional learning . . . and to the newer technologies."<sup>13</sup>

Aurillac was also an important station for travelers enroute to Santiago de Compostela, the most famed pilgrimage site in all of 10th-century Europe.<sup>14</sup> As such it provided a window on the world. Gerbert could thus become acquainted with people from all parts of Europe, enlarging his thought and horizon. In addition, Aurillac was in the radius of St. Martial, the Aquitanian monastery whose experiments in the area of chant development were then blazing new trails in liturgical music; some "St. Martial" manuscripts, in fact, are thought to have originated in Aurillac.<sup>15</sup> Thus though Gerbert's entrance into the world may have been poor and obscure, his entrance into the monastery opened to him a universe which he would not otherwise have discovered.

By entering St. Gerauld, Gerbert became an oblate or boy monk. As a student there, Gerbert came to the attention of the abbot of the monastery, one Gerauld, who entrusted his education to the monastery's scholar, Brother Raymond of Lavour.<sup>16</sup> Under Raymond's tutelage, Gerbert learned the trivium--grammar, dialectic and rhetoric. And well Raymond must have taught for, in his later years, Gerbert would write to Aurillac expressing his appreciation "especially to Father Raymond whom . . . I thank above all mortals for whatever knowledge I possess."<sup>17</sup> The quadrivium (the other four branches of the seven liberal arts--arithmetic, music, geometry and astronomy) was not taught at Aurillac: "in the whole of France and Lorraine there were then only four masters capable of teaching it, all of them far away from Aurillac."<sup>18</sup>

This entrance into the monastic doors was large in significance for Gerbert. Not only did it provide him his education, but it gave him the name by which he would be

known to all ages of history: Gerbert of Aurillac. Whatever the town in which he was born, it is this name which has attached itself to him permanently.<sup>19</sup> This association has thus become more important than the place of his birth, and Aurillac has honored him with a bronze statue (erected in 1851) in the center of the town.<sup>20</sup>

### Spain

One day, in the year 967, Count Borrell from Barcelona arrived at the monastery in Aurillac. The purpose of his visit was to make a retreat before his marriage to Ledgarde, daughter of Raymond Pons, a French count.<sup>21</sup> While Borrell was there, Abbot Gerauld inquired of him if there were, in his county, any schools which could provide training in the quadrivium for one of his monks. Borrell answered yes. Accordingly when the count and his entourage departed from Aurillac, Gerbert was in their company. Never again would he return to Aquitaine, the land of his birth.

His great good fortune in being accorded the opportunity to study in Spain<sup>22</sup> was only the first of many times when chance would intervene to propel Gerbert from a humble peasant existence to the highest post in Christendom.<sup>23</sup>

Gerbert would profit from the "tolerance and unorthodoxy" which "distinguished the intellectual life in Catalonia from that of the rest of Europe."<sup>24</sup>

Our only source of information about Gerbert's study in Spain comes from his pupil Richer. If his account is ample in detail when recounting how Gerbert came to study in Spain, it is brief in the extreme when speaking of Gerbert's stay there. In fact, it is but a single sentence long: Borrell, Richer tells us, confided Gerbert to Bishop Atto, who instructed him in mathematics (the quadrivium).<sup>25</sup>

This terse statement lays open at least as many questions as it answers. For a long time, scholars assumed that since Atto was the bishop of Vic,<sup>26</sup> Gerbert must have studied in that city. Recent scholarly "excavations," however, have called that assumption into question.

One scholar doing research on the question was Rudolf Beer. Early in this century, a millenium after Gerbert lived, he did extensive research on another Catalonian site, the monastery of Ripoll.<sup>27</sup> In the course of the study he examined the libraries of Ripoll and of Vic, as they were in the tenth and eleventh centuries. The basis of the Ripoll information was an inventory conducted around 1047, about eighty years after Gerbert had left Catalonia.<sup>28</sup> The basis of the Vic information was "an inventory of the movable property of Vich cathedral, drawn up in 957, [which] lists 51 manuscripts, not one of which was a text for the study of the liberal arts."<sup>29</sup> The findings of the two inventories convinced Beer that the Vic library could not possibly have been the source of the knowledge which Gerbert acquired in Catalonia, and that the site of his study was not Vic but Ripoll.

Not all scholars are so convinced, however. Paul Freedman, author of a study of the diocese of Vic, says that the city was, with Ripoll, an intellectual center.<sup>30</sup> A contemporary Catalan author, Ramon Ordeig i Mata, says that, "properly speaking, the only deduction one can make without risk of being in error is that Gerbert studied at the cathedral of Vic, that is to say, at the place where his tutor [Atto] resided."<sup>31</sup>

Perhaps this question can be resolved without too much violence. Ripoll is a mere twenty kilometers from Vic.<sup>32</sup> It is not at all improbable to suppose, as Ordeig i Mata does, that in the course of the three years which Gerbert spent in Catalonia (967-70), he accompanied his tutor Atto to Ripoll,<sup>33</sup> where there was a rich repository of manuscripts. Richer's account is vague enough to allow for more than one interpretation.

It would be hard to find a more suitable place for Gerbert to have spent all, or at least a part of, his Catalonian sojourn than the monastery of Ripoll. There he would have found fellow Benedictines as well as a vast store of knowledge. One of the jewels of the diocese of Vic,<sup>34</sup> Ripoll was renowned as a center of learning, along with Vic.<sup>35</sup> In addition, it enjoyed a fine reputation as a center of liturgical drama,<sup>36</sup> and of Catalan

music and culture.<sup>37</sup> It was well endowed with manuscripts, as Beer attests. It was one of the first contacts of western Christianity with Arab science,<sup>38</sup> a "striking example of the grafting of Arab elements onto the Isidorian tradition, . . . having served as an intermediary between the Christian and Moslem worlds."<sup>39</sup> It is certainly reasonable to suppose that Gerbert had at least an acquaintance with this renowned Catalanian monastery.

#### From Spain to Rome

Gerbert spent three years in the Iberian Peninsula. In 970 he left for Rome, in the company of Count Borrell and Bishop Atto. The count and the bishop were on a mission dealing with ecclesiastical government; they wanted to establish the see of Vic as a diocese independent of Narbonne. In this endeavor they counted on Gerbert, "whose ready wit and oratorical ability" would be an asset in their quest.<sup>40</sup> They were successful: the pope heard their proposal and granted Atto bulls declaring Vic an archdiocese, with Atto as its prelate.<sup>41</sup>

The pontiff, John XIII, was suitably impressed with Gerbert's intellectual acumen. Through the good offices of the pope,<sup>42</sup> Gerbert made the acquaintance of yet another dignitary, Emperor Otto I (the Great) of Germany. Gerbert had come a long way. Born a peasant in Aquitaine, he had traveled first to Spain, now to Italy. He moved daily in the company of the nobly born: popes and counts, bishops and emperors.

Atto and Borrell had expected that Gerbert would return with them to Catalonia.<sup>43</sup> But the little group which returned to Spain did not look like the entourage which had arrived in Rome. Atto was assassinated,<sup>44</sup> and Gerbert remained in Rome.

Gerbert's meeting with Otto had proved fateful. So impressed was the emperor with the young monk's ability that he retained him to tutor his son, Otto II.<sup>45</sup>

Gerbert spent nearly two years with the Ottos--coemperors, father and son.<sup>46</sup> The elder Otto would have been happy to have Gerbert continue in that post. And such might have been the case, had not fate intervened once again.

A man by the name of Gerannus arrived in Rome as part of a delegation from Lothaire, king of the Franks. He and his party had come perhaps for the wedding of Otto II and the Greek princess Theophanu on April 14, 972.<sup>47</sup> Gerannus was not a count or a prince; he was an archdeacon from Reims. But he represented a nobility of another sort which Gerbert prized: scholarship. Gerannus was skilled in the art of logic and Gerbert was not. Thus despite his excellent education in France and Spain, Gerbert felt himself less than fully prepared to be a scholar in all areas of knowledge. Therefore, instead of accompanying Otto to the German court, he went with Gerannus to Reims to be, once again, a student.

Had he continued in Otto's employ, Gerbert's life would have been directed into Italian and German channels.<sup>48</sup> Leaving the emperor's court did not spell the end of his association with the Ottonians, however. Far from it; Gerbert's fate was inextricably linked with that of the German monarchy--Otto I, Otto II and Otto III. It would play a large part in his manipulation of Frankish politics and in his ultimate ascent to the papacy.

Throughout his life, Gerbert was aided by his native intelligence and the remarkable fortune afforded to him by chance. The chance which brought him to Rome had borne fruits of which Gerbert could not have known in 970. In Rome, he met Gerannus and followed him to Reims--Reims, the city where Gerbert would spend the greater part of his life; Reims, the first of the three R's which would attach themselves to his name; Reims, Gerbert's *Schicksalsstadt* (city of destiny); Reims, the city where, for most of the intervening millenium, his reputation as a builder of organs would be centered.<sup>49</sup>

## NOTES

1. Erdoes, 10. E. Labande, "La formation de Gerbert à St-Géraud d'Aurillac," Gerberti Symposium, 23.
2. French scholars celebrated a millenary anniversary in 1938. Oscar G. Darlington, "Gerbert, the Teacher," American Historical Review LII (1947), 456 and n.2. See also Labande, 24.
3. Harriet Pratt Lattin, who translated Gerbert's letters into English (1961), also wrote a book about his life, The Peasant Boy Who Became Pope (New York: Henry Schuman, 1950). (The book is designed for students of approximately junior-high school age.) In it, she makes Gerbert seven years old in the year 951 (p.17), thus placing his date of birth in 944. She also assigns names to his parents--Angilbert and Guisla (p.6)--and provides him with a brother, Pierre, two years his elder (p.13). Erdoes, who first professes not to know the names of Gerbert's parents (p.10), later says that his father was Agilbertus (p.14). According to Riché, a Roman chronicler of the thirteenth century wrote that his father's name was Agilbert, but without mentioning the source of his information. Pierre Riché, Gerbert d'Aurillac: Le pape de l'an Mil (Paris: Fayard, 1987), 17. Leflon mentions sources which call Gerbert's father Agilbert, Benedict and Angelus Petrus. Jean Leflon, Gerbert: Humanisme et Chrétienté au Xe siècle (Paris: Editions de Fontenelle, 1946), 5. Mann mentions a pontifical catalogue which gives Gerbert's father's name as Agilbert. Horace K. Mann, The Lives of the Popes in the Early Middle Ages, 2nd ed., 18 vols. (St. Louis, Missouri: B. Herder, 1925-32), V, 7.
4. Taylor, I, 281. Darlington, "Teacher," 456, n.2.
5. Labande, 24. Darlington, "Teacher," 456, n.2. Richer, III, 43.
6. *Aquitanus genere*. Richer, III, 43.
7. Labande, 24, citing Mabillon (1723). Oscar G. Darlington, "Gerbert, 'obscurus loco natus,'" Speculum XI (1936), 509.
8. Labande, 24.
9. Taylor, I, 283. Darlington, "'Obscurus,'" 509.
10. Williams, Organ in western culture, 283.



11. Abel Beaufrère, L'Abbatiale Saint-Géraud d'Aurillac (Aurillac: L'Imprimerie Gerbert, 1980), 5, n.4. Pierre Riché and J.P. Callu, trans., Gerbert d'Aurillac: Correspondance, 2 vols. (Paris: Les Belles Lettres, 1993), I, vii.
12. Friedrich Kempf et al., The Church in the Age of Feudalism, trans. Anselm Biggs, vol. III of History of the Church, ed. Hubert Jedin and John Dolan (New York: Seabury Press, 1980), 325.
13. Williams, Organ in western culture, 283.
14. Beaufrère, 8.
15. Gerald Abraham, The Concise Oxford History of Music (New York: Oxford University Press, 1988), 87, n.24.
16. Riché, 21.
17. Harriet Pratt Lattin, trans., The Letters of Gerbert with His Papal Privileges as Sylvester II (New York: Columbia University Press, 1961), 230.
18. Erdoes, 25.
19. Sometimes he is called Gerbert of Aurillac and Reims; see, for instance, Williams, Organ in western culture, 181, n.32.
20. Erdoes, 10; 203.
21. Riché, 21. Lattin, Peasant, 49.
22. His time in Spain was spent in Catalonia, the northeastern part of Spain. Barcelona is the capital of present-day Catalonia.
23. For the role of chance in Gerbert's life, see R.W. Southern, The Making of the Middle Ages (New Haven, Connecticut: Yale University Press, 1953), 208.
24. Erdoes, 37.
25. . . . *atque Hattoni .... episcopo instruendam commisit*. Richer, III, 43. See also Darlington, "Teacher," 460 and n.18. Catalans are justifiably proud of their association with Gerbert. Articles such as that of Lluís Nicolau y d'Oliver, "Gerbert (Silvestre II) y la cultura catalana del segle X," Estudis Universitaris Catalans IV (1910), 332-58, attest to the esteem in which Gerbert is held. One Catalan author has noted that, were it not for the observations of a foreigner (Richer), they--the Catalans--would have no

information about Gerbert's stay there. Ramon Ordeig i Mata, Els orígens històrics de Vic (segles VIII-X), 2nd ed. (Vic, Spain: Patronat d'Estudis Ausonencs, 1983), 120.

26. See Paul H. Freedman, The Diocese of Vic: Tradition and Regeneration in Medieval Catalonia (New Brunswick, New Jersey: Rutgers University Press, 1983), ix, for a note on the spelling of Vic.
27. Rudolf Beer, "Die Handschriften des Klosters Santa Maria de Ripoll," Sitzungsberichte der Akademie der Wissenschaften, Philosophisch-historische Klasse CLV (1908), Abhandlung III. Pages 46-67 deal especially with Gerbert.
28. Beer, 53ff.; 101-9. Guy Beaujouan, "Les Apocryphes mathématiques de Gerbert," Gerberti Symposium, 656 and n.1.
29. Lattin, Letters, 3, n.3, citing Jaime Villanueva and Rudolf Beer. See also Eduardo Junyent, "La Biblioteca de la Canónica de Vich en los siglos X-XI," Gesammelte Aufsätze zur Kulturgeschichte Spaniens XXI (1963), 139-40, which mentions this inventory and one in 971 also.
30. Freedman, 7.
31. Ordeig i Mata, 122.
32. Riché, 26.
33. Ordeig i Mata, 122.
34. Freedman, 15.
35. Ibid., 7.
36. Donovan, 41.
37. Ibid., 47. Daniel Devoto, "Spain: From the Beginnings to c.1450," Music from the Middle Ages to the Renaissance, ed. F.W. Sternfeld (New York: Praeger Publishers, 1973), 371.
38. Guy Beaujouan, Science médiévale d'Espagne et d'alentour (Brookfield, Vermont: Ashgate, 1992), 9.
39. Ifrah, 476, citing Beaujouan. Isidore was a 7th-century Spanish bishop and scholar. See Jill Franklin, "Isidore, St," The Middle Ages: A Concise Encyclopedia, ed. H.R. Loyn (New York: Thames and Hudson, 1989), 184.

40. Lattin, Letters, 4.
41. These bulls can still be seen in the cathedral archives of Vic. Personal visit of the author, August 8, 1986. See also Ordeig i Mata, 104; Erdoes, 60; Freedman, 20; Jaffé, 3746-9.
42. Erdoes, 61. Richard C. Dales, The Intellectual Life of Western Europe in the Middle Ages, 2nd rev. ed. (New York: E.J. Brill, 1992), 137.
43. Ordeig i Mata, 123-4, citing Richer. Mann, V, 16.
44. It is not clear exactly where and when Atto died. It might have been in Rome or he might have returned to Vic. The date of his death was August 22, 971 or 972. Ordeig i Mata, 105. Richer, III, 44. Riché, 33.
45. Erdoes, 61. Lattin says Gerbert tutored Otto II in Ravenna. Lattin, Peasant, 71.
46. Erdoes, 60.
47. Ibid., 61. Lattin, Letters, 4. Riché, 34.
48. Darlington, "Teacher," 463.
49. Klaus-Jürgen Sachs, "Gerbertus cognomento musicus," Archiv für Musikwissenschaft XXIX (1972), 261.

### REIMS: THE *SCHOLASTICUS*

Reims was everything a scholar and cleric such as Gerbert could have desired.

Nearby were several libraries, well supplied with manuscripts, and close at hand at least five scriptoria were active in producing more manuscripts. . . . The location of the city made it the crossroads for commercial and intellectual interchange and easily accessible to students from everywhere.<sup>1</sup>

In Reims, Gerbert met the archbishop, Adalbero. In time Adalbero of Reims would become a mentor and steadfast ally of Gerbert.

Adalbero was a reformer.<sup>2</sup> He had strong ties to the monastery of Gorze, which formed part of the network of monastic reform then in progress. His father had been lay abbot of Gorze,<sup>3</sup> and Adalbero had been educated there. His teacher had been the formidable John of Gorze, "the father of monastic reform in Lorraine."<sup>4</sup>

One of the ways Adalbero proposed to reform was through education. He was looking for "a *scholasticus*, fired with . . . zeal for the *Regula*,<sup>5</sup> equipped with a wide scholarship, and above all capable of inspiring students with the love of learning . . . to make his cathedral school into a progressive force in the reformation of his church."<sup>6</sup> Accordingly when Gerbert appeared in Reims at the side of Gerannus, Adalbero considered him a gift, heaven-sent.<sup>7</sup> Thus Gerbert the student of logic and philosophy also became Gerbert the *scholasticus*.

#### Gerbert Teaches the Quadrivium

In this post, Gerbert had at last an opportunity to impart, in a school setting, the knowledge of the quadrivium which he had learned in Catalonia.

### Arithmetic and Geometry

In Gerbert's time, Roman numerals were used in mathematical operations. But at some time early in his life, Gerbert learned about Hindu-Arabic numerals. Possibly he learned of them while he was still at Aurillac, when the Spanish abbot Guarin paid a visit there.<sup>8</sup> If Gerbert did not encounter the new figures at Aurillac, he most likely learned of them while he was studying in Spain.<sup>9</sup>

Gerbert was captivated by these new figures. He astounded his students with his ability to perform the most complex calculations quickly by means of them. He "is now regarded as having been the first great scholar to spread the use of the Hindu-Arabic numerals . . . in Europe."<sup>10</sup> This advance revolutionized the world of mathematics, yet it was still primitive compared to the system as it has evolved today. Unlike the Arabs,<sup>11</sup> Gerbert and his disciples did not know written computation. Therefore "they did not grasp the essence of the 'new' system of numerals. They merely adopted the symbols, whose mysterious origin and significance were beclouded by their obscure and partly Arabic names."<sup>12</sup> Nor did they have the zero, which would be introduced some years later.<sup>13</sup>

The Hindu-Arabic numerals were spread, not through manuscripts, but by means of "the oral teaching of a reckoning technique" using an innovation which Gerbert is said to have made in the abacus.<sup>14</sup> By means of the experiment which he devised, Gerbert (and the other early abacists) "stood at the beginning of a mathematical revolution whose effects may be seen in fields as diverse as music, the design of castles and cathedrals, and the fiscal operations of government."<sup>15</sup> Gerbert's name became closely associated with the abacus; in the eleventh and twelfth centuries, the terms "abacist" and "Gerbercist" were virtually synonymous.<sup>16</sup>

Yet there were hints here of the dark legend which was to spring up following Gerbert's death. One German version of the legend characterized the counting device as "the Devil Abacus."<sup>17</sup>

Gerbert wrote two mathematical treatises. They form part of a small corpus of authentic writings which, so far, is not very extensive.<sup>18</sup> The first treatise, written about the year 980, was on the use of the abacus. It consists of a letter to his friend Constantine and a text of rules.<sup>19</sup> The treatise was probably known to William of Malmesbury or at the very least to his friend Walcher of Malvern.<sup>20</sup>

The second treatise was entitled the *Geometria*. It dates from about 980-2. Though it was published by Bubnov as an authentic work of Gerbert, his authorship has been called into question by some scholars.<sup>21</sup> Mann, citing Picavet, notes that

the general feeling seems to be that, though we have not the book as it left his hands, those MSS. on the subject which bear his name are fundamentally his work. To show the calibre of the work it will suffice to note that in it are found problems solved which, for the period, must have presented great difficulty--problems which involve an equation of the second degree.<sup>22</sup>

### Astronomy

In the field of astronomy, Gerbert also put to use the innovations which he had learned in Spain. He brought "Moorish science to France and from there to Germany and Italy."<sup>23</sup> He taught astronomy, which had a bad reputation at that time.<sup>24</sup>

Gerbert did not view the world as a flat disc but as an orb, and "constructed a sphere to support his view."<sup>25</sup> Actually he constructed several spheres of different types, including armillary spheres and celestial spheres.

The armillary sphere . . . was primarily a representation of the universe featuring the principal circles of the celestial sphere: the horizon, the meridian, the equator, the tropics, the arctic and antarctic circles, as well as

the earth, and often the sun, moon, planets, and certain stars. It was used to demonstrate the apparent motions of the heavenly bodies and to determine their positions at any time or place.<sup>26</sup>

The celestial sphere which Gerbert built consisted of

two hemispheres of metal joined together and pierced at both poles. Through these openings a polar tube was inserted and fixed in such a manner that the observer could sight the polestar by means of it. The celestial globe could be oriented by turning it upon its axis.<sup>27</sup>

It is recorded that Gerbert taught his students using such astronomical devices. On a bright night, he would show them the sky covered with stars and teach them to distinguish the movements of the heavenly bodies.<sup>28</sup>

In a letter to Constantine, his illustrious pupil from Fleury, Gerbert explained the principles used in making a sphere.<sup>29</sup>

Opinion is divided on Gerbert's use of the astrolabe, which is "basically a flattened armillary sphere, or a celestial sphere in a stereographic projection upon a plane, by means of which all circles of the sphere are represented."<sup>30</sup> Gerbert may have been the first to spread the use of the astrolabe in Europe, as Ifrah asserts,<sup>31</sup> but other sources are less convinced.<sup>32</sup> A treatise on the astrolabe is subject to the same doubt; some say he wrote it,<sup>33</sup> others are less certain.<sup>34</sup>

We know that Gerbert in all likelihood had access to information about the astrolabe and that he was interested in the instrument. A book which Gerbert requested of his Catalanian friend, Lupitus Barchinonensis, was a treatise on the astrolabe.<sup>35</sup> William of Malmesbury paid him a compliment when he said that Gerbert "surpassed Ptolemy with the astrolabe."<sup>36</sup>

Later generations would view these experiments of Gerbert's--"watching the stars from his observatory . . . designing a sundial with his own hand or studying astronomy on a globe covered with horse's skin"--as a sign of affinity with the devil.<sup>37</sup>

### Music

In music as in the other branches of the quadrivium, Gerbert brought back new theories from Spain.<sup>38</sup> It was said of him that "in music his teaching was the best obtainable."<sup>39</sup>

Richer reports that Gerbert used the monochord in teaching music theory.<sup>40</sup> By means of this instrument, Gerbert "showed the difference between tones and semitones, etc., and demonstrated that the tones varied in proportion to the length and thickness of the vibrating cord."<sup>41</sup>

### Gerbert, the Man and His Purpose

In all these things, whether constructing spheres or writing treatises, Gerbert's purpose was one of pedagogy. He was not "attempting to add to human knowledge in his scholarly writings." Nor was he "the experimenter groping for new knowledge." Rather he was "solely the teacher making visual aids for his classroom pupils."<sup>42</sup>

For all his brilliance in teaching, Gerbert's methods and intellectual processes might be looked upon as crude; some might even say arid. "Crude they were, and of necessity; arid they were not, being an unavoidable stage in the progress of mediaeval thinking."<sup>43</sup>

And he was not an original inventor. There was nothing of the original in him, Olleris says.<sup>44</sup> Rather his skill lay in the fact that "he drew intelligently upon the sources within his reach, and then taught with understanding and enthusiasm."<sup>45</sup>



Thus in the cathedral school of Reims Gerbert electrified education as it was then known in Europe. He was singularly equipped for this post. His formal training for the position of *scholasticus*

was as unusual for the tenth century as the man himself. His education made him heir to three widely divergent and even hostile sources of inspiration: the Christian Cluniac and Lotharingian enthusiasm for monastic reform and the good life, the pagan Latin classics, and the Moslem-tinctured scholarship of tenth-century Spain. The combination of these three, in varying degrees, produced Gerbert.<sup>46</sup>

Little wonder then that his coming to Reims should be an event of some moment. R.W. Southern, in his book about "the formation of western Europe from the late tenth to the early thirteenth century,"<sup>47</sup> situates his study between the dates 972 and 1204. 1204 is the date of "the physical conquest of the Greek Empire of Constantinople."<sup>48</sup> The earlier date is the year in which Gerbert began his tenure at the cathedral school of Reims. One is inclined to express surprise at Southern's equating the importance of these two events. Yet, he explains, though they seem to be disparate in significance, they are

not so unequally matched in their suggestion of new opportunities in thought and politics. It was in the first of these years in all probability that the scholar Gerbert, a young man at the height of his powers and bursting with intellectual life, having absorbed the scientific learning of Italy and the Spanish March, felt himself called to the study of logic and moved from Rome to Rheims for that purpose. The works which he wrote, the methods of teaching he devised and the pupils he taught at Rheims became the most important factor in the advancement of learning in northern Europe during the next two generations--particularly in enlarging the scope of the study of logic and in forwarding that reconquest of Greek thought which was the foundation of the medieval intellectual achievement.<sup>49</sup>

Southern's estimation of the importance of Gerbert's teaching at Reims seems justified, not only as regards his methods of teaching but also in the students whom he taught during his tenure there. Even a casual glance at the names of some of his students reads like a Who's Who of 10th- and 11th-century Europe. He taught those who would lead and influence others of their generation and beyond. There were scholars and historians: Constantine of Fleury and Micy, and Richer of St.-Rémi. There were bishops and archbishops (at least thirteen of Gerbert's students became members of the hierarchy). There were abbots: five or six of his students went on to head principal monasteries in Europe.<sup>50</sup> Gerbert instructed a future king (Robert the Pious of France)<sup>51</sup> and a future pope (John Gratian, who later became Gregory VI).<sup>52</sup> He taught also those who would teach a future pope: Lawrence of Amalfi and John Gratian were among the teachers of Hildebrand, who became the reforming pope Gregory VII.<sup>53</sup> There were those who served the monarchs as secretaries and chancellors: Froment, chancellor of Robert the Pious and bishop of Paris; Heribert of Cologne, chancellor to Otto III (who was himself a student of Gerbert when the latter went to Germany); and Adelbald, secretary to Emperor Henry II, Otto III's successor.<sup>54</sup>

These last two students, Heribert and Adelbald, held strategic posts in the court of Henry II of Germany (in the eleventh century). In this way they helped further Gerbert's educational ideas and reform principles.<sup>55</sup> They also illustrate the importance which reform held for Gerbert.

All his life, Gerbert was "a protagonist of the new 'reforming conscience' the monks had awakened in the Church."<sup>56</sup> He associated himself with reformers throughout his life, as we have seen, for instance, in his collaboration with Adalbero of Reims. And he espoused the Cluniac ideals, to which he was exposed very early in life, becoming "a principal link between the Cluniac reform movement of his homeland in

southern France and the Lotharingian movement in the Rhineland,"<sup>57</sup> of which Gorze was an important center.

The two reforming movements--Cluny in France and Lotharingia in Germany--converged in a very real way at Rome in the eleventh century in the person of Hildebrand, Pope Gregory VII.<sup>58</sup> Gerbert's role as the teacher of the teachers of Hildebrand came to have a significant part in the legend of Gerbert, which in turn figured importantly in the accounts of his organbuilding, as we shall see shortly.

## NOTES

1. Lattin, Letters, 4-5.
2. Ibid., 36, n.1. Darlington, "Teacher," 463.
3. Riché, Genealogy Table IV.
4. Darlington, "Teacher," 463. In addition, John had been Otto I's emissary to Córdoba from 953 to 956. Erdoes, 50-1. Southern, 36.
5. The Rule of St. Benedict.
6. Darlington, "Teacher," 463.
7. Ibid., citing Richer; see n.31.
8. Lattin, Letters, 64 and n.7. In Spain Gerbert renewed his acquaintance with Guarín; the two became lifelong friends. Riché, 22; 96.
9. The first known document in Europe to use Hindu-Arabic numerals comes from the monastery of Albelda in northern Spain. Its date is 976, shortly after Gerbert left Spain for Rome. Ifrah, 476-7. Riché, 47. Kurt Vogel, "L'Aritmetica e la Geometria di Gerberto," Gerberti Symposium, 581. J.M. Burnam, "A Group of Spanish Manuscripts," Bulletin Hispanique, Annales de la Faculté des Lettres de Bordeaux XXII (1920), 231. Lattin, Letters, 64, n.7. Burnam thinks that the archetype of the Albelda manuscript was in Ripoll at the time Gerbert was there.
10. Ifrah, 476. But see Werner Bergmann, Innovation im Quadrivium des 10 und 11 Jahrhunderts: Studien zur Einführung von Astrolab und Abakus im lateinischen Mittelalter (Sudhoffs Archiv, Zeitschrift für Wissenschaftsgeschichte, Beiheft 26) (Stuttgart: Frans Steiner, 1985), 207.
11. Ifrah, 476.
12. Menninger, 325.
13. Florence Trystram, Le Coq et la louve: Gerbert et l'an Mille (Paris: Flammarion, 1982), 113.
14. Ifrah, 477. The abacus or counting board is a familiar device. It uses a number of counters, placed on a rod, to calculate figures. Gerbert's innovation was to replace

the many counters with a single counter, on which was written a Hindu-Arabic numeral, one of those "highly peculiar and alien *characteres* which no one then knew." Menninger, 324-5. From the standpoint of true abacus computations, his innovation was a step in the wrong direction. Menninger, 325. By replacing the many counters, all uniform in appearance and equal in value, with a single counter, he robbed the device of its visual significance. Yet it would be wrong to think of his experiment as

"nothing more than a trivial innovation introduced by Gerbert. The truth is that he did adumbrate the use of the new numerals; he had heard marvelous things about the new computations which they made possible but which he, and perhaps also his informants, did not essentially understand." Ibid.

For an opposing view about Gerbert and the abacus, see Bergmann, 212.

15. Richard Fletcher, Moorish Spain (London: Weidenfeld and Nicolson, 1992), 149.
16. Lattin, Letters, 19. Menninger, 331. Nicolai Bubnov, Gerberti opera mathematica 972-1003 (Berlin, 1899), reprint (Hildesheim: Georg Olms, 1963), 291.
17. Erdoes, 192.
18. Mann, V, 112.
19. Lattin, Letters, 46, n.1. Lattin includes the letter *Vis amicitiae* in her collection as Letter 7. Other editors of the letters do not include it. In Havet, for instance, it is found in the appendix. Julien Havet, Lettres de Gerbert (983-997), publiées avec une introduction et des notes (Paris: Picard, 1889), 238-9.
20. William Stubbs, ed., De Gestis Regum Anglorum by William of Malmesbury, 2 vols. (London: Eyre and Spottiswoode, 1887-9), II, lxx.
21. See Beaujouan, Gerberti Symposium, 652-5, citing the work of Paul Tannery, a contemporary of Bubnov.
22. Mann, V, 118. See François Picavet, Gerbert un pape philosophe (Paris: Ernest Leroux, 1897), 80f. Mann, writing in 1925, postdates Tannery, the main opponent of Bubnov's opinion. Tannery first voiced his objections around 1900, the same period in which Bubnov published his massive work.
23. Erdoes, 39.

24. Ibid.
25. Ibid. Darlington, "Obscuro," 520.
26. Silvio A. Bedini, "Scientific Instruments," Dictionary of the Middle Ages, 12 vols., ed. Joseph R. Strayer (New York: Charles Scribner, 1982-9), XI, 95.
27. Ibid., 100. For more on Gerbert's spheres, see Emmanuel Poulle, "L'Astronomie de Gerbert," Gerberti Symposium, 602ff.
28. Alexandre Olleris, Oeuvres de Gerbert, pape sous le nom de Sylvestre II, collationnées sur les manuscrits, précédées de sa biographie, suivies de notes critiques et historiques (Paris: Ch. Dumoulin, 1867), xxxix.
29. Lattin, Letters, 36ff. Lattin has this letter as Letter 2 of her collection; other collections of Gerbert's letters refer to it not as a letter but as a treatise entitled *Sphaera, mi frater*, after the first Latin words of the letter.
30. Bedini, "Scientific Instruments," 96.
31. Ifrah, 476.
32. See, for example, Poulle, 611.
33. Erdoes, 39.
34. See, for instance, Lynn Thorndike, A History of Magic and Experimental Science, 8 vols. (New York: Macmillan, 1923-58), I, 710. Bergmann thinks Gerbert wrote Chapter 19 of De utilitatibus astrolabii. Bergmann, 174.
35. Poulle, 613.
36. Erdoes, 39. This statement was probably made "with a great deal of exaggeration." Thorndike, I, 710.
37. Herbert Thurston, "The Magical Arts of Pope Sylvester II," The Month CXVIII (1911), 185, citing Gregorovius. Gregorovius was a 19th-century German historian. See Massimo Oldoni, "Gerberto e la sua storia," I, Studi Medievali XVIII/2 (1977), 653.
38. Erdoes, 46.
39. Taylor, I, 288. See Darlington, "Obscuro," 520, citing Richer.

40. Arno Borst, Astrolab und Klosterreform an der Jahrtausendwende, Sitzungsberichte der Heidelberger Akademie der Wissenschaften, Philosophisch-historische Klasse (Heidelberg: Carl Winter, 1989), 53.
41. Mann, V, 20.
42. Darlington, "Teacher," 468.
43. Taylor, I, 281.
44. Olleris, xl.
45. Taylor, I, 288.
46. Darlington, "Teacher," 457.
47. Southern, 11.
48. Ibid.
49. Ibid.
50. Darlington, "Teacher," 473.
51. Largely as a result of Gerbert's teaching of King Robert II and Emperor Otto III, the era of the uneducated ruler came to an end. Trystram, 343.
52. Darlington, "Teacher," 476. Mann, VII, 11, n.2. Mann adds the disclaimer, "if to this extent we may rely on Beno."
53. Darlington, "Teacher," 476. Mann, VII, 11.
54. Darlington, "Teacher," 473.
55. Ibid., 475.
56. "Sylvester II 999-1003," The Popes: A Concise Biographical History, ed. Eric John (New York: Hawthorn Books, 1964), 170.
57. Darlington, "Teacher," 475.
58. Ibid.

## ITALY

The years 972-80 passed placidly enough, with Gerbert serving as *scholasticus* at the cathedral school and profiting from the association of Adalbero, his friend and mentor. In the year 980, another of those chance events occurred which gave shape to Gerbert's life. Word of Gerbert and his exceptional school had reached another *scholasticus*, Otric of Magdeburg. Otric, consumed with jealousy, sent one of his students to Reims for the purpose of "spying" on Gerbert. He was to take careful notes, then report back to Otric. Otric hoped that by this means he might find some way of proving Gerbert wrong in his teaching. On one point, having to do with Gerbert's "method of laying out the divisions of philosophy,"<sup>1</sup> the student--whether by accident or intention is not known--misrepresented Gerbert's teaching to Otric. The student reported that it appeared that Gerbert "subordinated physics to mathematics, as species to genus, whereas, in truth, he made them of equal rank."<sup>2</sup>

Otric and Gerbert had occasion to meet in Italy. While Gerbert and Adalbero were on a mission to Rome,<sup>3</sup> they met Otto II in Pavia.<sup>4</sup> Otric, a member of Otto II's entourage, was all too willing to believe his student's report that Gerbert was in error. Otto, however, a former student of Gerbert (during the latter's sojourn in Italy in 970-2) knew well Gerbert's intellectual acumen. He found it hard to believe that Gerbert should be capable of such a mistake. He invited Adalbero and Gerbert to join him at his court in Ravenna.<sup>5</sup> Accordingly the entire party journeyed by boat down the Po to Ravenna. There in December, 980 or January, 981,<sup>6</sup> the two scholars debated the fine points of philosophy.

The matter of the debate was quite elementary.<sup>7</sup>

There was not the slightest originality in any of the propositions stated by the disputants. . . . Yet the whole affair, the selection of the questions, the



nature of the answers, the limitation of the matter to the bare poles of logical palestrics, is most illustrative of the mentality and intellectual interests of the late tenth century. The growth of the mediaeval intellect lay unavoidably through such courses of discipline. . . . the best intellect of this early period grasped at logic not only as the most obviously needed discipline and guide, but also with imperfect consciousness that this discipline and means did not contain the goal and plenitude of substantial knowledge.<sup>8</sup>

Actually it was no contest. Gerbert carried the day (literally; the debate lasted for an entire day).<sup>9</sup> Otric was handily defeated, much to Otto's delight. Gerbert was richly rewarded by Otto for his brilliant demonstration. Among the spoils of victory was his appointment (by Otto) as abbot of Bobbio.

Just when that happened is not clear. According to Richer (and Havet, who cites him), once the session ended, Gerbert returned to Reims with Adalbero, laden with gifts.<sup>10</sup> Havet then places Gerbert's arrival at Bobbio sometime in 983.<sup>11</sup> Other sources suggest that Gerbert went to Bobbio late in 982 or early in 983.<sup>12</sup> So much confusion exists--not only with regard to Gerbert's abbacy but with regard to the abbots of Bobbio for the entire tenth century--that Michele Tosi has constructed a chart showing the opinions of various authors.<sup>13</sup>

Latin thinks Gerbert went to Bobbio earlier than 983, and gives the following reasons for her opinion:

The early letters [from Bobbio] bespeak a longer association with some of the addressees than the brief visit to the emperor at Ravenna in 980. Furthermore, Ottonian policy dictated the appointment of close associates to these important positions. Finally, the chronology of the early letters is too compressed if Gerbert's appointment came in the early months of 983, as suggested by Havet.<sup>14</sup>

An additional reason for favoring an earlier date of appointment comes from another source. Mathilde Uhlirz thinks that Otto I had already discussed this matter

with the pope early in the 970s, when Gerbert was staying in Italy with Count Borrell and Bishop Atto.<sup>15</sup>

Using the above information, especially that supplied by Lattin and Uhlirz, we are inclined to favor an earlier rather than a later date for Gerbert's assuming the abbacy of Bobbio. This date becomes important when we come to discuss whether Gerbert was involved in organbuilding. We will return to it at that time.

### Bobbio

Bobbio is located some sixty kilometers northeast of Genoa.<sup>16</sup> It is enroute "to one of the Apennine passes used by pilgrims to Rome, a road-system cultivated by the Cluniacs."<sup>17</sup> In the tenth century, the monastery of St. Columban in Bobbio was a prominent Benedictine establishment. So great was its reputation that it came to be known as "the Monte Cassino of northern Italy."<sup>18</sup> Its library was extensive; its land holdings, considerable.<sup>19</sup>

Gerbert arrived in Bobbio, a Frenchman charged by a German emperor to rule over Italian monks. It is not hard to see the possibility for conflict in such a situation. Moreover there was need for reform; Bobbio's wealth "was practically at the mercy of the petty Italian nobles, who cordially hated Otto I and Otto II and, later, Otto III, and they were willing to plunder their possessions at whatsoever cost to culture and scholarship."<sup>20</sup>

Gerbert may have been appointed abbot against his will<sup>21</sup> but, having accepted the post, he intended to carry it out with alacrity. His heart was moved by the plight of the monks whom he found penniless and starving as a result of the despoiling of the abbey's goods. He wrote to Otto, ". . . when I see my monks wasting away from hunger and suffering from nakedness, how can I keep silent?"<sup>22</sup> But Otto was not too sympathetic. He knew the conditions which Gerbert would find at Bobbio. "For years . . . Otto I and Otto II had tried to bolster up the abbot of the monastery in an attempt to stop the pillaging of its wealth by the petty Italian nobles."<sup>23</sup> Otto knew that what he "needed

at Bobbio was not only intelligence but intelligence skillfully applied, intelligence supported by scholarship."<sup>24</sup>

In that respect, Gerbert was the man for the job. He had not only intelligence but the reformer's zeal. He attempted to remedy the situation--the impoverishment of the abbey by people who had appropriated Bobbio's goods as their own.<sup>25</sup>

Gerbert did not shrink from speaking the truth as he saw it. And he did it without the tact and political skill that he acquired later in his life. No respecter of persons, he "set out at once to correct abuses applying commendable principles, even if perhaps in an unpolitic manner."<sup>26</sup> In so doing, he offended in turn the monks in the monastery, his royal patrons (Otto and his mother Adelaide) and the local nobility.<sup>27</sup> Gerbert's lack of tact, more than anything else, was his undoing at Bobbio.<sup>28</sup>

#### Gerbert's Functions at Bobbio

Gerbert actually served at least three functions at Bobbio. The first, of course, was that of abbot. The squabbles he inherited were not at all to his liking. They dissipated his energy and wasted his time, time which he would no doubt much have preferred to spend in teaching and study.

The second function which Gerbert filled was that of vassal to Otto II. (Gerbert was in effect a count-abbot.<sup>29</sup>) As such he was required to provide soldiers for the emperor's military campaigns. Otto was at that time involved in a struggle against the Saracens in southern Italy, and he looked to Gerbert to provide soldiers. This duty was hardly one for which Gerbert's scholarly disposition equipped him, and he found it difficult to muster the necessary personnel.<sup>30</sup>

The third role he had to fill, one much more to his liking, was that of teacher. "Gerbert planned to continue his teaching activities at Bobbio, as seen from a letter he wrote" to Egbert of Trier on arriving at Bobbio.<sup>31</sup> There Gerbert taught the

seven liberal arts; in his teaching of music, he experimented in the construction of musical instruments. Of all the disciplines, Gerbert's letters treat most explicitly of music.<sup>32</sup> Of this we will have more to say in the musicological section of the paper. Suffice it to say that this school of Gerbert is closely connected to the main subject matter of this study: was Gerbert of Aurillac an organbuilder?

#### Gerbert's Flight

Gerbert's situation was, from the start, precarious at best and perilous at worst. It became untenable when Otto II suddenly died in December, 983. Without the emperor, Gerbert had no backing in Bobbio. His only recourse was to flee. This he did, quitting the monastery soon after Otto's death.<sup>33</sup> This was the first time Gerbert's status changed drastically as a result of the death of his royal patron; it was not to be the last.

Gerbert must have felt a complete failure: out of his element as an administrator, an absolute misfit in the games of war, and lacking the political skill to effect the desired reforms, he left Bobbio, a sadder but wiser man. It was a total rout. Nevertheless he retained the title of abbot until 998,<sup>34</sup> when he again found himself in Italy.

## NOTES

1. Taylor, I, 289.
2. Ibid. *Etenim cum mathematicae phisica par atque coeva a Gerberto posita fuisset, ab hoc mathematicae eadem phisica ut generi species subdita est.* Richer, III, 56. See Havet, ix, n.7.
3. The purpose of the trip is unknown. Havet, ix-x.
4. The young emperor had been governing alone since the death of his father Otto the Great in 973.
5. At that time monarchs did not remain in one place. Instead they traveled from court to court throughout their realm as a means of maintaining control.
6. Havet, x. Dales, 138.
7. Dales, 138.
8. Taylor, I, 291-2.
9. Havet, x.
10. *Ab augusto itaque G. egregie donatus, cum suo metropolitano in Gallias clarus remeavit.* Richer, cited in Havet, x, n.5.
11. Havet, x.
12. Michele Tosi, "Il governo abbaziale di Gerberto a Bobbio," Gerberti Symposium, 98. Olleris, 489. Mann, V, 26.
13. Tosi, 74.
14. Lattin, Letters, 7, n.14.
15. Mathilde Uhlirz, "Die Ottonischen Kaiserprivilegien für das Kloster Bobbio; Gerbert als Abt," Archiv für Urkundenforschung XIII (1935), 441, n.2. Olleris notes that Otto II delayed naming an abbot at Bobbio while Otric was alive. Having refused Otric the archbishopric of Magdeburg, he did not wish to deny him another honor, that of the abbacy of Bobbio. Accordingly Otto did not name Gerbert abbot until after Otric's death on October 7, 981. Olleris, 489. Olleris' reasoning helps pinpoint the time of

Gerbert's appointment, but it does not rule out an earlier date, as proposed by Lattin (and others).

16. J.N.D. Kelly, The Oxford Dictionary of Popes (New York: Oxford University Press, 1986), 136.
17. Williams, Organ in western culture, 284, n.14.
18. John Coulson, "Columbanus," The Saints: A Concise Biographical Dictionary (New York: Guild Press, 1958), 205. Monte Cassino was the place where St. Benedict founded the Benedictine Order. See C. Hugh Lawrence, "Benedict of Nursia, St," The Middle Ages: A Concise Encyclopedia, 50.
19. Regarding the library, see Darlington, "Obscuro," 511 and Beer, 110. Olleris gives a list of the manuscripts found in Bobbio. Olleris, 489-97. As for Bobbio's land holdings, see Darlington, "Obscuro," 512.
20. Darlington, "Obscuro," 512.
21. Ibid.
22. Lattin, Letters, 49.
23. Darlington, "Obscuro," 513.
24. Ibid., 512.
25. For more on two of the despoilers, Petroald and Boso, see Lattin, Letters, 50, n.4 and 51, n.1; Darlington, "Obscuro," 514-5; Mann, V, 27-8.
26. Darlington, "Obscuro," 513.
27. One among this last group was Peter Canevanova, bishop of Pavia and archchancellor to Otto II. When Peter became Pope John XIV in 983, his dislike for Gerbert caused the latter a good deal of trouble over the ten-year period of John's reign. Ibid., 514.
28. Ibid., 515.
29. Mann, V, 32.
30. Trystram, 138-9.
31. Darlington, "Teacher," 457, n.4. See also Tosi, 106.

32. Tosi, 123-4.

33. Ibid., 74.

34. Ibid.

## REIMS: THE POLITICIAN

Gerbert's rout from Bobbio was a source of bitterness for him. But his return to Reims and to Adalbero was a reason for joy. The city for its part welcomed him with open arms, the dearly beloved son now come back, the prodigal son matured by his trials.<sup>1</sup>

In all, Gerbert spent more than twenty years in Reims--most of his adult life, in fact. During this second sojourn he displayed interests different from those of his first stay: interests in secular politics and in ecclesiastical ladder-climbing. During the next years (984-97) these two activities completely overshadowed his role as teacher, though he continued to serve as *scholasticus* (*écolâtre*) at the cathedral school.<sup>2</sup>

At his side in all these activities was Gerbert's friend and mentor Adalbero. The archbishop had a reputation as a reformer (as we have already noted) but he was also deeply involved in politics. He was born of nobility, as were most prelates of that time. He was "an accomplished politician. . . . a born diplomat, easy in the presence of princes,"<sup>3</sup> an "archconniver."<sup>4</sup>

As archbishop of Reims, Adalbero was the most powerful prelate in all of France.<sup>5</sup> Among Gerbert's duties at Reims was that of secretary to this ecclesiastical potentate. "Gerbert's keen intellect composed Adalbero's letters for him, and thus forced a way for its master into the intricate politics of the time."<sup>6</sup> With his return to Reims, Gerbert became deeply embroiled in those politics.<sup>7</sup>

### The Last of the Carolingians

The archbishops of Reims had always taken a prominent part in French politics.<sup>8</sup> As archbishop of Reims and grand chancellor of France, Adalbero owed his first allegiance to the Carolingian king of France, who at the time was Lothaire.<sup>9</sup> But the archbishop also had strong ties to the German Ottonians.<sup>10</sup> His family was from Lorraine,



"one of the states which then made up the monarchy of the kings of Germany."<sup>11</sup> Gerbert too had (since 970) feelings of intense loyalty to the Ottos.

The same event which had brought about a swift reversal of Gerbert's fortunes in Italy now became all-important in his life at Reims. Otto II's death on December 7, 983, which left Gerbert defenseless in Italy, also left Otto's three-year-old son as king.<sup>12</sup>

Needless to say, all the powers that be began jockeying for influence, seeking to take away the toddler's powers or at least to have a share in them. In order to maintain Otto III's position, his elders had to move assertively--and with alacrity. "To Gerbert the empresses<sup>13</sup> entrusted the delicate but urgent task of trying to hold the German ecclesiastics and certain of the nobility steadfast in their fidelity to Otto III."<sup>14</sup>

Gerbert wrote letters to the nobles, both ecclesiastical and lay. Persuaded by Gerbert's pen, the German nobility rallied to Theophanu's side. Encouraged by the vassals' fidelity to her, she assumed the guardianship of Otto III herself, thereby excluding all other contenders.<sup>15</sup>

Both Gerbert and Adalbero were wholly caught up in this political crossfire. "The large number of letters concerned with saving Otto III's throne . . . indicates Gerbert's extreme sensitivity to the fluctuations of political events. Henceforth, political activity claimed too much of his time and attention."<sup>16</sup>

There were other political torrents swirling as well. Relations were becoming increasingly hostile between the Carolingians and the archbishop of Reims.<sup>17</sup> Lothaire had ordered Adalbero to stand trial in 985 for treason, but the trial never came about.<sup>18</sup> When his son Louis V assumed the throne, he prepared new charges against Adalbero, and the archbishop was again summoned to stand trial in May, 987.<sup>19</sup>

However Louis died before the trial could take place. His death produced two results. On the one hand, it removed Adalbero's accuser. On the other hand, it left

the nobles--assembled to try Adalbero--with a new problem: whom to choose as Louis' successor.<sup>20</sup>

It was clear that, as long as a Carolingian was on the throne, the fate of Gerbert and Adalbero was far from secure. Moreover the line of Charlemagne was severely weakened as a result of continued division of power and lack of strong administrative personalities.<sup>21</sup>

#### The First of the Capetians

Enter another figure into this roiling political cauldron. Hugh Capet, duke of France, had long seemed more powerful and more kingly than Lothaire, the Carolingian king. Adalbero and Gerbert had been aware for some time of the need to cultivate favorable relations with Hugh.<sup>22</sup>

It now appeared that the time was ripe for a new French dynasty. Gerbert campaigned mightily; Adalbero provided support. Together they convinced the assembled nobles to reject the Carolingian claim of Lothaire's brother, Duke Charles of Lower Lorraine, in favor of the elective principle of kingship. Henceforth the title of king of France would belong to a new family. Hugh Capet was elected king in the spring of 987.<sup>23</sup>

From this time on, Gerbert had a new role. Heretofore he had been Adalbero's secretary. Now he became royal secretary and "adviser on foreign affairs."<sup>24</sup> The new king was impressed with Gerbert, as previous monarchs had been. Gerbert had gifts from which a newly crowned king could benefit: "political acumen, great learning, broad international interests, and experience in matters Roman, Spanish, Byzantine, and German."<sup>25</sup>

But all was not well. Duke Charles of Lower Lorraine was miffed at being passed over for the kingship. He quietly assembled support for his position. In May, 988, he launched a surprise attack, capturing Laon and its bishop, Ascelin.<sup>26</sup> Gerbert and

Adalbero sent aid to King Hugh in the fall of 988, hoping to dislodge Charles from Laon.<sup>27</sup>

## NOTES

1. Trystram, 151.
2. Havet, xiii. Mann, V, 35.
3. Erdoes, 77.
4. Darlington, "Obscuro," 516.
5. Lattin, Letters, 9.
6. Darlington, "Obscuro," 510.
7. Mann, V, 33.
8. "Sylvester II," John, The Popes, 170.
9. Lothaire was also related to the Ottos.
10. "Sylvester II," John, The Popes, 170. Havet, xiii-xiv.
11. Havet, xiii.
12. Elected German king at Verona in June, 983, Otto III was crowned at Aachen on Christmas of that year. Lattin, Letters, 7.
13. Adelaide, widow of Otto I, and Theophanu, widow of Otto II.
14. Lattin, Letters, 7.
15. Ibid., 8.
16. Ibid.
17. For more on this subject, see Mann, V, 43ff.
18. Lattin, Letters, 9.
19. Ibid. Mann, V, 46.
20. Lattin, Letters, 9.

21. See Mann, V, 35.

22. It was Hugh who had dispersed the group assembled by Lothaire to try Adalbero for treason the first time, in May, 985. Lattin, Letters, 9.

23. Ibid., 9; 143, n.

24. Ibid., 10.

25. Ibid.

26. Ascelin was Adalbero's nephew. Ibid. Riché, Genealogy Table IV.

27. Lattin, Letters, 10. Mann, V, 49.

## REIMS: THE ARCHBISHOP

This feat was as yet unaccomplished when, on January 23, 989, Adalbero died.<sup>1</sup> Gerbert was certain that he would be named the next archbishop. After all, he had all the qualifications: long association with Adalbero had rendered him thoroughly knowledgeable about the administration of affairs--both civil and ecclesiastical--in this important city. Moreover he had been given assurances that he would receive the post.<sup>2</sup>

But for some reason Hugh passed over Gerbert in favor of Arnoul. Arnoul was a natural son of King Lothaire (and thereby nephew to Charles, the Carolingian contender who had been denied the French throne).<sup>3</sup>

Gerbert was bitterly disappointed. Nevertheless his days were filled. First of all, he devoted himself to intellectual pursuits, astronomy in particular.<sup>4</sup> Secondly, he was engaged by Arnoul to be the archbishop's secretary--to Gerbert's surprise, no doubt.<sup>5</sup>

### Arnoul's Treachery

Gerbert sensed, however, that all was not so calm as it might have been. But even he, astute politician that he was, was not prepared for the blow Arnoul was to deliver to the city. On a September night in 989, Arnoul caused the gates of Reims to be opened to Duke Charles of Lower Lorraine and his band of soldiers. He had plotted carefully, causing the attack to coincide with a council which he had convened; hence Charles's prisoners included members of the lay and ecclesiastical nobility.<sup>6</sup>

Among those taken prisoner that night was Gerbert. He wrote in a letter, "Therefore, since I was involved in affairs of state, I fell with the state, just as in the betrayal of our city I was the greatest part of the booty."<sup>7</sup>

It appears that Gerbert was not incarcerated in Laon, however, but was ordered by Charles to assume the civil and ecclesiastical administration of Reims.<sup>8</sup> But if not in jail in Laon, Gerbert was a virtual prisoner in his own city, subject to constant

surveillance. He managed finally to escape to Senlis where a synod of bishops was assembled under King Hugh. Gerbert recounted the story of Arnoul's treachery, upon which the assembled bishops pronounced the captors of Reims excommunicated.<sup>9</sup>

In March, 991, Bishop Ascelin of Laon succeeded by trickery in bringing about the capture and imprisonment of Charles and his nephew Arnoul.<sup>10</sup>

#### Negotiations and Acrimony

In June, 991, a council of French bishops was convened at St.-Basle-de-Verzy. The bishops assembled at St.-Basle should, properly speaking, have let the pope decide the matter of Arnoul.<sup>11</sup> But John XV had been indecisive and had taken no action.<sup>12</sup>

The French clerics were of two minds: some pointed out that canon law clearly stated that grave matters, such as the deposition of an archbishop, were issues for Rome to decide, "no matter how inadequate the pope of the day might seem."<sup>13</sup> Others said no; the French church could deal with such cases itself. It was Gerbert who provided the ideological underpinning of this latter opinion.<sup>14</sup> The upshot of the deliberations was that Arnoul was forced to resign his office, and almost immediately afterward, Gerbert was elected and consecrated archbishop.<sup>15</sup>

When John XV heard of the proceedings in Reims, however, he "rather unexpectedly revealed himself a firm upholder of the rights of the papacy."<sup>16</sup> He sent Abbot Leo of Rome to serve as papal legate. On Leo's return to Rome, the pope invited King Hugh and his son Robert to Rome, but they refused.<sup>17</sup> The pope for his part declined the invitation of King Hugh to travel to France.<sup>18</sup>

Matters reached a new level of tension when Leo went to Reims a second time, in 995. There he held two councils, both of which condemned Gerbert.<sup>19</sup> Gerbert realized that his position was utterly precarious unless sanctioned by the pope. Hence in an attempt to justify himself, he published the Acts of the Council of St.-Basle--four years

after that council had been convened. These Acts show Gerbert at his most acrimonious. He denounced Pope John XV as "an enemy of the human race."<sup>20</sup> He referred to "criminal and venal Rome" and pronounced "a dreadful indictment of the tenth-century papacy."<sup>21</sup>

### Bases for the Legend of Gerbert

#### Acts of the Council of St.-Basle

These Acts would prove to be important as one of the bases on which the legend of Gerbert was founded in the century after his death. Massimo Oldoni, a scholar who has devoted a great deal of study to the legend of Gerbert, writes, "Of such a man, one has either admiration or fear. The legend of Gerbert in the eleventh century is the story of an unaccepted fear." And since Gerbert was also powerful, "his detractors kept silence, awaiting the opportune moment to speak."<sup>22</sup>

#### Leo

Leo also proved to be vituperative. Showing how little he understood Gerbert and his thinking, Leo opposed Gerbert's elevation to the archbishopric of Reims saying that "the vicars of Peter and their disciples will not have for their teacher a Plato, a Virgil, a Terence or any other of that herd of philosophers."<sup>23</sup> In other words, Gerbert's "classical learning made him out of temper with his own times . . . [as] revealed by the letter of the papal legate. It was Gerbert's humanism and nonconformity to medieval patterns that gave rise after his death to the legends of his compact with the devil."<sup>24</sup> And these legends, completed by William of Malmesbury, were part of the fabric of his reputation as an organbuilder.<sup>25</sup>

### Gerbert's Excommunication

Following the second council in 995, Leo made a hasty return to Rome, frustrated by the indecisiveness of the two recent meetings and scandalized by the acrimonious tone of the bishops at St.-Basle, as reported in Gerbert's Acts.<sup>26</sup> Safely out



of reach of possible physical interference by King Hugh, Leo declared multiple excommunications: Hugh, Robert and the author of the Acts (Gerbert) were "separated from the Church by Pope John."<sup>27</sup>

Gerbert protested his excommunication vigorously. All the while he continued to discharge his duties as archbishop. He was a capable administrator and zealous in the cause of uprightness.<sup>28</sup> It was said of him that he was "the first bishop of France to administer his see with wisdom and compassion."<sup>29</sup>

#### Otto III and Gerbert

Once the papal legate (Leo) had left France, it was decided to hold another council, this time at Ingelheim.<sup>30</sup> The main purpose of the synod was to prepare for Otto III's departure for Rome, but the assembled bishops agreed to discuss the Reims dispute also.<sup>31</sup>

The synod of Ingelheim convened in February, 996. Following the meeting, Otto left for Rome. He was accompanied by a number of bishops, his sister Sophia and, most probably, Gerbert.<sup>32</sup>

Hence both Gerbert and Otto had their reasons for going to Rome: Gerbert to justify himself before the pope;<sup>33</sup> Otto to have himself crowned emperor and to quell a Roman uprising.<sup>34</sup>

But it was not John XV who performed the services which they sought, for he died in April, 996. Otto knew that he could waste no time in choosing a successor to the recently deceased pope. Accordingly he named his cousin Bruno of Carinthia as pope. Bruno ascended the throne of Peter as Gregory V on May 3, 996. It was the first time a non-Italian had ever been chosen pope.<sup>35</sup> It was not the last; the precedent would be continued with Gregory's successor.

Gerbert had reason to hope that, with the accession of an Ottonian pope, he would be successful in his quest to obtain approval of his claim to be archbishop of

Reims. After all, he had been on intimate terms with the Ottos since 970. Enroute to Rome, he had formed secure bonds of friendship with Otto III<sup>36</sup> who, like his grandfather and father before him, was completely taken with "Gerbert's charm, knowledge, and enthusiasm for education."<sup>37</sup> The entourage arrived at Rome in May, 996. Here Gerbert would plead his case before the papacy--an institution which he had criticized most harshly in the Acts of the Council of St.-Basle.

While in Rome, Gerbert witnessed the crowning of the sixteen-year-old Otto as emperor.<sup>38</sup> It must have been a moving moment for Gerbert, who had been present at the marriage of Otto's parents, Otto II and Theophanu, and at their coronation as emperor and empress the same day.<sup>39</sup> Moreover the ascent of Otto brought a new role for Gerbert. Having been secretary to the archbishops of Reims (Adalbero and Arnoul) and the king of France (Hugh Capet), he was now secretary to the emperor, Otto III.<sup>40</sup>

But Gerbert's main reason for going to Rome met with no success. Gregory may have been the emperor Otto's cousin, but he was the apostle Peter's successor. The office of pope demanded that he declare Arnoul the rightful archbishop of Reims.<sup>41</sup>

This Gregory did in actions and in words. He himself consecrated a new bishop, Herluin, rather than allow Gerbert to consecrate him. Thus he showed his disapproval of Gerbert's claim to the archbishopric of Reims.<sup>42</sup> Furthermore, in the bull accompanying his consecration of Herluin, Gregory pronounced Gerbert an "invader."<sup>43</sup>

#### Death of Hugh Capet

Gerbert returned to Reims empty-handed. He was able to maintain his position as long as he had the support of King Hugh. But Hugh died on October 24, 996.<sup>44</sup> Gerbert might have hoped for support from Robert, his former pupil who succeeded his father as king. Such advocacy was not forthcoming, however. Robert had his own political battles to fight with the papacy. He was in an irregular marriage and he

feared that, if he supported Gerbert against the pope, Rome would be unlikely to approve his marriage.<sup>45</sup>

The death of Hugh at this critical juncture for Gerbert once again shows how the death of a royal patron undercut his position; it left him without "a powerful and devoted protector."<sup>46</sup>

Further words of condemnation from the papacy ensued. At a synod held in Pavia in February, 997, the pope declared that all those bishops who had participated in the removal of Arnoul from the see of Reims were relieved of their offices.<sup>47</sup>

The popes--John XV and Gregory V--had spoken repeatedly. After six years of living in the midst of turmoil, there was no hope of Gerbert's gaining papal approval for his claim to the see of Reims. Heretofore he could count on the support of the French bishops. But that too began to evaporate as they realized, following the pronouncement from Pavia, that they could "be charged with associating with an intruder archbishop."<sup>48</sup> Gerbert became a man alone. "As he was under the ban, his own clerics . . . shunned him, his servants refused to obey him, and his soldiers mutinied. He had been reduced to an outcast, forced to eat his meals alone."<sup>49</sup>

Gerbert did not yet abandon all hope, though he could see that matters were headed for an impasse. Using all his powers of persuasion, he wrote Archbishop Siguin of Sens, urging him not to regard too rigidly the terms of the synod of Pavia.<sup>50</sup> He also wrote to Empress Adelaide, grandmother of Otto III, for aid.<sup>51</sup>

Gerbert's troubles took their toll on his health. He related how he had been sick for nearly a year. "One of his main troubles was rheumatism, the result of long years spent in badly heated stone buildings."<sup>52</sup>

All Gerbert's appeals had been exhausted. Every favor, personal or political, which he could call in had been spent. Every charm, every philosophical argument had been used, all to no avail. Gerbert knew his cause was lost forever when he

began to hear rumors that King Robert was going to obtain, through the intervention of the papal legate Leo, the recognition of his marriage in return for the restoration of Arnoul to the see of Reims.<sup>53</sup>

## NOTES

1. Lattin, Letters, 10. Mann, V, 49.
2. Lattin, Letters, 11.
3. The reason for Hugh's choice is not clear. He may not have been aware of Arnoul's support for Charles. Or he may have been hoping that, given a position of importance, Arnoul would withdraw his support from Charles, or that Charles, in order to further his nephew's ecclesiastical career, would offer to renounce his claims to the throne. Ibid., 10-1.
4. Ibid., 11; 189ff.
5. Ibid., 11. Mann, V, 51.
6. Lattin, Letters, 11.
7. This last is a quotation from Virgil's Aeneid. Ibid., 200-1.
8. Ibid., 11-2.
9. Ibid., 12.
10. Ibid.
11. "Sylvester II," John, The Popes, 173.
12. Adherents of Arnoul and Duke Charles had reached Rome almost at the same time as letters from Gerbert and his supporters; consequently the pope delayed rendering judgement. Lattin, Letters, 12; 216-9.
13. "Sylvester II," John, The Popes, 173. Among this group was Abbo of Fleury. Kempf et al., 298.
14. "Sylvester II," John, The Popes, 173.
15. Lattin, Letters, 12; 222-4.
16. "Sylvester II," John, The Popes, 173.
17. Lattin, Letters, 12. See Olleris, 243.

18. Lattin, Letters, 12-3.
19. Ibid., 13.
20. Olleris, cited in Lattin, Letters, 13, n.19.
21. Kempf et al., 298. See Olleris, 173-236, for the entire text of the Acts. See Lattin, Letters, 236-59, for a letter which summarizes the Acts.
22. Oldoni, "Gerberto e la sua storia," I, 681.
23. Darlington, "Teacher," 459 and n.11. See Olleris, 237.
24. Darlington, "Teacher," 466.
25. Oldoni finds much similarity between Leo and Beno, the chief perpetrator of the Gerbert legend in the eleventh century. Oldoni, "Gerberto e la sua storia," I, 680.
26. Lattin, Letters, 13.
27. Ibid.
28. Ibid., 14.
29. Erdoes, 134. See also Mann, V, 55-6.
30. Richer, cited in Riché, 164.
31. Lattin, Letters, 259, n.
32. Riché, 164-5. Sources differ on exactly when Gerbert met Otto III. Trystram seems to think they met in Rome. Trystram, 323. Lattin thinks they met at Pavia after Gerbert had left Rome. Lattin, Letters, 14.
33. Riché, 164.
34. Trystram, 323.
35. Riché, 165.
36. Ibid.
37. Lattin, Letters, 14.

38. The coronation took place on the feast of the Ascension, May 21, 996. Riché, 166. Erdoes, 178.
39. Riché, 33.
40. Ibid., 166.
41. Lattin, Letters, 14.
42. Herluin had traveled to Rome to be consecrated by the pope because he feared that, were he to be consecrated by Gerbert, his consecration would not be recognized as valid. Ibid.
43. Ibid. Jaffé, 3866. Riché, 167. This language matches that of the chronicler Thietmar, bishop of Merseburg, who declared that Gerbert was archbishop of Reims *iniuste* (unjustly). Thietmar, VI, 100.
44. Erdoes, 134. Riché, 168.
45. As it turned out, Rome withheld approval even though Robert did not support Gerbert. Erdoes, 134-5.
46. Leflon, 284.
47. Riché, 169. Jaffé, 3875. Lattin says the synod was held in January. Lattin, Letters, 15.
48. Lattin, Letters, 15.
49. Erdoes, 135. See Riché, 170, citing Havet.
50. Lattin, Letters, 15. Riché, 171-3.
51. Lattin, Letters, 279-80. Riché, 171.
52. Erdoes, 135.
53. Riché, 174.

## GERMANY AND ITALY

Gerbert was alone. With nowhere to turn in Reims, he made a hasty departure, apparently at the beginning of April, 997.<sup>1</sup> Fleeing in the dead of night, he left behind everything: his see, his role, his life, his goods and books, and the people dear to him.<sup>2</sup> If the departure from Bobbio was bitter, this flight was triply so. In 984 he could enjoy the prospect of a number of years of teaching in his school in Reims. This time, with his life behind him (or so it seemed), Gerbert was a man forlorn.

Gerbert's flight from Reims was truly the nadir of his life. He was old, at least by medieval standards.<sup>3</sup> And he was sick. He wrote to a friend:

Old age threatens me with death. Pleurisy oppresses my lungs, my ears tingle, my eyes run water, my whole frame seems to be pierced with needles. All this year have I been in bed, stricken down with pain. Scarcely have I risen from my couch when I find myself assailed by an intermittent fever.<sup>4</sup>

For years afterward, he would not cease to long and hope for a return to "his" archbishopric. Such hope was vain, however. Not only would he not regain the see of Reims, but he would never again set foot in his native France.

Leaving Reims, Gerbert went to Germany. Citing the numerous favors he had performed for the Ottonians, Gerbert hoped to find refuge at the court of Otto III. Fortunately he was not disappointed. Otto welcomed him warmly. He gave Gerbert the estate of Sasbach, a short distance from Strasbourg, where he could regain his peace and his health.<sup>5</sup>

In a now-famous letter addressed to "Gerbert, most skilled of masters and laureate of the three branches of philosophy,"<sup>6</sup> Otto invited Gerbert to be his teacher and counselor. Such an offer was a double thrill for Gerbert: as teacher, he could influence



the brilliant mind of the young charismatic emperor; as counselor, he could once again indulge his political bent.

Gerbert seems to have moved around a good bit while in Germany.<sup>7</sup>

Sometimes he was at Otto's side; other times they were apart (as Gerbert's letters to the emperor bear out).

When Otto was not involved in military campaigns to keep the peoples on the neighboring borders in check, he and Gerbert held long conversations. They read Boethius and debated the finer points of philosophy.<sup>8</sup> In the heat of the summer, when Otto was preparing for yet another military campaign, he engaged in a discussion of Aristotle and other ancient philosophers, asking his court sages for an explanation of the passages cited. When they could make him no answer, he ordered Gerbert to write a treatise. This was the origin of Gerbert's tract *De rationali et ratione uti*. Gerbert was too sick to undertake the project just then.<sup>9</sup> Consequently it was not until the early months of the following year that the pamphlet was completed.<sup>10</sup>

#### The Magdeburg Clock

A portion of Gerbert's stay in Germany was spent in Magdeburg, where Otto was staying during the month of June, 997. This we know from a contemporary of Gerbert, Thietmar of Merseburg.<sup>11</sup> Thietmar was an historian and bishop of Merseburg, but he spent some time in Magdeburg.<sup>12</sup> In his brief comments on Gerbert, Thietmar reports that the latter knew perfectly how to observe the course of the stars and surpassed all his contemporaries in his knowledge of the most diverse disciplines.<sup>13</sup> While conversing with Otto by day, Thietmar reports,<sup>14</sup> Gerbert constructed, in Magdeburg, an *horologium*, which one could set in place to observe the polestar with a tube. Its purpose was to tell time during the night.<sup>15</sup>

And what type of instrument was this *horologium*? In the Middle Ages, the word *horologium* could indicate any one of three different types of timepieces: a

sundial,<sup>16</sup> a nocturlabe (which is most often designated as *horologium noctis*--an horologe of the night--or simply *horologium*) and a clepsydra or water clock.<sup>17</sup> Says Poule, "Gerbert is . . . credited by Thietmar of Merseburg with having fabricated a nocturlabe in Magdeburg."<sup>18</sup> In this opinion Poule differs from other sources, who say that the Magdeburg construction may have been an astrolabe<sup>19</sup> or a sundial.<sup>20</sup> Of these three divergent opinions, we are inclined towards that of Poule because he bases his conclusion on manuscript illustrations of such an instrument--illustrations which he himself has examined.<sup>21</sup>

#### *De Rationali et Ratione Uti*

By the end of 997 or certainly by the beginning of 998, Gerbert went to Italy to join Otto III.<sup>22</sup> Enroute across the Alps, despite the rigors of the journey, his sickness and the natural preoccupations of his spirit,<sup>23</sup> Gerbert composed the tract which Otto had requested some months earlier in Germany. The *De rationali* is the only philosophical work which Gerbert has left us.<sup>24</sup> The introduction contains some of his thoughts regarding empire--a "universal empire which would equal at least that of Byzantium."<sup>25</sup>

Gerbert and Otto enjoyed each other's company. "Their mutual admiration was boundless."<sup>26</sup> Gerbert was Aristotle to Otto's Alexander.<sup>27</sup> "It was a strange relationship . . . an odd marriage of coolness with fire, age with youth, realism with unreality."<sup>28</sup>

Gerbert was relatively content with his life at this point. But the siren call of Reims was not yet silenced in his heart. Despite the fact that he had been gone from Reims for almost a year (997-8) and despite the fact that he had headed the archdiocese of Reims irregularly for the six years before that, he nevertheless entertained hopes that the matter might be resolved in his favor.<sup>29</sup>

About this time Arnoul, the deposed archbishop of Reims, was released from prison.<sup>30</sup> This eventuality most certainly dashed the hopes of Gerbert. And it created a real problem for the two Saxon cousins, Emperor Otto and Pope Gregory: what to do with Gerbert? Rome refused to recognize Gerbert's claim to be archbishop of Reims, and Gerbert refused to relinquish it. The Ottonian house, indebted to Gerbert for nearly three decades of loyal service and devotion, found itself between the proverbial rock and hard place: if it recognized Gerbert's claim, there would be two archbishops of Reims.<sup>31</sup> But if Gerbert did not win back the see of Reims, he would be offended. The Reims matter, which had festered all during the decade of the 990s, would simply not resolve itself. What to do? This is the question which perplexed both Gregory and Otto in the early months of 998 when they found themselves enroute to Rome to settle another problem, one more pressing than the Reims irregularity.

#### Rome in 998

To establish a background for the struggle which was taking place in 997-8, it is necessary to give a brief history of the conflict which had been going on in Rome for some time. Rome was ruled by a Saxon emperor (currently Otto III). The royal authority in Rome was maintained by the pope (who depended on the emperor to support his position). The Roman nobles resented the presence of the German ruler--and his appointee, the pope. Accordingly they were constantly looking for opportunities to assert themselves. The Crescentius family "represented the tradition of independence, as far as this had been possible, since the advent of the Saxon kings in Italy."<sup>32</sup>

In the late 990s, the leader of the Roman nobles was one John Crescentius. He had been stirring up unrest and naming his own choice for the see of Peter for over twenty-five years.<sup>33</sup> When John XV was elected in 985, Crescentius was the real power in Rome.<sup>34</sup>

John XV was succeeded by Gregory V, Otto's cousin, in 996. But Gregory "was no match for such an experienced infighter as Crescentius."<sup>35</sup> He was forced to flee to northern Italy. Crescentius then took the audacious step (once again) of naming an antipope. His choice fell on John Philagathos.<sup>36</sup>

The Greek John Philagathos was hardly a man unknown to Otto and his family. Godfather to the young emperor,<sup>37</sup> he had also been Otto's beloved teacher. Furthermore it was he who had been sent by Empress Theophanu to search for a Byzantine princess as a bride for Otto.<sup>38</sup>

John let himself be seduced by Crescentius' scheme because he saw in it a chance "to further an ambitious plan of his--no less than restoring Rome to the Byzantine Empire and placing the Catholic church under the supremacy of the patriarch in Constantinople."<sup>39</sup> Accordingly in the spring of 997, John Philagathos became John XVI. With Gregory in exile in the north of Italy, John ruled the church; Crescentius and his Romans provided the secular support.

In February, 998, Otto and Gregory descended on Rome. As the emperor's army approached, Crescentius barricaded himself inside the castle of Sant'Angelo, and John fled the city.<sup>40</sup> Neither escaped punishment, however. John XVI

was recognized, manacled, and dragged to Rome. . . . His eyes were gouged out, his nose, lips, and ears were sliced off, and his tongue was torn out by the root. He was then placed backward upon a miserable donkey, its tail was placed in his hand, and his head was crowned with a comical animal mask whose ears were sticking up. Thus he was paraded through the town to be pelted with ordure--a hideous example to other would-be traitors. He was then thrown into a dungeon in spite of his crippling wounds.<sup>41</sup>

This punishment was inflicted on John by an emperor who is described as Otto the sweet, Otto the friend of letters and philosophy, Otto who listened without ceasing to the saints of the church, Otto who wanted to elevate the western empire far

above all others. Not only did he display a hideous barbarism on this occasion, but he took great joy in it.<sup>42</sup> Otto exacted such a price, it is thought, because John had been his intimate, making his treason all the more reprehensible.<sup>43</sup>

Where was Gerbert during this time? Did he witness the terrible cruelty inflicted on John Philagathos? Some say he went only to the gates of Rome but no farther.<sup>44</sup> Others say that he watched the reprisals.<sup>45</sup> Whether he was there cannot be said with certainty. It does seem safe to say, however, that he was horrified at the proceedings. All his life, he was opposed to acts of violence and base vengeance.<sup>46</sup>

Following the mutilation of John, Otto was remorseful. He sent an archbishop--doubtless Gerbert--to Nil, the saintly friend of John, to plead forgiveness. But Nil was unrelenting. He reproved Otto severely: "As you had no pity on him who was delivered into your hands, so the heavenly Father will likewise show you no mercy for your sins."<sup>47</sup> This censure preoccupied Otto from that time on, and seems to account for the penances which he imposed on himself for the rest of his life.<sup>48</sup>

#### Reims Question Resolved

Before recounting the events of the spring of 998 in Rome, we had left open the question of Gerbert and the diocese of Reims. Sometime in the course of this bloody spring, the two young Saxon cousins (and Gerbert?) hit on a brilliant solution to this insoluble problem. They persuaded the archbishop of Ravenna, John, to retire to a monastery and vacate his see.<sup>49</sup>

On April 28, 998, Otto had John Crescentius beheaded.<sup>50</sup> The same day, "in a suggestive coincidence,"<sup>51</sup> Gregory signed a bull instituting Gerbert as archbishop of Ravenna.<sup>52</sup>

Gerbert, having received a compensation at least equal to that of the archbishopric of Reims, would be content at last to relinquish his claim to the French see.<sup>53</sup>

And this time, he was archbishop with Rome's approval.

## NOTES

1. Lattin, Letters, 15.
2. Trystram, 308.
3. In 997 Gerbert would have been in his early fifties.
4. Mann, V, 59. The letter is addressed to Adelaide, but opinions differ as to whether it was Adelaide, queen of France or Adelaide, empress of Italy and Germany. Ibid. Lattin, Letters, 272-3; 273, n. and n.1.
5. Lattin, Letters, 15. Mann, V, 60. Sasbach is located about fifty kilometers south of Strasbourg, on the right bank of the Rhine. Riché, 184.
6. *Girberto dominorum peritissimo atque tribus philosophiae partibus laureato*. Havet, 171. The date of the letter is disputed. Some sources place it as early as 995 (for example, Bubnov, 105); others as late as the last months of 997 (for instance, Havet, 171, n.5).
7. Besides Sasbach, Gerbert was at Reichenau. Lattin, Letters, 297-9.
8. Erdoes, 175.
9. This sickness was aggravated, no doubt, by the continued intransigence of Rome in the matter of the Reims archbishopric. Olleris, clviii-clix.
10. Ibid., clix.
11. Thietmar died in 1018, fifteen years after Gerbert.
12. Leflon, 297.
13. Riché, 183, citing Thietmar.
14. *Et cum eo diu conversatus*. Thietmar, VI, 100.
15. Riché, 183. Poulle, 607. Poulle notes that this documentation, relatively precise and close in time to Gerbert, is often overlooked by scholars.
16. Gerbert himself uses the word *horologium* for the sundials which he constructed. Poulle, 599.

17. Ibid.
18. Ibid.
19. Williams, Organ in western culture, 284. Bubnov, 382, n.30. Silvio A. Bedini, "Sylvester II, Pope," Dictionary of the Middle Ages, XI, 553. See Poulle, 607.
20. Olleris, xl. Williams, Organ in western culture, 284. Bedini, "Sylvester II," 553.
21. Poulle, 607 and n.19.
22. Lattin, Letters, 16. Riché, 190. Trystram, 327.
23. Olleris, clxi.
24. Trystram, 327.
25. Ibid.
26. Erdoes, 175.
27. Ibid., 174. ———
28. Ibid., 176.
29. Part of Gerbert's intent in seeking the archbishopric of Reims again was to be able to unite king and emperor (Robert of France and Otto of Germany and Italy) for the good of Christendom. Leflon, 321.
30. Arnoul had been imprisoned following his capture in March, 991. The intervention of Abbo of Fleury and the good graces of King Robert brought about his release. Picavet, 66 and n.6. Havet, xxviii and n.9. (Both these sources cite Richer.) See also Trystram, 328. Lattin maintains that the date given by Picavet and Havet (November, 997) is too early. Arnoul's release had been falsely reported and did not take place until early 998. Lattin, Letters, 290, nn.1-2.
31. Trystram, 331.
32. Louis Duchesne, The Beginnings of the Temporal Sovereignty of the Popes, A.D. 754-1073 (1908), reprint, trans. Arnold Harris Mathew (New York: Burt Franklin, 1972), 245.



33. In 973, following the death of Otto I, Crescentius named Boniface VII antipope. Otto II routed Boniface but, when Otto died in 983, Boniface reappeared. See "Benedict VI 973-974" and "John XIV 983-984," John, The Popes, 168-9.
34. It was this pope who first declared Rome's authority in the Reims matter. One detail of John XV's administration, his encouragement of Ethelred II of England to make an alliance with Duke Richard of Normandy (see "John XV 985-996," John, The Popes, 169) mistakenly found its way into William of Malmesbury's first account of Gerbert. In other words, William mistook Gerbert for John XV. See the legend of Gerbert below for more on this subject.
35. Erdoes, 180.
36. Ibid.
37. Ibid.
38. Ibid. The wedding never took place. Otto died unmarried. See also Picavet, 66.
39. Erdoes, 180.
40. Ibid., 181. Trystram, 328. Jaffé, p.495.
41. Erdoes, 181. This matter is reported in Thietmar of Merseburg, among other places. It happened sometime in March, 998. Jaffé, p.495. Olleris, clxii. Leflon, 333. Picavet, 66-7. John XVI did not die from his wounds. He lived fifteen more years, dying in Germany in 1013. Jaffé, p.496.
42. Trystram, 329.
43. Erdoes, 181.
44. Ibid., 182.
45. Riché, 193. Trystram, 329.
46. Trystram, 330.
47. Ibid. Riché, 192-3. Olleris, clxii. See also Erdoes, 183.
48. Erdoes, 183. Trystram, 330.

49. John was simply a victim of Gerbert's ambition, according to one of Gerbert's 19th-century critics who displays a severe bias against him. Gfrörer, cited in Olleris, clxii, n.1.
50. Leflon, 330. Picavet, 67. Olleris, clxii. "Sylvester II," John, The Popes, 170. Lattin, Letters, 16.
51. Leflon, 330.
52. Olleris, clxii. Jaffé, 3883: *Gerberto, archiepiscopo Ravenmati, pallii usum concedit.*
53. Leflon, 330-1.

## RAVENNA

Next to Ravenna and her sister cities in north Italy, Reims seemed like a mere village.<sup>1</sup> This important metropolis, located on the Adriatic, had maintained bonds with Byzantium;<sup>2</sup> everywhere in the city, the Greek influence was evident. Moreover Ravenna was important to the Ottonian Empire: it was a critical link between Rome and Germany, the two extreme points of the far-flung empire which Otto governed, and his ancestors before him.<sup>3</sup>

After Rome, Ravenna was first in importance.<sup>4</sup> Thus Gerbert had gone from being the most powerful prelate in Gaul (though irregular in status) to occupying the hierarchical position in Italy second only to that of the pope.<sup>5</sup>

Though duly recognized by Rome and supported by the emperor, Gerbert was nonetheless a French primate in an Italian city, Ravenna's first non-Italian archbishop.<sup>6</sup> This circumstance caused him some discomfort. Gerbert was surrounded by enemies<sup>7</sup>--he who since his Bobbio days had had nothing good to say about Italians.<sup>8</sup>

Early in his administration, in September, 998, Gerbert convened a synod to deal with abuses in his archdiocese.<sup>9</sup> With the emperor present, Gerbert declared an end to simony, that is, the practice of selling ecclesiastical services such as the Eucharist. Furthermore Gerbert declared that, if an abbot or bishop alienated any goods belonging to the abbey or the diocese, those goods were to revert to the institution following the death of the prelate.<sup>10</sup>

This latter, the practice of alienating the goods of an institution, was the very issue which had caused Gerbert such grief in Bobbio. In his short unhappy stay there he had been unable, try as he might, to effect a remedy. Now after years of vain demands, Gerbert received full satisfaction. The abuses from which he had suffered were formally condemned by the sovereign authority; the inalienable goods which he had been unable to

reclaim while at Bobbio were to return to the monastery, to the grand confusion of those who had seized them.<sup>11</sup>

In actual fact Gerbert still held the title of abbot of Bobbio.<sup>12</sup> Throughout the years Gerbert had maintained ties with the monastery. He received monks from there, wrote letters to them, advised them. He helped preserve and distribute works from the rich library there.<sup>13</sup>

### Dreaming of Empire

Already in the *De rationali*, there were foreshadowings of the dreams entertained by Gerbert and Otto, "dreams for a completely revived 'Roman' Empire."<sup>14</sup> "Ours, ours is the Roman Empire," Gerbert wrote in his preface. "Italy, . . . Lorraine and Germany . . . offer their resources, and even the strong kingdoms of the Slavs are not lacking to us."<sup>15</sup> Now in his relatively placid days as archbishop of Ravenna,<sup>16</sup> sustained by the close presence of his secular protector, Gerbert began to dream once more of a revived empire.<sup>17</sup> Otto was worthy of the name emperor; in fact he was more conscious than any monarch since Charlemagne of the duties of empire.<sup>18</sup>

But what could Gerbert do for the moment? He was only the archbishop of Ravenna. It was a powerful post, but it was not a position from which to build an empire.<sup>19</sup> Moreover he had no reason to aspire to greater things. He was in his mid-fifties, weakened by care and sickness.<sup>20</sup> And the only post in Italy higher than the one he held--the chair of Peter--was occupied by a young healthy German.<sup>21</sup>

But then lightning struck. Gregory died on February 18, 999.<sup>22</sup> Rumors abounded that he was poisoned--and the reports were not groundless. He was a German pope imposed by the German emperor.<sup>23</sup> He had surrounded himself with Germans in his curia, a move which the Romans viewed as an insult to them. He was "hotheaded, impatient, and grimly determined."<sup>24</sup> Finally, the Romans had not forgotten his and Otto's cruelty towards Crescentius, one of their own.<sup>25</sup>

Otto lost no time. He hastened to Rome, arriving there on March 29, 999. He had to act fast to prevent the election of yet another antipope. Gerbert traveled to Rome also to "consult" with the emperor. The consultations lasted only a few days. On April 2, Palm Sunday, Otto announced his choice as successor to Gregory V.<sup>26</sup> The next pope would be his mentor and political counsel, Gerbert, the peasant of Aurillac.

## NOTES

1. Trystram, 334.
2. Ibid., 334-5.
3. Leflon, 332.
4. At one time, Ravenna had attempted to replace Rome as the papal seat. Erdoes, 184.
5. Ibid.
6. Ibid.
7. Ibid.
8. See Trystram, 333.
9. Sources are not in agreement on where this synod was held. Trystram says it took place in Ravenna. Trystram, 341. Leflon says it was held at Pavia and the acts forthcoming were called the Capitulary of Pavia. Leflon, 337.
10. Trystram, 341. Mann, V, 62-3; 37, n.4.
11. Leflon, 338. Mann, V, 37.
12. Gerbert was abbot until 998. Tosi, 74.
13. Gerbert allowed Petroald to govern the abbey by delegation. Nevertheless he did not deny himself the pleasure of going to Bobbio to be received with full abbatial honors. Trystram, 339.
14. "Gregory V 996-999," John, The Popes, 169. Mann cites Lot (Les derniers Carolingiens):

"At the close of the tenth century, the bishops and some few learned clerics, the only ones who had any political capacity, did not see in the domination of the Othos a German empire, but the continuation pure and simple of the Christian Roman empire founded by Constantine."  
Mann, V, 41, n.3.

15. Lattin, Letters, 298. See Trystram, 327.

16. Trystram, 343.

17. Ibid., 345.

18. Ibid.

19. Ibid., 346.

20. Erdoes, 184.

21. Gregory was in his late twenties.

22. "Gregory V," John, The Popes, 170.

23. Trystram, 346.

24. Erdoes, 180.

25. Trystram, 346.

26. Riché, 202.

## ROME

Gregory V had been the first German pope. His immediate successor, Gerbert, was the first French pope. Following his election on Palm Sunday, Gerbert was consecrated in St. Peter's Basilica on Easter Sunday, April 9, 999.<sup>1</sup>

### "A Pope Too Wise, An Emperor Too Young"<sup>2</sup>

Incredible as it might seem, Otto and Gerbert were now poised to realize their grandiose dreams of empire. To symbolize the nature of the partnership which they envisioned, Gerbert chose the name Sylvester II to indicate that "Otto was the new Constantine and he himself the new Sylvester, co-rulers of the new universal empire, two bodies with one single heart. Together they would rule the world in perfect harmony as God's vice-regents, with the holy and imperial city as its center."<sup>3</sup>

Gerbert no longer felt ill and old. With renewed youth and vigor, he threw himself into the task, once again, of reforming the church.<sup>4</sup>

### "Gerbert Who Is Also Sylvester"<sup>5</sup>

Though the legend of Gerbert tarnished his name, history has generally evaluated the papacy of Gerbert of Aurillac in a favorable light. He was "perhaps, as a man of intellect, if not as a prelate and a statesman, the greatest pontiff who ruled the Church from the time of Gregory the Great to that of St. Gregory VII."<sup>6</sup> Durant says that, following Gerbert's death, the decay of the papacy resumed.<sup>7</sup> Mann, writing his history of the medieval popes, expresses the same sentiment: "The pen instinctively lingers round the name of Gerbert, and dreads to think what it has to record when it leaves him."<sup>8</sup>

Gerbert's papacy gave further testimony of his universality. He presided along with the Ottonians "over the twilight of the old pagan gods. The years around Anno



Domini 1000 saw the kings of Denmark, Norway, Sweden, Poland, and Hungary accept the Christian faith."<sup>9</sup>

In some quarters, Gerbert's tenure is regarded as a light in the midst of deep darkness. "Gerbert in Rome is like a solitary torch in the darkness of the night. The century of grossest ignorance closed strangely enough with the appearance of a renowned genius."<sup>10</sup>

Once in the chair of Peter, Gerbert showed himself "one of the most intransigent defenders of the papacy for many years."<sup>11</sup> One of his first papal acts was to declare Arnoul the rightful archbishop of Reims. What Gerbert, as would-be archbishop of Reims, "had declared to be wicked and invalid, he had unhesitatingly done as Pope."<sup>12</sup>

As pontiff, Gerbert was "an authoritarian reformist, denouncing nepotism and simony among the clergy and demanding celibacy."<sup>13</sup>

The reforming monks connected with the abbey of Cluny had taken the lead in denouncing simony. . . . Now Sylvester brought the authority of the Apostolic See to bear against it. His ideas were more or less those of the Gregorian reform party<sup>14</sup> two generations later, but the time was not yet ripe for such a campaign and the pope's intentions came to nothing.<sup>15</sup>

The reforms of Gregory VII, foreshadowed by Gerbert, would come to play a part in the legend which grew up around Gerbert, beginning in the eleventh century.

#### Birth of a Millenium: *L'An Mil*

As the year 1000 approached, people grew increasingly nervous. Their anxiety was not assuaged by the thought of the man who occupied the throne of Peter. Many Romans feared that the coming of the new millenium on New Year's Eve, 999

would reveal Gerbert in his true shape of the devil's familiar. . . . Did he not voice disbelief in the imminent end of the world? Had he not introduced evil wisdom gotten from Jews and Moors? Did he not practice black arts

such as astronomy? . . . He was making spheres depicting the world as an orb. Surely this was blasphemy.<sup>16</sup>

When therefore the Day of Wrath<sup>17</sup> came and went with no untoward incident, they were much relieved. "Humanity had been given a new lease on life upon an earth reborn. The year of fear and trembling had passed. A new day had dawned."<sup>18</sup>

Otto left Rome for a period of about six months (December, 999-June, 1000). Gerbert, alone in the city of unfriendly Roman nobles, followed the progress of his journey avidly.<sup>19</sup>

Sometime in the year 1000, Otto returned to Rome. "Gerbert was glad to have him and his knights back, as without them he had hardly been able to maintain himself against the once-again plotting Italian nobles."<sup>20</sup> Otto was undergoing changes in his person, however. He became increasingly ascetic, in large part due to remorse for his mutilation of John Philagathos.<sup>21</sup>

#### Death of Otto III

The young emperor grew more and more emaciated, the result of extreme self-imposed penances. Gerbert's cajolery could not shake him from his despondency. Otto took gravely ill early in 1002 and died on January 24 of that year. "The Last of the Romans," *Romanorum Ultimus*, was twenty-two years old.<sup>22</sup> Since Otto died unmarried, "with him died the house of Otto and the dream of his universal empire of all Christians."<sup>23</sup>

Gerbert resumed his papal duties, "but his life, too, had lost its purpose, since with Otto the church had lost its right arm to carry the sword of temporal power."<sup>24</sup> Once again Gerbert the powerful ecclesiastic was defenseless following the loss of his royal protector. Otto II had left him bereft in Bobbio, Hugh Capet in Reims, and now Otto III in Rome.

A new member of the Crescentius family was on the rise. His rule was so well established that he could allow Gerbert to wait quietly for death.<sup>25</sup>

#### Death Comes for the Pope

In May of the following year, Gerbert was presiding at a service at the Church of the Holy Cross of Jerusalem<sup>26</sup> when he fell ill. Nine days later, on May 12, 1003, he died at the Lateran Palace.<sup>27</sup>

According to one of Gerbert's papal successors, Sergius IV, Gerbert's papacy coincided with a moment of peace and unity in the church. With the death of Sylvester, "the world was darkened and peace disappeared."<sup>28</sup>

## NOTES

1. Ibid., 203.
2. Title of Erdoes, Chapter 21.
3. Ibid., 184.
4. Ibid.
5. Jaffé, p.496. Lattin, Letters, 315.
6. Thurston, 184. Gregory the Great died in 604; Gregory VII was elected pope in 1073.
7. Will and Ariel Durant, The Age of Faith, vol. IV of The Story of Civilization (New York: Simon and Schuster, 1935-75), 540.
8. Mann, V, 120.
9. Erdoes, 203.
10. Gregorovius, History of the City of Rome, cited in Thurston, 185 and n.2.  
Gregorovius was a 19th-century German historian who, says Thurston, was not inclined to be favorably disposed towards any representative of the papacy.
11. "Sylvester II," John, The Popes, 173.
12. Kempf et al., 299.
13. Bedini, "Sylvester II," 553.
14. The party of Hildebrand, who became Gregory VII.
15. "Sylvester II," John, The Popes, 173.
16. Erdoes, 193; 8.
17. Ibid., 1.
18. Ibid., 193.
19. Riché, 217.

20. Erdoes, 195.
21. Ibid., 195f.
22. Ibid., 200. Riché, 227.
23. Erdoes, 200-1.
24. Ibid., 201.
25. Kempf et al., 249.
26. Riché, 232. This is one of seven Roman churches "visited, one after another, by pilgrims, because they contain pieces of the true cross." Erdoes, 202. See also Stubbs, II, lxviii and n.1.
27. Riché, 232.
28. Oldoni, "Gerberto e la sua storia," I, 666-7.

## THE LEGEND: FACT, FANTASY AND FICTION

Gerbert the man may have died, but Gerbert the legend was just beginning. If the factual story of Gerbert's life is engaging, it is as nothing compared to the legend--fed by misinformation, greed, spite, envy and medieval tale-weaving--which took root following Gerbert's death. As Olleris writes, "The story of Gerbert was not finished at his death."<sup>1</sup> "A man of so many accomplishments and so many political rivalries might well in his lifetime obtain the repute of an enchanter."<sup>2</sup> Moreover Gerbert's meteoric rise in fortune from peasant to pope was bound to cause people to speculate. "As in everything else that was wonderful, the Middle Ages looked for the supernatural in a life so uncommon."<sup>3</sup>

Of what did the legend consist? It was made up of several elements. Chief among them was the report that Gerbert had sold his soul to the devil in exchange for certain favors. Those favors included the ability to fashion certain instruments (clocks and spheres, for example) and to foretell the future. Part of the belief that Gerbert had made a pact with the devil had to do with the knowledge which he acquired while in Spain.

Another element was Gerbert's identification with Antichrist. "There were some who believed him to be Antichrist appearing in the shape of a pontiff."<sup>4</sup>

Gerbert died in 1003. As the new millenium--our millenium--was beginning, his life was ending. But the shadow he cast has extended over the length of the thousand years which intervene between his time and ours.<sup>5</sup>

The legend of Gerbert did not start immediately.<sup>6</sup> But "as soon as his name began to be bandied about in controversy . . . the story of the Satanic compact would follow."<sup>7</sup>

### Gerbert Himself: Source of the Legend

#### The Acts of the Council of St.-Basle

A legend is not created from nothing.<sup>8</sup> In Gerbert's case the seeds of the legend were planted in part by the man himself. As we noted in the account of the council of St.-Basle, Gerbert was in part responsible for the springing up of the legend. "The episode of St.-Basle was certainly the first moment of a man concerned with constructing, consciously or not, his own personage, even his own myth . . . Later, history answered him, and the legend was born."<sup>9</sup>

#### The Three R's

The other piece of Gerbertiana which helped give rise to the legend was the famous "Three R's." Even the most casual reader may have observed that the three cities in which Gerbert was bishop had names beginning with R. A saying originated which read, *Scandit ab R Girbertus in R, post papa viget R*. ("Gerbert ascends from Reims to Ravenna; then, become pope, he dominates in Rome.")<sup>10</sup> According to Helgaud of Fleury, Gerbert himself coined the saying while amusing himself one day.<sup>11</sup>

One might ask why this little saying, apparently innocuous, led to a full-blown malevolent legend about Gerbert. In order to answer this question, we must move to the eleventh century, to a figure who, more than any other single person, gave rise to the legend of Gerbert.

#### The Eleventh Century: Reform, Counter-Reform and Polemics

Gerbert's reputation began to undergo serious revision at the hands of an 11th-century cleric named Beno.<sup>12</sup> Beno was a one-time adherent of Hildebrand, the reformer who became Pope Gregory VII in 1073. Gregory VII, like Gerbert a strong personality and one given to attracting as many adversaries as admirers, was like a refiner's fire. He

took over the direction of the Church in a flood tide of reform. The policies had been set by his predecessors<sup>13</sup> and by 1073 the new conscience about the laicization of the Church and simony was deep-rooted. All Gregory needed was perseverance, and perhaps a little discretion. But Gregory was above all considerations of politics. He despised the art of the possible and kept his gaze fixed on a world of immutable principles and values to a degree few men have dared to emulate.<sup>14</sup>

Gregory was but a sign of his times. The whole atmosphere was charged; one author, Karl Leyser, speaks of "the edge, the fury and volume of the later eleventh century, which respected neither persons nor institutions."<sup>15</sup> In the period between 1050-1111, 115 polemical pamphlets were written.<sup>16</sup>

In 1084 Beno deserted the pope and his cause. Against Gregory and his "immutable principles," in the charged atmosphere of the late eleventh century, he wrote a poison-pen pamphlet, the Gesta Romanae ecclesiae contra Hildebrandum (The Deeds of the Church of Rome against Hildebrand).<sup>17</sup> It is this work which now commands our attention.

When Beno defected from the pope's cause, he did so with great acrimony. Gregory had studied with some illustrious masters who had educated him in the "doctrine of demons," Beno wrote.<sup>18</sup> Benedict IX and Lawrence of Amalfi, one or both of whom had studied with Gerbert, were the most famous teachers of Gregory VII.<sup>19</sup> Gerbert, according to Beno, had infected the city, and Theophylactus (Benedict IX) and Lawrence as well, with his wicked deeds.<sup>20</sup> They in turn transmitted his teachings to Hildebrand.<sup>21</sup> Gerbert, of whom it was said *Transit ab R. Gerbertus ad R. post papa viget R*,<sup>22</sup> had a particular demon whom he questioned about his future. He asked the demon the date of his death.

"You shall not die," his demon assured him, "till you have celebrated Mass in Jerusalem." Forgetful that the Church of St. Croce was known as *in Gerusalemme*, he said Mass in it. Immediately after he died a most horrible



death, ordering with his last breath his hands and tongue, with which by sacrificing to demons he had dishonoured God, to be cut to pieces.<sup>23</sup>

Beno, then, reasoned thus: Gregory was "poisoned" by his tutors. It was on account of their evil teaching that the pope was now headed (in the opinion of Beno) down a mistaken path. And since Gregory's teachers had been Gerbert's students, it was really Gerbert, the "pope-magician," who was the source of the ills which were currently afflicting the church.<sup>24</sup>

Olleris, the 19th-century commentator on Gerbert, gives an account of the legend and the progress of its spread.

How the legend originated, we do not know; it was formed slowly, far from the places which Gerbert inhabited, far from the places where his name, his life and his works were best known. One encounters it for the first time in a German author from the end of the eleventh century; one can follow its progress in some chroniclers from Lorraine, Brabant and England. It is on that island, where people are disposed to believe fantasies,<sup>25</sup> that the legend develops and takes its complete form. Until the end of the twelfth century, there is not a single word of it in the writings of France, Spain or Italy. The monastery of Fleury-sur-Loire was little disposed to feel kindly towards Gerbert, whose renown had eclipsed that of Abbo.<sup>26</sup> . . . If the monks of Fleury had heard the reports of Gerbert's relations with the devil, they would eagerly have mentioned them in their chronicle. The silence of Hugh of Fleury is a sure guarantee that, about 1130, the accounts were unknown on the banks of the Loire.<sup>27</sup>

Olleris goes on: Papire Masson,<sup>28</sup> who had read everything available on Gerbert, suspected that Beno invented the fable to discredit Gregory VII.<sup>29</sup> To that end, Beno "was prepared to assert any absurdity."<sup>30</sup>

But can one person alone create a legend? Can one write a single piece and make it popular, a hundred years after the death of the hero, if the memory of the person has not been preserved? There are certain laws for the development of such ideas, Olleris continues.<sup>31</sup> The legend of Gerbert followed those laws. Beno was the first to

write it down. "When once such a story had secured a written foundation, its future was secured."<sup>32</sup> Beno was able to add some traits, but he did not invent the legend. What he did was to choose well the moment to publish it.<sup>33</sup>

Later on, in the twelfth century, another chronicler, Orderic Vitalis, retold the story of Gerbert. He recounted how Gerbert, while a scholastic,<sup>34</sup> had conversations with the devil. When he asked Satan what the future held, the devil replied with the ambiguous phrase: *Transit ab R. Gerbertus ad R, post papa uigens R.*<sup>35</sup> One salient detail to note is that, in this account of the incident, Gerbert knows that he will become pope before it happens (*dum scolasticus*). Thus he can foretell the future, a sure sign that he is in league with the devil.

Orderic Vitalis was a contemporary of another chronicler, William of Malmesbury, the subject of our next chapter.<sup>36</sup>

## NOTES

1. Olleris, clxxxviii.
2. Stubbs, II, lxxi.
3. Mann, V, 109.
4. Erdoes, 8.
5. There has been an almost-uninterrupted series of commentators on Gerbert and Gerbertiana from the tenth century to the present. They include Gerbert's contemporaries Richer of Reims, Adémar of Chabannes and Thietmar of Merseburg. The eleventh through the fourteenth centuries were rich with Gerbertisti. Oldoni, "Gerberto e la sua storia," I, 652. These include Beno (eleventh century), William of Malmesbury and Orderic Vitalis (twelfth century), Albert of the Three Fountains and Vincent of Beauvais (thirteenth century) and Dietrich of Reims (fourteenth century). See Riché, 12 and Erdoes, 203. There was Baronius in the sixteenth century and Baluze in the seventeenth. Riché, 13. The nineteenth century saw a fresh resurgence of interest in the Gerbert question, as we have already seen in the numerous references cited. Among the writers of that time were Olleris, Bubnov, Havet and Picavet. In the twentieth century, which celebrates the millenary anniversary of Gerbert, there has been a spate of recent biographies, among them the works of Riché, Erdoes and Trystram. In 1983, marking the millennial observance of Gerbert's tenure at Bobbio, Gerbertian scholars held a symposium in that monastery. The papers presented in Bobbio were published in 1985 (Gerberti Symposium), from which we have quoted extensively.
6. Sergius IV, pope from 1009-12, wrote favorably about him, as we have seen.
7. Stubbs, II, lxxi.
8. Oldoni, "Gerberto e la sua storia," I, 637.
9. Ibid., 681.
10. Helgaud of Fleury, Vie de Robert le Pieux, new ed., ed., trans. and annotated by Robert-Henri Bautier and Gillette Labory (Paris: Centre National de la Recherche Scientifique, 1965), 60-3. Sometimes the word *transit* appears in place of *scandit*.
11. Helgaud died about fifty years after Gerbert (ca. 1050); his report of the Three R's appears to be the first. See Stubbs, II, lxix, n.6.

12. Just who Beno was is not easy to determine. Sometimes he is described as a German named Benno, sometimes as an Italian named Beno. Benno (the German) is identified as the bishop of Osnabrück. See, for example, Riché, 10. Beno (the Italian) is identified as a cardinal-priest of the Church of SS Martino e Silvestro in Rome. See, for example, I.S. Robinson, Authority and Resistance in the Investiture Contest: The Polemical Literature of the Late Eleventh Century (New York: Holmes and Meier, 1978), 45. At least one author (Robinson) thinks they were two different people, one German, one Italian. See Robinson, Authority, 191. The question of just who Benno/Beno was is an interesting one, but the answering of it would take more time than the writing of this paper will allow. We will refer to him as Beno. By choosing this spelling, we are stating our belief that the author of the Gesta Romanae ecclesiae was the cardinal-priest of SS Martino e Silvestro. Whether that person was the same or different from Benno of Osnabrück, we are not prepared to say.
13. Some of those policies had begun with Gerbert.
14. "Gregory VII 1073-1085," John, The Popes, 187.
15. Karl J. Leyser, Medieval Germany and Its Neighbours 900-1250 (London: Hambledon Press, 1982), 140.
16. *Ibid.*, citing the research of Carl Mirbt.
17. Beno, Gesta Romanae ecclesiae contra Hildebrandum, MGH Libelli II, 369ff. Robinson, Authority, 45.
18. Oldoni, "Gerberto e la sua storia," I, 667, citing Beno.
19. *Ibid.*
20. Beno, 377.
21. Olleris, *cx.* In his account, Olleris speaks not of Lawrence of Amalfi but of John Gratian, later Pope Gregory VI.
22. Beno, 377.
23. Mann, V, 110, citing Beno. See also Olleris, *cx.*
24. The earliest suggestion of Gerbert as a magician seems to have come from Beno. Thurston, 186. Oldoni remarks on one not irrelevant fact in Beno's narrative:

"Sylvester is always called by his own secular name; the pontiffs are lined up 'post Gerbertum' and not behind Sylvester, and this implies that the true identity of such a wicked master of wicked souls resides in his 'Gerbertness,' while the choice of the pontifical name does not eliminate the wicked substance. Summing up, he traces back to Gerbert the establishment at Rome of idolatry, of familiarity with the devil, of schism, of heresy. This is enough for us to see how far we have come, with Beno, from the epitaph of Sergius IV." Oldoni, "Gerberto e la sua storia," I, 670.

(See the end of Gerbert's biography for a portion of Sergius' epitaph.) William of Malmesbury, in his account, also refers to Gerbert rather than to Sylvester.

25. *Trouvant des esprits disposés au merveilleux*. "For some reason unexplained, English writers have contributed more than any others to the diffusion of the legend in its more aggravated form." Thurston, 181.
26. Abbo of Fleury had opposed Gerbert on the question of the Reims succession. The two men remained adversaries. See, for example, Olleris, cci.
27. Ibid., clxxxix.
28. Masson was a 17th-century commentator on Gerbert. See Lattin, Letters, 21.
29. Olleris, clxxxix.
30. Mann, V, 110.
31. Olleris, clxxxix.
32. Mann, V, 110.
33. Olleris, clxxxix.
34. *Dum scolasticus*. Orderic Vitalis, The Ecclesiastical History of Orderic Vitalis, 6 vols., ed., trans. with introduction and notes by Marjorie Chibnall (New York: Oxford University Press, 1980), I, 156. It is not clear whether the term *scolasticus* indicates Gerbert as student or as teacher. Olleris has the same question. Olleris, cxci.
35. Orderic, I, 156.

36. William and Orderic may have known each other's work. See, for example, Antonia Gransden, Historical Writing in England c.550 to c.1307 (Ithaca, New York: Cornell University Press, 1974), 158.

## WILLIAM OF MALMESBURY

The 12th-century English Benedictine, William of Malmesbury, brought to completion the legend of Gerbert. Thurston calls him "the worst offender" in perpetuating the legend, though he was "probably writing in all good faith according to the credulous ideas of the age in which he lived."<sup>1</sup>

Since for centuries Gerbert's reputation as an organbuilder later rested on William's testimony, we will devote a considerable amount of space to William himself and to his account of Gerbert in his historical work, examining him first vis-à-vis Gerbert and then as an historian generally.

William was born soon after the Norman Conquest of England in 1066. He was of mixed Anglo-Norman parentage.<sup>2</sup> At the time he was writing (the early part of the twelfth century), Gerbert had been dead a little over a hundred years.

William traveled a great deal in England, assembling material for his historical works.<sup>3</sup> But he never left the British Isles.<sup>4</sup> Hence he was never in any of the countries in which Gerbert lived and worked.<sup>5</sup>

### William and the Legend

William then did not know Gerbert personally. But he was the inheritor, as we have said, of the legend spawned in the century which separated him from Gerbert.

What source did William, heir to "the floating traditions of the previous century,"<sup>6</sup> use in compiling his account of Gerbert? Gransden says that he acquired his information from "some now lost German source."<sup>7</sup>

It was William who completed the legend.<sup>8</sup> Oldoni calls him "the first great systematizer" of the legend.<sup>9</sup> Using the materials available to him and his own imagination ("one slender fact or unauthenticated rumour could rouse the story-teller in him"<sup>10</sup>) William fashioned "a veritable novel" about Gerbert.<sup>11</sup> "How much . . . was

floating rumour, how much historic truth, how much the tribute which superstitious ignorance pays to genius or unexpected success in life? The three are curiously intermixed."<sup>12</sup>

A number of authors have commented on how well (or how poorly) Gerbert fared at the hands of William. Erdoes says that William did not have much good to say about Gerbert; later he calls William "the most famous of Gerbert's detractors."<sup>13</sup> Olleris refers to him as an "ignorant and credulous monk."<sup>14</sup>

#### William's Traits as an Historian

Before recounting William's narrative about Gerbert, a brief profile of him as an historian would be in order.

One of William's traits was the inclusion of stories in his historical narrative. Whenever the account became thin or dry, he included stories for the reader's entertainment. Entertainment was undoubtedly the reason why the extended story of Gerbert, "this portentously improbable legend,"<sup>15</sup> found its way into William's first historical book, an account of the kings of England, the Gesta Regum (Of the Deeds of the English Kings).<sup>16</sup>

Though William wrote partly to edify he also tried to please. His desire to entertain was encouraged by contemporary foreign influences, which help to account for the secular, in places gay, almost frivolous, tone of the Gesta Regum. This is particularly apparent in the good stories William copied from some now lost German source. Most of the stories relate to Gerbert and to the Emperor Henry III. They were obviously intended to entertain the reader: Bishop Stubbs suggests that William included them in order to float the heavier portions of his narrative.<sup>17</sup>

On the subject of William's stories about Gerbert, Stubbs says:

Of all the entertaining episodes with which our author diversifies his narrative, or fills up the gaps in the scantier parts of the history, this [about Gerbert] is perhaps the most famous, for in it are summed up, with a few



genuine data, the floating traditions of the previous century relating to one of its most famous men. It is possible to glean from earlier writers glimpses of the growing myths; it is to William of Malmesbury, first of extant writers, that we owe the collective presentation of them.<sup>18</sup>

Further on, Stubbs writes:

. . . trifling as many of them are, [the stories] are suggestive . . . of investigations as to matters of far more importance than themselves, the existence of traditions, superstitions, and forms of thinking that throw some light on the mental and moral history as well as the literary life of the times in which they were told.<sup>19</sup>

William had a fascination for things Islamic, as did many a 12th-century historian.<sup>20</sup> For that reason, Gerbert's story would have had special appeal for him, given the fact that Gerbert had spent a period of time in Spain.

Intelligent and classically trained as an historian,<sup>21</sup> "Malmesbury's love of learning was constitutional."<sup>22</sup> He was the first really enlightened English historian since Bede.<sup>23</sup> He was not content simply to record the facts: his Latin was excellent<sup>24</sup> and he believed that elegant presentation was required of the historian; hence style was important to him.<sup>25</sup>

William also had his weaknesses as an historian. He showed a "superficial lack of discrimination"<sup>26</sup> and "sometimes made uncritical use of legend."<sup>27</sup> William could be cumbersome. In the Gesta Regum, for instance, he makes "many excursions from the main theme."<sup>28</sup> In spite of his attempt to be conscientious, William "gave some wrong dates" in the Gesta Regum.<sup>29</sup> He also confused historical characters with one another.<sup>30</sup>

There is more than one instance of his use of false documents. In the famous Canterbury-York dispute, William clearly favored Canterbury.<sup>31</sup> In support of his position, he cited the Canterbury Forgeries. William apparently used these documents in

good faith, though they are now known to be inauthentic.<sup>32</sup> But in another instance, William intentionally used documents which he knew to be false: in his history of Malmesbury,<sup>33</sup> an issue which concerned him personally ("he had money on the horses and chalked up the winners"<sup>34</sup>) "William himself may well have had a hand in concocting the forgeries and it is hard to exonerate him from the charge of knowingly including forged material in the history."<sup>35</sup>

This then is a profile of the 12th-century writer who completed the legend of Gerbert. His account also contains one of the earliest and certainly one of the most oft-cited reports of Gerbert as an organbuilder.<sup>36</sup>

## NOTES

1. Thurston, 181.
2. Gransden, Historical Writing, 166; 173. Stubbs, I, x-xi.
3. See Gransden, Historical Writing, 174.
4. M.R. James, Two Ancient English Scholars: St. Aldhelm & William of Malmesbury (Glasgow: Jackson, Wylie and Co., 1931), 30.
5. And Gerbert, for all his travels, never set foot in England.
6. Stubbs, II, lxvi.
7. Gransden, Historical Writing, 171.
8. Mann, V, 110. Picavet, 203.
9. Massimo Oldoni, "Gerberto e la sua storia," II, Studi Medievali XXI/2 (1980), 527.
10. Gransden, Historical Writing, 176.
11. Riché, 11.
12. Stubbs, II, lxviii.
13. Erdoes, 39; 192.
14. Olleris, xxxix.
15. Thurston, 182, n.1.
16. De Gestis Regum Anglorum, or Chronicle of the Kings of England, as Giles titles it in English. J.A. Giles, trans., William of Malmesbury's Chronicle of the Kings of England (London: Henry G. Bohn, 1847). Besides the Gesta Regum, William also wrote other historical books, as well as hagiographical and devotional works. See Gransden, Historical Writing, 167; 169; 180 and James, 16.
17. Gransden, Historical Writing, 171. See Stubbs, II, lxvi; xc-xci. That William succeeded in his attempt to entertain is evident from the judgement of critics. James calls him "in some ways the most entertaining" historian since Bede. James, 15.

18. Stubbs, II, lxvi.
19. Ibid., xc-xci.
20. See Le Goff, 137. One biography of William devotes an entire chapter to the interest in Islam exhibited by William and other 12th-century writers. Rodney Thomson, William of Malmesbury (Wolfeboro, New Hampshire: Boydell, 1987), Chapter 9. William's friend, Walcher of Malvern, was an Arabic scholar. Stubbs, II, xc.
21. Kenneth Sisam, "Anglo-Saxon Royal Genealogies," British Academy Papers on Anglo-Saxon England, selected and introduced by E.G. Stanley (New York: Oxford University Press, 1990), 178.
22. Giles, viii.
23. James, 15. See also R.W. Chambers, "Bede," British Academy Papers, 49 and Stubbs, I, ix.
24. Gransden, Historical Writing, 178.
25. Ibid. Thomson, 19.
26. David Knowles, Saints and Scholars: Twenty-five Medieval Portraits (Cambridge: Cambridge University Press, 1962), 22.
27. Gransden, Historical Writing, 168.
28. Ibid., 178.
29. Ibid., 176 and n.80.
30. For instance, he was unclear about the origin of Hugh Capet, causing Stubbs to ask, "How many Hughs are combined in this personality?" Stubbs, II, xxxv.
31. The controversy concerned the question of whether the archbishop of York was required to pay homage to the archbishop of Canterbury. William was here showing his regional bias: Canterbury is geographically closer to Malmesbury than York is. He devoted a number of pages to the dispute in his Gesta Regum. Gransden, Historical Writing, 176.
32. However, says Gransden,

"only modified blame attaches to William for including the notorious Canterbury forgeries. He himself had no hand in manufacturing them, and a twelfth-century monk with little knowledge of diplomatic would find it almost impossible to distinguish a genuine charter from a spurious one." Ibid., 177.

33. The history appears in Book V of the Gesta Pontificum. See *ibid.*

34. *Ibid.*

35. *Ibid.*, 177-8. In William's defense, Gransden points out that medieval attitudes to forgery differed from our own.

"The twelfth-century monastic forger saw himself as providing documentary proof of his house's right to privilege . . . It is unlikely, therefore, that William's primary object was to deceive: it was to corroborate Malmesbury Abbey's right to property which William sincerely believed it held." Ibid., 178.

36. William's account spawned many progeny. Some authors--for example, Vincent of Beauvais and Albert of the Three Fountains--paraphrased large portions of William's narrative. See Stubbs, I, xcii. Oldoni, "Gerberto e la sua storia," II, devotes a large part of his article to a comparison of parallel passages--for instance, the work of William is shown alongside a similar passage from Vincent. Thus William was responsible for the wholesale spread of the legend. This widespread reproduction of William's work ensured his popularity for centuries.

## GERBERT OF AURILLAC, ACCORDING TO WILLIAM OF MALMESBURY

The reader has seen the growth of the legend and has been introduced to the man who completed it. Herewith now the story of Gerbert as recounted by William of Malmesbury.<sup>1</sup>

### #167: Gerbert as Pope; Gerbert in Spain

After the death of this John, Gregory succeeded; after whom came John XVI.; then Silvester, also called Gerbert, about whom it will not be absurd, in my opinion, if I commit to writing those facts which are generally related about him. Born in Gaul, from a lad he grew up a monk at Fleury; afterwards, when he arrived at the double path of Pythagoras, either disgusted at a monastic life or seized by lust of glory, he fled by night into Spain, chiefly designing to learn astrology and other sciences of that description from the Saracens. Spain, formerly for many years possessed by the Romans, . . . fell under the power of the Goths. . . . The Saracens, who had subjugated the Goths, being conquered in their turn by Charles the Great, lost Galicia and Lusitania, the largest provinces of Spain; but to this day they possess the southern parts. As the Christians esteem Toledo, so do they hold Hispalis, which in common they call Seville, to be the capital of the kingdom; there practising divinations and incantations, after the usual mode of that nation. Gerbert then, as I have related, coming among these people, satisfied his desires. There he surpassed Ptolemy with the astrolabe, and Alcandraeus in astronomy, and Julius Firmicus in judicial astrology; there he learned what the singing and the flight of birds portended; there he acquired the art of calling up spirits from hell: in short, whatever, hurtful or salutary, human curiosity has discovered. There is no necessity to speak of his progress in the lawful sciences of arithmetic and astronomy, music and geometry, which he imbibed so thoroughly as to show they were beneath his talents, and which, with great perseverance, he revived in Gaul, where they had for a long time been wholly obsolete. Being certainly the first who seized on the abacus from the Saracens, he gave rules which are scarcely understood even by laborious computers. He resided with a certain philosopher of that sect, whose good will he had obtained, first by great liberality, and then by promises. The Saracen had no objection to sell his knowledge; he frequently associated with him; would talk with him of matters at times serious, at others trivial, and lend him books to transcribe. There was however one volume, containing the knowledge of his whole art, which he could never by any means entice him to lend. In consequence Gerbert was inflamed with anxious desire to

obtain this book at any rate, "for we ever press more eagerly towards what is forbidden, and that which is denied is always esteemed most valuable." Trying, therefore, the effect of entreaty, he besought him for the love of God, and by his friendship; offered him many things, and promised him more. When this failed he tried a nocturnal stratagem. He plied him with wine, and, with the help of his daughter, who connived at the attempt through the intimacy which Gerbert's attentions had procured, stole the book from under his pillow and fled. Waking suddenly, the Saracen pursued the fugitive by the direction of the stars, in which art he was well versed. The fugitive too, looking back, and discovering his danger by means of the same art, hid himself under a wooden bridge which was near at hand; clinging to it, and hanging in such a manner as neither to touch earth nor water. In this manner the eagerness of the pursuer being eluded, he returned home. Gerbert, then quickening his pace, arrived at the sea-coast. Here, by his incantations, he called up the devil, and made an agreement with him to be under his dominion for ever, if he would defend him from the Saracen, who was again pursuing, and transport him to the opposite coast: this was accordingly done.

Probably some may regard all this as a fiction, because the vulgar are used to undermine the fame of scholars, saying that the man who excels in any admirable science, holds converse with the devil. Of this, Boethius, in his book, *On the Consolation of Philosophy*, complains; . . . The singular choice of his [Gerbert's] death confirms me in the belief of his league with the devil; else, when dying, as we shall relate hereafter, why should he, gladiator-like, maim his own person, unless conscious of some unusual crime? Accordingly, in an old volume, which accidentally fell into my hands, wherein the names and years of all the popes are entered, I found written to the following purport, "Silvester, who was also called Gerbert, ten months; this man made a shameful end."<sup>2</sup>

#### #168: Gerbert Teaches; The Hydraulic Organ

Gerbert, returning into Gaul, became a public professor in the schools, and had as brother philosophers and companions of his studies, Constantine, abbot of the monastery of St. Maximin, near Orleans, to whom he addressed the *Rules of the Abacus*; and Ethelbald bishop, as they say, of Winteburg . . . He had as pupils, of exquisite talents and noble origin, Robert, son of Hugh surnamed Capet; and Otho, son of the emperor Otho. Robert, afterwards king of France, made a suitable return to his

master, and appointed him archbishop of Rheims. In that church are still extant, as proofs of his science, a clock constructed on mechanical principles: and an hydraulic organ, in which the air escaping in a surprising manner, by the force of heated water, fills the cavity of the instrument, and the brazen pipes emit modulated tones through the multifarious apertures. The king himself, too, was well skilled in sacred music, and in this and many other respects, a liberal benefactor to the church: moreover, he composed that beautiful sequence, "The grace of the Holy Spirit be with us;" and the response, "He hath joined together Judah and Jerusalem;" together with more, which I should have pleasure in relating, were it not irksome to others to hear. Otho, emperor of Italy after his father, made Gerbert archbishop of Ravenna, and finally Roman pontiff. He followed up his fortune so successfully by the assistance of the devil, that he left nothing unexecuted which he had once conceived. The treasures formerly buried by the inhabitants, he discovered by the art of necromancy, and removing the rubbish, applied to his own lusts. Thus viciously disposed are the wicked towards God, and thus they abuse his patience, though he had rather that they repent than perish. At last, he found where his master would stop, and as the proverb says, "in the same manner as one crow picks out another crow's eyes," while endeavouring to oppose his attempts with art like his own.<sup>3</sup>

#### #169: The Story of the Campus Martius

There was a statue in the Campus Martius near Rome, I know not whether of brass or iron, having the forefinger of the right hand extended, and on the head was written, "Strike here." The men of former times supposing this should be understood as if they might find a treasure there, had battered the harmless statue by repeated strokes of a hatchet. But Gerbert convicted them of error by solving the problem in a very different manner. Marking where the shadow of the finger fell at noon-day, when the sun was on the meridian, he there placed a post; and at night proceeded thither, attended only by a servant carrying a lanthorn. The earth opening by means of his accustomed arts, displayed to them a spacious entrance. They see before them a vast palace with golden walls, golden roofs, every thing of gold; golden soldiers amusing themselves, as it were, with golden dice; a king of the same metal, at table with his queen; delicacies set before them, and servants waiting; vessels of great weight and value, where the sculpture surpassed nature herself. In the inmost part of the mansion, a carbuncle of the first quality, though small in appearance, dispelled the



darkness of night. In the opposite corner stood a boy, holding a bow bent, and the arrow drawn to the head. While the exquisite art of every thing ravished the eyes of the spectators, there was nothing which might be handled though it might be seen: for immediately, if any one stretched forth his hand to touch any thing, all these figures appeared to rush forward and repel such presumption. Alarmed at this, Gerbert repressed his inclination: but not so the servant. He endeavoured to snatch off from a table, a knife of admirable workmanship; supposing that in a booty of such magnitude, so small a theft could hardly be discovered. In an instant, the figures all starting up with loud clamour, the boy let fly his arrow at the carbuncle, and in a moment all was in darkness; and if the servant had not, by the advice of his master, made the utmost despatch in throwing back the knife, they would have both suffered severely. In this manner, their boundless avarice unsatiated, they departed, the lantern directing their steps. That he performed such things by unlawful devices is the generally received opinion. Yet, however, if any one diligently investigate the truth, he will see that even Solomon, to whom God himself had given wisdom, was not ignorant of these arts: for, as Josephus relates, he, in conjunction with his father, buried vast treasures in coffers, which were hidden, as he says, in a kind of necromantic manner, under ground . . . I believe, that He, who gave to Solomon power over demons to such a degree, as the same historian declares, . . . I believe, I say, that he could give, also, the same science to this man: but I do not affirm that he did give it.<sup>4</sup>

#### #170: Introduction of the Aquitanian Monk

But leaving these matters to my readers, I shall relate what I recollect having heard, when I was a boy, from a certain monk of our house, a native of Aquitaine, a man in years, and a physician by profession. "When I was seven years old," said he, "despising the mean circumstances of my father, a poor citizen of Barcelona, I surmounted the snowy Alps, and went into Italy. There, as was to be expected in a boy of that age, having to seek my daily bread in great distress, I paid more attention to the food of my mind than of my body. As I grew up I eagerly viewed many of the wonders of that country and impressed them on my memory. Among others I saw a perforated mountain, beyond which the inhabitants supposed the treasures of Octavian were hidden. Many persons were reported to have entered into these caverns for the purpose of exploring them, and to have there perished, being bewildered by the intricacy of the ways. But, as hardly any apprehension can restrain avaricious minds from their intent, I, with my companions, about twelve in number, meditated an expedition of this

nature, either for the sake of plunder, or through curiosity. Imitating therefore the ingenuity of Daedalus, who brought Theseus out of the labyrinth by a conducting clue, we, also carrying a large ball of thread, fixed a small post at the entrance. Tying the end of the thread to it, and lighting lanterns, lest darkness, as well as intricacy, should obstruct us, we unrolled the clue; and fixing a post at every mile, we proceeded on our journey along the caverns of the mountain, in the best manner we were able. Every thing was dark, and full of horrors; the bats, flitting from holes, assailed our eyes and faces: the path was narrow, and made dreadful on the left-hand by a precipice, with a river flowing beneath it. We saw the way strewn with bare bones: we wept over the carcasses of men yet in a state of putrefaction, who, induced by hopes similar to our own, had in vain attempted, after their entrance, to return. After some time, however, and many alarms, arriving at the farther outlet, we beheld a lake of softly murmuring waters, where the wave came gently rolling to the shores. A bridge of brass united the opposite banks. Beyond the bridge were seen golden horses of great size, mounted by golden riders, and all those other things which are related of Gerbert. The mid-day beams of Phoebus darting upon them, with redoubled splendour, dazzled the eyes of the beholders. Seeing these things at a distance, we should have been delighted with a nearer view, meaning, if fate would permit, to carry off some portion of the precious metal. Animating each other in turn, we prepared to pass over the lake. All our efforts, however, were vain: for as soon as one of the company, more forward than the rest, had put his foot on the hither edge of the bridge, immediately, wonderful to hear, it became depressed, and the farther edge was elevated, bringing forward a rustic of brass with a brazen club, with which, dashing the waters, he so clouded the air, as completely to obscure both the day and the heavens. The moment the foot was withdrawn, peace was restored. The same was tried by many of us, with exactly the same result. Despairing, then, of getting over, we stood there some little time; and, as long as we could, at least glutted our eyes with the gold. Soon after returning by the guidance of the thread, we found a silver dish, which being cut in pieces and distributed in morsels only irritated the thirst of our avidity without allaying it. Consulting together the next day, we went to a professor, of that time, who was said to know the unutterable name of God. When questioned, he did not deny his knowledge, adding, that, so great was the power of that name, that no magic, no witchcraft could resist it. Hiring him at a great price, fasting and confessed, he led us, prepared in the same manner, to a fountain. Taking up some water from it in a silver vessel, he silently traced the letters with his fingers, until we understood by our eyes, what was unutterable with our tongues. We then went confidently to the mountain, but we found the farther outlet beset, as I believe, with devils, hating, forsooth, the name of

God because it was able to destroy their inventions. In the morning a Jew-necromancer came to me, excited by the report of our attempt; and, having inquired into the matter, when he heard of our want of enterprise, "You shall see," said he, venting his spleen with loud laughter, "how far the power of my art can prevail." And immediately entering the mountain, he soon after came out again, bringing, as a proof of his having passed the lake, many things which I had noted beyond it: indeed some of that most precious dust, which turned every thing that it touched into gold: not that it was really so, but only retained this appearance until washed with water; for nothing effected by necromancy can, when put into water, deceive the sight of the beholders. The truth of my assertion is confirmed by a circumstance which happened about the same time.<sup>5</sup>

#### #171: The Two Old Women

"There were in a public street leading to Rome, two old women, the most drunken and filthy beings that can be conceived; both living in the same hut, and both practising witchcraft. If any lone stranger happened to come in their way, they used to make him appear either a horse, or a sow, or some other animal; expose him for sale to dealers, and gluttonize with the money. By chance, on a certain night, taking in a lad to lodge who got his livelihood by stage-dancing, they turned him into an ass: and so possessed a creature extremely advantageous to their interests, who caught the eyes of such as passed by the strangeness of his postures. In whatever mode the old women commanded, the ass began to dance, for he retained his understanding, though he had lost the power of speech. In this manner the women had accumulated much money; for there was, daily, a large concourse of people, from all parts, to see the tricks of the ass. The report of this induced a rich neighbour to purchase the quadruped for a considerable sum; and he was warned, that, if he would have him as a constant dancer, he must keep him from water. The person who had charge of him rigidly fulfilled his orders. A long time elapsed; the ass sometimes gratified his master by his reeling motions, and sometimes entertained his friends with his tricks. But, however, as in time all things surfeit, he began at length to be less cautiously observed. In consequence of this negligence, breaking his halter, he got loose, plunged into a pool hard by, and rolling for a long time in the water, recovered his human form. The keeper, inquiring of all he met, and pursuing him by the track of his feet, asked him if he had seen an ass; he replied that himself had been an ass, but was now a man: and related the whole transaction. The servant astonished told it to his master, and the master to pope Leo, the holiest man in our times. The

old women were convicted, and confessed the fact. The pope doubting this, was assured by Peter Damian, a learned man, that it was not wonderful that such things should be done: he produced the example of Simon Magus, who caused Faustinianus to assume the figure of Simon, and to become an object of terror to his sons, and thus rendered his holiness better skilled in such matters for the future."<sup>6</sup>

#### #172: William Resumes the Account

I have inserted this narrative of the Aquitanian to the intent that what is reported of Gerbert should not seem wonderful to any person; which is, that he cast, for his own purposes, the head of a statue, by a certain inspection of the stars when all the planets were about to begin their courses, which spake not unless spoken to, but then pronounced the truth, either in the affirmative or negative. For instance, when Gerbert would say, "Shall I be pope?" the statue would reply, "Yes." "Am I to die, ere I sing mass at Jerusalem?" "No." They relate, that he was so much deceived by this ambiguity, that he thought nothing of repentance: for when would he think of going to Jerusalem, to accelerate his own death? Nor did he foresee that at Rome there is a church called Jerusalem, that is, "the vision of peace," because whoever flies thither finds safety, whatsoever crime he may be guilty of. . . . The pope sings mass there on three Sundays, which are called "The station at Jerusalem." Wherefore upon one of those days Gerbert, preparing himself for mass, was suddenly struck with sickness; which increased so that he took to his bed: and consulting his statue, he became convinced of his delusion and of his approaching death. Calling, therefore, the cardinals together, he lamented his crimes for a long space of time. They, being struck with sudden fear were unable to make any reply, whereupon he began to rave, and losing his reason through excess of pain, commanded himself to be maimed, and cast forth piecemeal, saying, "Let him have the service of my limbs, who before sought their homage; for my mind never consented to that abominable oath."<sup>7</sup>

**NOTES**

1. William wrote the Gesta Regum in 1125. Thomson, 121. In all, he devoted six lengthy sections to the narrative of Gerbert. Stubbs, II, lxvi. The sections are #167-72.
2. Giles, 172-5.
3. Ibid., 175-6.
4. Ibid., 176-7.
5. Ibid., 177-80.
6. Ibid., 180-1.
7. Ibid., 181.

## WILLIAM'S ACCOUNT: ANALYSIS AND PROBLEMS I

Thus William's account of Gerbert. We can recognize, from our familiarity with Gerbert's life story, the kernels of truth in some of the fanciful episodes--his nocturnal scientific experiments with his students, for instance, or his written requests for books.

It is said that William of Malmesbury "pickt up his history from ye times of Ven. Bede to his time out of old Songs."<sup>1</sup> After reading his account of Gerbert, one would be inclined to believe the report.

William's narrative begins and ends with Gerbert as pope. Between these two points is a phantasmagorical saga made up almost entirely of tales based loosely on the facts of Gerbert's life (and on the lives of those people with whom William confused him). Embedded in the fanciful narrative are a few of the facts of Gerbert's life. We can summarize the material as follows:

- 1) A portion of the legend of Gerbert which includes his study with the Saracens, his pact with the devil, his maiming of himself and his shameful death (#167);
- 2) A bit of "rational discourse" recounting Gerbert's teaching in Gaul, some of his students and their accomplishments, his appointments as bishop in Reims, Ravenna and Rome, and "proofs of his science" in the cathedral at Reims, namely the clock and the hydraulic organ (*organa hydraulica*) (#168);
- 3) A portion of the legend of Gerbert narrating how he found, by necromancy, the treasures hidden by others (the story of the Campus Martius near Rome) (#169);
- 4) The two tales told by the Aquitanian monk, namely, the story of the treasures of Octavian and the account of the two old women who were able to transform humans into animals (#170 and #171);
- 5) Gerbert's conversation with the talking head and his death (#172).

As we can see, by far the greater part of William's account is given over to the legend. Only a very small portion gives simple data concerning Gerbert's life. Of the stories, Stubbs notes that "they are of a sort which, whether found current in Spain or in Italy; in reference to Gerbert, or Virgil . . . ; in the *Gesta Romanorum*, or in the *Arabian Nights*; belong to a common treasury of entertainments meant for the diversion of uncritical listeners."<sup>2</sup>

Despite its success as a narrative, William's account of Gerbert contains passages which have troubled scholars for years.

First Problem: William's Confusion of Gerbert's Identity

At the outset William makes an egregious error: he confuses Gerbert with one of his papal predecessors, John XV. The original text reads *De hoc sane Johanne qui et Gerbertus*<sup>3</sup> instead of *Decedente hoc Johanne . . . Silvester, qui et Gerbertus*, the corrected version of the text.<sup>4</sup> "It is only by a somewhat violent correction of the text in two places that the true computation is vindicated."<sup>5</sup>

According to Stubbs, William's "fatal mistake of identifying Gerbert with John XV . . . is probably the most unfortunate blunder in the whole of the works of William of Malmesbury," an error not corrected until after William's death.<sup>6</sup>

How did this confusion occur? One of William's biographers, Rodney Thomson, has found the likely reason for the error. The *Papstkatalog* used in two manuscripts of the *Liber Pontificalis*<sup>7</sup> "had one outstanding peculiarity in that it erroneously identified Gerbert with Pope John XV, a confusion repeated by William in his *Gesta Regum*."<sup>8</sup>

The entry which William misread is the following:

*Iohannes sed. m.x., qui turpiter finiuit uitam suam.*  
*Silvester sed. an. IIII m. i d. viii.*<sup>9</sup>

John reigned ten months, and ended his life shamefully.  
 Sylvester reigned four years, one month, eight days.

Obviously William's error was to take two lines, referring to two different popes, and to make of them one line: *Johannes qui et Gerbertus menses decem*.<sup>10</sup> Later William's text was amended to read: *Silvester, qui et Gerbertus, annos quatuor, mensem unum, dies decem: hic turpiter vitam suam finivit*.<sup>11</sup>

But there is a problem with this solution, namely, that the information given about John in the entry does not apply to John XV. First, John XV did not reign immediately before Gerbert; hence his name would not appear directly above Gerbert's in a list of popes.<sup>12</sup> Second, John XV reigned for eleven years, not ten months (*m.x.*).<sup>13</sup> Third, John XV did not make "a shameful end" (*turpiter finiuit uitam suam*).<sup>14</sup> These observations cause us to look at the entry again and to notice that it does not specify which Pope John is meant; it simply says *Iohannes*.

What could account then for the confusion in William's narrative? First he mistakes Gerbert for John XV and gives him too short a reign. (Both of these mistakes were fixed in later editions.) Next he describes circumstances which do not apply either to Gerbert or to John XV, most notable among them the description of the shameful death. (This detail remained in his narrative, uncorrected.)

"Is any explanation possible?" Stubbs asks. He then proposes a solution which seems to answer all the questions: at the base of the convoluted narrative is a confusion of Sylvester II with two popes--John XV and John XVI, the latter being the antipope whose horrible mutilation we described in Gerbert's biography.<sup>15</sup>

The information contained in the Papstkatalog entry cited by Thomson fits John XVI exactly: he reigned almost immediately before Gerbert,<sup>16</sup> he served approximately ten months, and he "made a shameful end."



William took details of the lives of three people--John XV, the antipope John XVI, and Gerbert--and ascribed them to Gerbert. In the course of time some of his errors were corrected; others were not. These errors, combined with the bits of legend already afloat in the twelfth century, became a permanent part of the myth of Gerbert.

### Second Problem: Gerbert's Stay in Spain

#### Gerbert's Motive for Going to Spain

Another of the problems with William's narrative has to do with his account of Gerbert's early education. He mistakenly says that Gerbert grew up at Fleury rather than at Aurillac.<sup>17</sup> But that misstatement is fairly innocuous. More damaging to Gerbert's reputation are the motives which William imputes to Gerbert for leaving his native France. "Either disgusted at a monastic life or seized by lust of glory, he fled by night into Spain."<sup>18</sup>

Actually William may not have originated these sentiments. Hugh of Flavigny, writing shortly before William,<sup>19</sup> says that Gerbert was sent from Aurillac *pro morum insolentia*.<sup>20</sup> That phrase is usually translated "for the insolence of his manners."<sup>21</sup> Another author, however, prefers to translate the expression *pro morum insolentia* "on account of the strangeness of his comportment."<sup>22</sup>

The second translation certainly seems in keeping with the story of Gerbert: a monk of uncommon intelligence, interested in gadgetry of all kinds and bored with the academic matter available in Aurillac, might indeed be guilty of "strange comportment."

#### Gerbert's Destination in Spain

Perhaps the single most disputed fact in Gerbert's life concerns the location of his studies in Spain. In the biography, we gave Richer's account of Gerbert's going to Catalonia and dealt with the problem of exactly where in Catalonia he might have studied.

But William mentions none of this. He talks instead of Toledo and Seville, both of which were deep in Moslem territory.<sup>23</sup>

Since shortly after Gerbert's death, there have been conflicting reports on this subject. How could these have originated, given Richer's clear account of the circumstances leading to Gerbert's journey with Borrell to the county of Barcelona?

The answer is easy to discover. Besides the vagueness of Richer's account of Gerbert's whereabouts in Spain (an account which, as we saw, leaves room for a considerable degree of interpretation), there is another source for this part of the Gerbertian legend.

Gerbert had two biographers. The first was Richer. The second was Adémar of Chabannes. He, like Richer, told of Gerbert's Spanish education. He was writing shortly after Gerbert's death.<sup>24</sup> His account reads as follows:

*Girbertus vero natione Aquitanus monachus Aureliacensis sancti Geraldii ecclesiae, causa sophiae primo Franciam, deinde Cordobam lustrans*  
...<sup>25</sup>

Gerbert, certainly from the region of Aquitaine, a monk of the Aurillac church of St. Gerauld, for the sake of wisdom, traversing first France, then Córdoba . . .

Córdoba is, like Toledo and Seville, a city in the far southern part of Spain. Here then is the heart of the confusion. Two historians, both close in time to Gerbert, give two different regions in Spain where he is reported to have studied. One says that he went to the county of Barcelona (present-day Catalonia, in the northeastern part of Spain); the other says that he went to Córdoba. Before attempting to resolve this conflict, let us examine some other, perhaps less obvious, differences in the two narratives.

First, Adémar did not know Gerbert firsthand (though he was, like Gerbert, an Aquitanian). Richer, on the other hand, was Gerbert's student and knew him well.

Second, Adémar gives no information about Gerbert's travel to Spain other than the motive: *causa sophiae*. Richer, by contrast, sets out in abundant detail the circumstances of the trip and the persons who brought it about.<sup>26</sup>

In view of the fact that Richer presents not only the fact that Gerbert went to Spain but also the reasons and circumstances that led to the fact, his account seems the more believable of the two. It is difficult to put any faith in Adémar's report. He relates no circumstances, mentions no names. There is only the terse phrase, *causa sophiae . . . Cordobam lustrans*.

That single phrase has caused a river of words and a mountain of disagreement. It also led to "bigger and better" stories; Beno took this bit of information and "improved upon it," adding to Adémar's statement the phrase, "where he studied science and magic."<sup>27</sup> William of Malmesbury, captivated with things Islamic, made the most of this report. It was the crowning touch, one might say: it enabled him to add the story of the Saracen; it made the story of the pact with the devil so much the more credible; it provided him the occasion to say that Gerbert learned necromancy while "in Spain." Thus it added nicely to the mix of lore which was circulated about Gerbert.<sup>28</sup>

Did Gerbert study in Córdoba or did he not? Is it likely that he did? Is it possible? Could he have paid even a brief visit to the Moorish capital? Scholars have been unable to dismiss the question completely from their minds. On the one hand, they are inclined to say that he did not. The situation with the Moslems was too precarious; one cannot realistically entertain such a possibility.<sup>29</sup> On the other hand, it is true that Gerbert learned a great many things which strongly suggest contact with the Arabs, and historians sometimes have found it difficult to explain how Gerbert might have acquired knowledge of such things as Arabic numerals without studying in Córdoba.

Another factor to consider in this disagreement--a factor central to our discussion here--is the divergence of opinion between musicologists (including organ

historians) and Gerbert scholars in general. Those studying Gerbert as churchman, scientist, mathematician and letter-writer cite Richer's account of Gerbert's sojourn in Catalonia.<sup>30</sup> However when one comes to the field of musicology (and organ history in particular) there is much less unanimity on the subject. Musicologists seem all too ready to believe that Gerbert went to Córdoba and only there.<sup>31</sup> Some musicologists are in agreement with mainstream Gerbert scholars, citing Gerbert's trip to the county of Barcelona in the company of Count Borrell.<sup>32</sup> Sometimes one finds conflicting information within the same source.<sup>33</sup>

One might ask why musicologists--and organ historians especially--have been so eager to assert that Gerbert went only to Córdoba for his Spanish studies. The first reason may well be that they considered this immediate contact with the Arab civilization necessary in order to bolster any claims that Gerbert had knowledge of organbuilding.

The second reason might be that the sources on which they were relying treated Gerbert only in the narrow context of his role as a reputed organbuilder. (Studies dealing with the whole of Gerbert's life were, as we have said, likely to give the site of his Spanish education as Catalonia, not Córdoba.) We can think of no other reason why there should be such discrepancy between the reports of Gerbert as an organbuilder and the more general treatments of him. It is precisely for this reason that this present study devotes such a large amount of space to Gerbert's life and legend. By presenting Gerbert's life in its entirety, it is possible to see the circumstances which led to his reputed organbuilding activity. Otherwise one runs the risk of assembling isolated pieces of information which turn out to be misinformation.

The third reason is that musicologists do not cite either of the early biographers. They do not cite Adémar, who made the original claim that Gerbert went to

Córdoba. And of course they do not cite Richer; if they did, the discrepancy would be obvious at once.

But to go back and consider Adémar's account for a moment: why did he write that Gerbert went to Córdoba? Was he mistaken in his information? Was he intentionally writing fiction? Or is some other explanation possible?

In the late tenth century, most of present-day Spain was under Moslem domination. The Ebro River marked the southern border of the Christian part of Spain, that part which had been reclaimed from the Arabs. The portion of Spain which lies between the Ebro and the Pyrenees was called the Spanish March (the *Marca Hispanica*<sup>34</sup> or, in Richer's words, "hither Spain").<sup>35</sup> It had been formed around Barcelona in the first decade of the ninth century<sup>36</sup> and remained a part of France until the thirteenth century.<sup>37</sup> Though geographically separated from the rest of the Frankish territory, it was nevertheless part of the Carolingian Empire. As such it owed nominal loyalty to the Carolingian kings of France.<sup>38</sup>

What about the rest of Spain in the year 1000? By what name was it called? Sometimes it was called al-Andalus.<sup>39</sup> And sometimes it was called the caliphate of Córdoba.<sup>40</sup>

We would like to suggest that, when Adémar wrote that Gerbert went to Córdoba, he meant that he (Gerbert) went to the caliphate, not the city, of Córdoba.

Two aspects of the wording of Adémar's report indicate that he was probably talking about a region, not a city. *Primo Franciam, deinde Cordobam lustrans*. First, if this is a parallel construction, then *Cordobam*, like *Franciam*, would indicate a country or region. Second, the word *lustrans* ("traversing") seems to indicate a large area, such as a country.

If, when Adémar wrote *causa sophiae . . . Cordobam lustrans*, he meant the caliphate of Córdoba, then his statement is not far in meaning from Richer's. Indeed

there is little discrepancy between the two accounts. Richer says that Gerbert went to "hither Spain"; Adémar in all probability says that he went to (the caliphate of) Córdoba.

It remains true that Gerbert probably did not penetrate Moslem territory, even for a brief visit.<sup>41</sup> In other words, it is unlikely that he went to Córdoba--either the caliphate or the city. But there is quite a difference between saying that he went to the caliphate of Córdoba (which could simply have meant a few miles south of the Ebro River) and saying that he went to the city of Córdoba (which was located deep in the heart of the Arab domain in the Iberian Peninsula). Adémar's statement that Gerbert went to Córdoba does not seem so far-fetched, given the 10th-century geographical conditions of present-day Spain.

## NOTES

1. John Aubrey (1626-97), cited in Roy Palmer, "Folk song and the teaching of history," Folk Music in School, ed. Robert Leach and Roy Palmer (Cambridge: Cambridge University Press, 1978), 99.
2. Stubbs, II, lxxii.
3. Immediately before William begins the story of Gerbert, he writes of John XV's negotiations with Ethelred of England and Richard of Normandy. Then he says, "Of this very John who is Gerbert . . ." "There can be little doubt," says Stubbs, "that Malmesbury himself confounded John XV. with Gerbert." Ibid., I, 193, n.3. See also Gransden, Historical Writing, 176. Recall from the profile given of William as an historian that he was also confused about the identity of Hugh Capet.
4. Stubbs, I, 193.
5. Ibid., II, lxxvii. Giles thinks the error arose when William omitted several words which "made nonsense of the whole paragraph." He credits Sir Thomas Hardy with giving from manuscript authority the passage as it should read. Giles, 172, n.
6. Stubbs, I, li.
7. Manuscripts C and L. See Thomson, 119-20.
8. Ibid., 122. Thomson thinks that William compiled "the lost exemplar of the Liber Pontificalis version which is common to these two manuscripts (CL)." Ibid., 120.
9. Ibid., 122 and n.20.
10. Stubbs, I, 195, n.1.
11. Ibid., 195.
12. Gerbert's immediate predecessor in the papacy was Gregory V, cousin of Otto III.
13. John XV was pope from 985-96. "John XV," John, The Popes, 169.
14. John XV died in exile, but there is no record that he met a violent death. Ibid.

15. Stubbs, II, lxxiii-lxxiv. Thomson seems to be unaware of this double confusion on Malmesbury's part. He speaks only of a confusion between John XV and Gerbert. See Thomson, 120-2.
16. John XVI's tenure was 997-8; Gerbert's was 999-1003.
17. Stubbs, I, 195. Giles, 172.
18. Giles, 172.
19. Hugh's chronicle ends in 1102. Stubbs, II, lxix.
20. Hugh of Flavigny, Chronicon, PL, CLIV, col.193. Hugh was as confused on some of his facts as William was. For instance, he has Sylvester II succeeding Gregory V, not the reverse. Ibid., cols.196-7.
21. Stubbs, II, lxix.
22. Labande, 28 and n.29.
23. See Stubbs, I, 194 and Giles, 173.
24. Adémar died in 1034. J.A. Corbett, "Adhémar of Chabannes," New Catholic Encyclopedia, 15 vols. (New York: McGraw Hill, 1967), I, 128.
25. Adémar of Chabannes, Historiarum libri tres, PL, CXLI, col.49. Jules Chavanon, ed., Chronique by Adémar of Chabannes (Paris: Picard, 1897), 154. The author has also examined MS *lat.5927* in the Bibliothèque Nationale de Paris. Chavanon considers this manuscript "the most important of all because it is the oldest and includes the Chronique in its entirety." Chavanon, xviii.
26. Chavanon notes that Adémar is alone among historians in saying that Gerbert went to Córdoba. Chavanon, 154, n.2. Alone among Gerbert's contemporaries or near-contemporaries, that is. Adémar's testimony has been repeated innumerable times in the intervening centuries.
27. Darlington, "Teacher," 462, n.28, citing Olleris.
28. Massimo Oldoni, "*Imago e Fantasma: l'incantesimo storiografico di Gerberto*," Gerberti Symposium, 755-6. Oldoni, "Gerberto e la sua storia," II, 522.



29. It is true that there was diplomatic exchange between the court at Córdoba and rulers of Christian Europe. Otto I, for example, sent John of Gorze as ambassador to the caliph and the caliph in turn sent Bishop Recemund to Otto. Fletcher, 67.
30. This position does not rule out their wondering whether he might have visited Córdoba, but among such sources surveyed for this study, only one gives Córdoba as the sole site of Gerbert's study in Spain. Charles Pichon, Histoire du Vatican (Paris: Société d'Éditions Françaises et Internationales, 1946), 448.
31. Among those works which give Córdoba as the site of Gerbert's Spanish study are Henry George Farmer, The Organ of the Ancients from Eastern Sources (London: William Reeves, 1931), 155 (the phrase Farmer uses is "under Arabian masters"); Jean Perrot, L'Orgue de ses origines hellénistiques à la fin du XIII siècle: étude historique et archéologique (Paris: Picard, 1965), 291; Jean Perrot, The Organ from its Invention in the Hellenistic Period to the end of the Thirteenth Century, trans. Norma Deane (New York: Oxford University Press, 1971), 226 (Perrot says that Córdoba is the probable site of Gerbert's stay in Spain); Peter Williams, "Organ," The New Grove Dictionary of Music and Musicians, 6th ed., 20 vols., ed. Stanley Sadie (London: Macmillan, 1980), XIII, 728; Peter Williams, A New History of the Organ from the Greeks to the Present Day (Bloomington, Indiana: Indiana University Press, 1980), 38; and Williams-Owen, The Organ, 55. The date of this last work is 1988.
32. These sources (and their dates) include Sachs, "Cognomento" (1972), 258; Devoto (1973), 371; Michel Huglo, "Gerbert d'Aurillac," Grove (1980), VII, 250; Julio-Miguel Garcia Llovera, De organo vetere hispanico: zur Frühgeschichte der Orgel in Spanien (St. Ottilien: EOS Verlag Erzabtei, 1987), 91-2; and Peter Williams' most recent work, The organ in western culture (1993), 208.
33. See Grove (1980). Huglo gives Catalonia as the site of Gerbert's Spanish study (VII, 250), while Peter Williams gives Córdoba (XIII, 728).
34. See Appendix A.
35. Darlington, "Teacher," 460 and n.18, citing Richer.
36. Roger Collins, Early Medieval Spain: Unity in Diversity, 400-1000 (New York: St. Martin's Press, 1983), 186.
37. The *Septimania cum marchiis suis* was separated from France in a transaction between Louis IX and James I, king of Aragon, in 1258. Olleris, xviii, n.5.
38. Fletcher, 57.

39. Al-Andalus is of course the predecessor of modern-day Andalusia. The name al-Andalus comes originally from the word for Vandals. Duncan Townson, Muslim Spain (Minneapolis, Minnesota: Lerner, 1979), 7.
40. See map, Appendix B. The caliphate was established in 929. Previously the Moslem portion of Spain was ruled by an emir; hence it was called an emirate. See Fletcher, 54.
41. His study, properly speaking, did not take place in Spain but in the Spanish March.

## WILLIAM'S ACCOUNT: ANALYSIS AND PROBLEMS II

### Third Problem: The Hydraulic Organ

The last problem in William's narrative, that which most concerns us in this discussion, is that of the hydraulic organ at Reims. In many organ histories, Gerbert's reputation as an organbuilder has rested solely or almost solely on the short passage by William of Malmesbury.<sup>1</sup> There have been innumerable pages written about this "hydraulic organ" passage. Every word has been analyzed, every phrase searched for meaning. Organ historians have discoursed endlessly on whether the phrase *organa hydraulica* describes a hydraulis or a steam organ.<sup>2</sup>

### Aspects Not Covered

Curiously enough, with all the feverish attention that has been paid to the words used in this passage, some critical details have been overlooked.

First is the most important one: no organ scholar has asked why a 12th-century historian would include in his account of English kings a reference to a French organ. We have answered this question in our treatment of the legend of Gerbert, but it is worth asking why the issue has not been raised among organ historians before this time.

Second, scholars have not concerned themselves at all about the fact that William was writing over a hundred years after Gerbert's death and had never seen the organ for himself. No one has asked: how could William of Malmesbury, never having set foot outside England, say with such certainty: "there is still extant in that church . . . a hydraulic organ"?<sup>3</sup>

Third is the "tone" of the passage. It does not say "Gerbert built an organ." The construction is much less active than that; it says "there are still proofs of his learning." The manner of expression used by William is indirect, not forthright.

Fourth is the fact that William does not give a date for the building of the organ. In itself this fact is not significant. Its importance arises from the fact that some organ historians have assigned a date to the organ (with nothing more than William's account to go on).<sup>4</sup> And other organ scholars have then repeated the date, causing it to become a permanent part of the lore. Of the date that organ historians have given and the possible reason for it, we will have more to say shortly.

A fifth and final consideration overlooked by organ scholars is the fact that William, alone among historians, mentions this instrument. No other author mentions it--not in the tenth century (Gerbert's time), not in the eleventh century, and not in the twelfth century (William's time). This observation causes us to ask if there were any writers who might have written on the subject and whose works are still available. In fact there is an abundance of firsthand source material both from Gerbert's time and from William's time.

Flodoard, a 10th-century cleric of Reims, maintained a yearly account of the goings-on at Reims from 919 until his death in 966.<sup>5</sup> Following his death, no entries were made (except to enter the years, interestingly enough) until the year 976.<sup>6</sup> In that year an anonymous continuator took up where Flodoard had left off.<sup>7</sup> He began immediately with an account of Adalbero's renovation of the cathedral:

*Anno DCCCCLXXVI destruxit Adalberto, nomine non merito archiepiscopus, arcuatum opus, quod erat secus valvas aeclesiae Sanctae Mariae Remensis; supra quod altare Sancti Salvatoris habebatur, et fontes miro opere erant positi.*<sup>8</sup>

In the year 976 Adalbero, archbishop in name but not in merit, destroyed the vaulted work found near the doors of the church of St. Mary of Reims and on which was installed the altar of the Holy Savior as well as fountains of beautiful workmanship.

Obviously whoever the anonymous writer was, he was no partisan of Adalbero, "archbishop in name but not in merit." He mentions the things which Adalbero

destroyed, but says nothing of the additions which Adalbero made. It is left to Richer to enumerate those items which Adalbero added in the course of the renovation: the main altar was adorned with a gold cross and surrounded by balustrades (*cancelli*) of brilliant metal, the windows received *vitraux* painted with various subjects, and the towers were endowed with bells which gave forth a powerful sound resembling thunder (*dilucidatam campanis migientibus acsi tonantem dedit*).<sup>9</sup>

Neither writer mentions anything about an organ, either as a positive or a negative feature of the newly refurbished cathedral. It is true that Richer omits a good many details of Gerbert's life in his biography and is sketchy about others. And it is true that the continuator of Flodoard mentions only those things which he dislikes about Adalbero's renovation. Yet the absolute silence of both 10th-century chroniclers causes Olleris to say that we should include this recital of the hydraulic organ by William "with so many other fables transmitted to us by this ignorant and credulous monk."<sup>10</sup>

Regarding the date attached to the "Reims organ" (976) one can conjecture that the reason for it very likely had something to do with the fact that 976 was the year in which Adalbero remodeled the cathedral. Most certainly the date did not originate with William, as we have seen.<sup>11</sup>

From the twelfth century we have a firsthand account given by a writer who was present at the Council of Reims convened by Calixtus II in 1119, six years before William wrote the *Gesta Regum*. Hesso of Strasbourg recounts in the most fastidious detail the opening and closing ceremonies of the council. He notes where the pope's throne was placed, how many prelates were present, how many candles were lit. But nowhere does he mention an organ.<sup>12</sup>

Of all these oversights, perhaps the most egregious has to do with the context of William's passage about the "Reims organ." Having read William's account of Gerbert in its entirety, it is difficult to ascribe any truth to the organ report. Nevertheless

the report does have an air of authority about it, occurring as it does in that part of the narrative which we have termed "rational discourse." (Perhaps that is why organ historians have been so eager to embrace it as factual.) And it is just this--the matter-of-fact way in which William describes the organ--that has made it difficult for organ scholars to dismiss.

### Resolution of the Problem

Knowing William's traits as an historian as we do, we might be inclined to think that perhaps he gave an accurate report of an organ by Gerbert but erred in naming the city. We might even suspect him of outright falsification. But having read his fantastical tale of Gerbert, we can ask: could William's account of the *organa hydraulica* form part of the legend of Gerbert, the legend which William completed?

Massimo Oldoni, the scholar whom we cited earlier for his work on the Gerbert myth, writes in regard to the passage:

This construction of Gerbert is a steam organ, but the mechanism thanks to which the "voice" is obtained, the *modulati clamores*, explains so much about that prophetic and diabolical talking head which assures the pontiff that he will die in "Jerusalem." . . .

How can one not think of the severed head inhabited by the devil with which Gerbert of Aurillac, according to the account of William of Malmesbury, has conversation and intimacy? The whistle, emitted from the *sufflator* when the water begins to boil, could not come from a more easygoing and fascinating talking devil than the automata. Before closing these matters, it is worth noting that everything in the *De Gestis Regum Anglorum* describes the development of an uncommon intellect, a perfect synthesis of science illuminated by faith or, better still, of faith illuminated by science, according to how much the same Gerbert theorizes on the occasion of the affair at St.-Basle.<sup>13</sup>

Later (in 1983), speaking at the symposium held in Bobbio on the millenary anniversary of Gerbert's abbacy there, Oldoni elaborates on his theme:

Hence Gerbert is usable [for William]. To push further to the fount [of the legend] we move from the story of the automata to twisted love stories and within, as always, one can find everything: the pope, science, heresy, empire, manuscript traditions, the fantastic and the trivial...An exceptional polyvalence, an occasion no one should pass up. And the Gerberts become several . . . Vincent of Beauvais continues to read William of Malmesbury and sees passing before his eyes [Gerbert's] impressive career in the French schools, the *modulati clamores* of the aeolipyle, the bellows and the hydraulic organs, which nowadays are less and less convincing. But the constant error is always the same: who cares if the works and experiments of Gerbert are true or not? What matters is that they are real, real with that reality that we give to the country of Lilliput, to the forge of Vulcan; real in our ideas, real as the country of Alice in Wonderland, real as the other side of the mirror . . .<sup>14</sup>

Gerbert, from the thief of prohibited books and curious about the taboo, expects, as the devil's partisan, the impossible voyage, the surreal experience. Thus we arrive at the incredible moment of the discovery of the treasures of Octavian.<sup>15</sup>

In other words, William's account of the hydraulic organ is simply a prelude to the legend of Gerbert. The fact that William says that an organ built by Gerbert is still there (or was there in the twelfth century) need not concern us. Given the manner and the context of the writing, we know that he was not reporting historical fact as we understand the term today. The use of the word *extant* neither adds to nor subtracts from the historicity of William's account. He was simply bringing to final form the bits of legend about Gerbert and entertaining his readers; no other significance need be attached to his report.<sup>16</sup>

It is worth noting that William's account of Gerbert's inventions has caused problems in other disciplines also. Emmanuel Poulle remarks that "the particularly optimistic exploitation of the testimony of William of Malmesbury . . . has allowed uncritical historians to make of Gerbert the inventor of the pendulum clock . . . or the conceiver of some planetary system."<sup>17</sup>

## NOTES

1. Some of the organ historians who rely on William of Malmesbury are given below, together with the dates of their publications. They include Edward J. Hopkins and Edward F. Rimbault, The Organ: Its History and Construction (London, 1877), unchanged reprint (Hilversum, The Netherlands: Frits Knuf, 1965), 13-4; George Ashdown Audsley, The Art of Organ-Building, 2 vols. (New York, 1905), unabridged and corrected republication (New York: Dover Publications, 1965), I, 16; Helen Robbins Bittermann, "The Organ in the Early Middle Ages," Speculum IV (1929), 410 and n.7; Farmer (1931), 156; Perrot, L'Orgue (1965), 291-2; Perrot, Organ (1971), 226-7; William Leslie Sumner, The Organ: Its Evolution, Principles of Construction and Use (New York: St. Martin's Press, 1978), 26; Williams, Grove (1980), 728; Williams, New History (1980), 38; Williams-Owen (1988), 55; and Williams, Organ in western culture (1993), 160 and 216. In this last cited reference, however (p.216), Williams introduces a note of doubt regarding Malmesbury's credibility. Sachs also mentions William of Malmesbury's account but puts little faith in it. Sachs, "Cognomento" (1972), 261.
2. The center of the controversy concerns the expression *per aquae calefactae violentiam*, "by the violence of heated water." This phrase, especially the word *calefactae*, has generated the most discussion--the most "heat," if you will. If the word is translated in its literal meaning ("heated"), then the instrument William describes is a steam organ. But if it is translated in its figurative sense ("disturbed," "excited"), as some organ scholars advocate, then the passage refers to a hydraulis, that is, an organ powered by water. For lengthy discussions of this and other phrases in William of Malmesbury's passage, see Farmer, 156; Perrot, L'Orgue, 291-2; Perrot, Organ, 227; Williams, Organ in western culture, 216. See also C.-E. Ruelle, "Hydraulis," Dictionnaire des antiquités grecques et romaines d'après les textes et les monuments, 5 vols., ed. Charles Daremberg and Edmond Saglio (Paris, 1877), reprint (Graz, Austria: Akademischen Druck- u. Verlagsanstalt, 1962-3), III, 315.
3. In fact there are several ways in which William could have known about such an instrument. The first way is through Ralph d'Escures, a French monk who became archbishop of Canterbury. He was a friend of John of Reims and was mentioned several times by William in the Gesta Regum. For more on Ralph, see Orderic Vitalis, I, 90 and Norman F. Cantor, Church, Kingship, and Lay Investiture in England 1089-1135 (New York: Octagon Books, 1969), 303ff. A second way is through Seffrid d'Escures, half-brother of Ralph. Seffrid attended the Council of Reims as the delegate of the English king. The council was convened in 1119, six years before William wrote the Gesta Regum. Seffrid became abbot of Glastonbury in 1120. In his history of Glastonbury, William enumerated the gifts which Seffrid left to the abbey. For more on Seffrid, see Osbert of Clare, The Letters of Osbert of Clare, ed. E.W.



Williamson (London: Oxford University Press, 1929), 203 and John Scott, ed., trans., The Early History of Glastonbury by William of Malmesbury (Suffolk, England: Boydell, 1981), 163. A third way in which William might have known of a Reims organ is through his friend Walcher of Malvern, originally from Lorraine. For more on Walcher, see Durant, IV, 991 and Antonia Gransden, Legends, Traditions and History in Medieval England (Rio Grande, Ohio: Hambledon Press, 1992), 111. A fourth possible source of knowledge for William was his Reims contacts. According to Thomson, William's biographer, William displayed Reims interests in his writing. "A permissible conclusion from all this seems to be that William had one or more friends who were willing to transcribe Reims material for him and to get it to Malmesbury." Thomson, 125.

4. See, for example, Sumner, 26.
5. B. Lacroix, "Flodoard (Frodoard) of Reims," New Catholic Encyclopedia, V, 964.
6. See the MSS from the Bibliothèque Nationale de Paris, MSS *lat.9768* (Galerie Mazarine, Arm.XI, n°176) and *lat.5354*.
7. Michel Bur, "Architecture et liturgie à Reims au temps d'Adalbéron (vers 976)," part II of "A propos de la Chronique de Mouzon," Cahiers de la Civilisation Médiévale XXVII/4 (Oct.-Dec., 1984), 298.
8. Ibid. Ph. Lauer, ed., Les Annales de Flodoard (Paris: Picard, 1905), 160-1.
9. Lauer, 161, n.1. Richer, III, 22.
10. Olleris, xxxix. Did William know either Flodoard or Richer? We cannot say with certainty. His biographer, Thomson, does not list either one among the sources which William knew. Thomson, 197ff. In all likelihood he did not know them.
11. Sumner, 26. Farmer says "about the year 976, and certainly before 980." Farmer, 156.
12. I.S. Robinson, The Papacy 1073-1198: Continuity and Innovation (New York: Cambridge University Press, 1990), 132-3. Hesso of Strasbourg, Relatio de concilio Remensi, MGH Libelli III, 28. This omission is not of itself sufficient to conclude that there was no organ. Peter Williams, Organ in western culture, is replete with instances of organs which we know to have existed even though they are not mentioned in sources where we would expect to find such references.
13. Oldoni, "Gerberto e la sua storia," II, 529-30. Oldoni goes on: "On the contrary, Vincent of Beauvais," who paraphrases large portions of William's text, "describes an

*ars mechanica*, the fruit of an *ars necromantica*, stolen from the Arabs and the polluting vehicle of the Christian wisdom of the West." Ibid., 530.

14. Oldoni, Gerberti Symposium, 756-7.

15. Ibid., 757. Oldoni, "Gerberto e la sua storia," II, 531.

16. Other authors attribute William's account of the organ to legend (see, for example, Mann, V, 21, n. 1 and Olleris, xxxix) but none with such thoroughness as Oldoni. See also Bergmann, 197ff., for more on the legendary and mythical nature of William's account of Gerbert.

17. Poulle, 597.

## THE LETTERS OF GERBERT

It appears then that if Gerbert's reputation as an organbuilder is founded solely on any activity at Reims, as reported by William of Malmesbury, he was not an organbuilder at all. But are there any other evidences which indicate that he did indeed build organs? Are there any other cities in which he might have practiced this art? And more important still, are there any sources contemporaneous with Gerbert which testify to his work as an organbuilder?

Instead of using as evidence the account of an historian writing more than a hundred years after the fact, let us consider sources closer to Gerbert--first of all, those originating from his own pen. While he left a fairly small body of written works in the form of treatises, he was a prolific letter-writer. We have a substantial corpus of those letters remaining to us. Not all of them are preserved; in fact, all the originals have been lost.<sup>1</sup> The collection which remains has been edited by Gerbert. Those we have (some 226 in all<sup>2</sup>) are copies made by Gerbert. It is a sign of Gerbert's wily and cautious nature that he preserved copies of his letters. He began this practice during the time he was abbot in Bobbio, when he discovered that the answers he received from Otto II did not correspond to the letters he had originally sent.<sup>3</sup> Hence the preserved letters date only from 983; they cease with his accession to the archbishopric of Ravenna.<sup>4</sup>

The letters present a lively picture of life in the tenth century. As Harriet Pratt Lattin, the translator of the only English edition of the letters, remarks, "life and movement pulsate through them, and the last quarter of [the tenth] century comes alive with the same types of people to be met with anywhere, anytime."<sup>5</sup>

There are two systems of numbering used in this study. The numbering system used by most Gerbert scholars is that of Julien Havet, the French scholar who made the first critical edition of the letters in 1889.<sup>6</sup> Lattin uses a different system of

numeration.<sup>7</sup> In referring to the letters, both the Havet and the Lattin numbers will be used as a rule. (For example, a letter will be identified as 70H/77L.)

Our interest, of course, is in the area of organs, namely, is there anything in the letters which could make a case for--or against--Gerbert's having engaged in organbuilding?

There are five references to organs in the letters, if one includes the reference in Lattin, Letter 2 (a letter not found in the other collections used in this paper). We will consider Lattin's Letter 2 as one of the instances in which Gerbert refers to the organ in his letters, even though she is the only one who includes it in the corpus of Gerbert's letters.<sup>8</sup> Generally it is indicated by the opening words of the letter, *Sphaera, mi frater*.<sup>9</sup> It is a mini-treatise in which Gerbert explains to Constantine "the construction of a hemisphere for making astronomical observations."<sup>10</sup> Gerbert's sphere was equipped with tubes a half-foot long.<sup>11</sup> The part of the letter which is of interest to organbuilders is that in which Gerbert contrasts the tubes of the sphere (*semipedales fistulae*) with organ pipes (*fistulae organicae*): the tubes of the sphere "differ from organ pipes by being all equal in size" (*aequalis grossitudinis*).<sup>12</sup>

Sachs draws two conclusions from this statement:

- 1) Organ pipes were so familiar to the correspondents that Gerbert could refer to them when describing his astronomical tool; of course, the association (between organ pipes and astronomical instrument) naturally suggested itself through the common word *fistula*;
- 2) The phrase *aequalis grossitudinis* is almost a stereotypical condition of pipe measurement in numerous pipe-measurement treatises, some of which were evidently older than Gerbert's treatise and were in all probability known to him.<sup>13</sup>

### Overview of the Four Letters

Now we turn to the four letters usually cited when referring to organs.<sup>14</sup>

An overview of the letters would seem to be in order before we examine the content of each letter. From the overview we can learn the following.

First, all the letters appear to have been written from Reims.<sup>15</sup> Second, the letters were written between 986 and 990. Third, every one of the letters was written to someone in Aurillac. Fourth, when Gerbert refers to actual organs (all except 92H/105L, which speaks of the playing of organs) it is always to organs which are in Italy.

These are the raw data. Following are some conjectures we might make based on those data. Of the fact that all the letters originate from Reims, we will have more to say in the conclusion. Concerning the dates: the letters were written long after Gerbert's sojourn in Bobbio (between two and six years after he returned to Reims from Bobbio). Nevertheless he makes reference to Italy in all the letters except 92H/105L (as we mentioned above).

The fact that all the letters are written to Aurillac might be significant. (Of Gerbert's preserved letters, ten were written to Aurillac.) It implies that there was in Aurillac more than a passing interest in the craft of organbuilding. It could even lend credence to Perrot's speculation that Gerbert might have learned the art of organbuilding in Aurillac.<sup>16</sup>

We know that Aurillac had no means of teaching the quadrivium; that is why Gerbert was sent away to Catalonia. There might have been not only interest but also some practice in the craft of organbuilding at Aurillac. It is doubtful, however, if the monks at Aurillac were acquainted with the theory of organbuilding, since the pattern in such matters is generally that practice precedes theory.

As part of the overview it would be appropriate to mention the fact that the word *organa* in the letters could have more than one meaning. (See the introduction to this paper.) It is clear that, while Gerbert's use of the word is restricted to physical things (as opposed to intangibles such as ensemble singing), there remain some ambiguities. In the first place, it is sometimes unclear whether the word *organa* is intended to be singular or plural.<sup>17</sup> In the second place, the exact meaning of the word in Gerbert's letters is unclear, "despite usual assumptions."<sup>18</sup> Mann remarks that some passages seem to indicate that Gerbert may be talking about scientific apparatuses in general.<sup>19</sup>

#### What the Letters Say about Organs: Conditions of the Times

##### First Letter: 70H/77L

Now for an examination of the contents of the letters as they pertain to the question of organs and organbuilding, and how the conditions of the times have a bearing on the issue of organs. The first letter was written in 986 to Abbot Gerauld of Aurillac. In the letter, Gerbert reports to Gerauld that the organs<sup>20</sup> and the other things Gerauld wanted sent are being kept in Italy; they will be sent once peace is restored among the kingdoms.<sup>21</sup>

This is the first instance in the letters of events unrelated to music which impinge on the question which interests us here: Gerauld would be able to get his organs if the political conditions were more settled. It would seem that the reason the organs are in Italy and therefore unreachable by Gerbert is that he was forced to beat a hasty retreat from Bobbio.<sup>22</sup> Whether he ever retrieved them is not known.

##### Second Letter: 91H/102L

The second letter was written in 986 or 987 to Abbot Raymond of Aurillac, Gerauld's successor. In it, Gerbert writes with great uncertainty (*non . . .*

*certum; nec satis . . .*): he is uncertain what to write about the organs which are in Italy; he is uncertain whether, come fall, he will be in Germany or in Italy.

Once again the realities of feudal living interfere with the tranquil life of the scholar. And the large role which royal protection plays in Gerbert's life is evident.<sup>23</sup> If he goes to Italy before autumn, it will be at the head of the army assembled for Empress Theophanu, the widow of Otto II.<sup>24</sup> In the absence of Theophanu, he is in great danger, he reports to Raymond. Without the assurance of the imperial patronage, Gerbert can guarantee neither his own safety nor that of anyone else: "I do not now know what to write for certain about the organs<sup>25</sup> located in Italy and about sending a monk there who shall learn and practice on them, especially since without the presence of my Lady Theophanu I dare not rely on the trustworthiness of my knights . . ."<sup>26</sup>

And why can he not trust his knights? "Because they are Italians."<sup>27</sup>

There is a three-way animosity at work here: the Italians are not overly fond of an abbot from France nor of an empress from Germany. And without the strong presence of the monarch, treason could well prevail.<sup>28</sup>

### Third Letter: 92H/105L

The third letter which has reference to organs was written about the same time as the letter just discussed. This is the letter which mentions the conditions which caused Gerbert to flee Bobbio, as discussed above. The recipient of the letter is Bernard, a monk of Aurillac. Gerbert tells Bernard that, if any one of them is interested in studying music or learning to play the organ,<sup>29</sup> he will recommend Constantine of Fleury<sup>30</sup> to assist them if he is not able to do so himself.<sup>31</sup>

The phrase which mentions the organs is couched in rather curious language: *vel in his quae fiunt ex organis*. Exactly what is meant by this expression is difficult to say.<sup>32</sup> Lattin translates it simply as "the playing of organs"<sup>33</sup> but, in giving a literal translation of the phrase ("in these things that are made out of organs") she

suggests that it might indicate that Gerbert possibly originated a new technique of playing the organ with the fingers instead of the whole hand.<sup>34</sup> This interpretation seems wide of the mark, an opinion voiced also by Sachs.<sup>35</sup> Perrot seems to think it refers to organbuilding.<sup>36</sup> Sachs maintains that the only thing which can be said with certainty is that the *organa* were a matter of Gerbertian instruction. He wonders whether possibly this teaching pursued another goal, neither primarily the building nor the playing of organs but rather their use in demonstrating basic musical theory.<sup>37</sup>

Is this one of the instances when the word *organa* may refer to something other than musical instruments? One might think so, but that opinion seems offset by the musical context in which the passage occurs: the preceding phrase is *vel in musica perdiscenda*. It seems that by the word *organa* Gerbert means something musical as well as something tangible. Yet the phrase remains obscure, making it difficult to know exactly what Gerbert meant when he wrote *vel in his quae fiunt ex organis* or why he chose that mode of expression.<sup>38</sup>

#### Fourth Letter: 163H/171L

In the fourth and final letter having to do with organs, written in 989 or 990, Gerbert again addresses Raymond, abbot of Aurillac. He had hoped to get to Italy, where the organs are kept.<sup>39</sup> But owing to distressing political conditions in Reims, that is not possible.<sup>40</sup>

Again we see the effect of political conditions on Gerbert's activities involving organs. Whether in Bobbio or in Reims, political turmoil interferes with his plans for transporting organs and for living a tranquil life (if indeed Gerbert was capable of living tranquilly). It is because of the interconnection between Gerbert's interest in organs and the other areas of his life that this study has dealt with all aspects of Gerbert's life and activity, not just with his reputed efforts as an organbuilder.



### Conclusions and Questions

What can we conclude from Gerbert's discussions of organs in his letters and what can we not conclude? We cannot conclude simply from his written words that he built any organs. Neither can we rule out such a possibility.

We can assume that, when Gerbert speaks of the organs "in Italy," he is referring to Bobbio. That seems a safe enough supposition since Bobbio is the only place in Italy where Gerbert had spent any time in his recent past.<sup>41</sup>

Perhaps the letters raise more questions than they answer. Were the *organa* mentioned by Gerbert organs as we understand the term today? Were they built by Gerbert? Were they intended for liturgical use or were they only for demonstrations to students? Was this long written "conversation" the result of a project begun long before, when Gerbert was an oblate at Aurillac? Were there monks at Aurillac who could build organs? And most tantalizing of all, what occasioned the long discussion (stretching over three or four years) between him and his fellow Benedictines at Aurillac?

This much seems certain: there was an interest in organs at Aurillac--a real and sustained interest.<sup>42</sup> We have conjectured earlier that the craft of organbuilding might have been known and practiced at Aurillac. If that was in fact the case, however, it seems unlikely that Gerbert would be seeking ways to import organs from Italy to Aurillac.

The most we can conclude is that Gerbert's friends at his home monastery were endeavoring to have an organ and were petitioning Gerbert for one.<sup>43</sup> Perhaps they simply wanted an organ (or organs) built by Gerbert (assuming that the instrument in question was an organ and was indeed built by him).

As for Gerbert himself, the letters confirm that he did indeed have an interest in *organa*. He does not refer to "my" organs, however, but to "the" organs. No conclusive proof can be drawn from the letters to show that Gerbert involved himself in

the craft of organbuilding. Perhaps there is evidence from another quarter which can provide more information.

## NOTES

1. Lattin, Letters, 20.
2. Or 233 in Lattin's collection.
3. Lattin, Letters, 20.
4. Riché, 203.
5. Lattin, Letters, ix.
6. *Ibid.*, 23. Olleris included an edition of the letters in his volume containing all of Gerbert's (then-known) works. It preceded the work of Havet by some twenty years, being published in 1867.
7. This difference is due in part to the fact that she includes seven early epistles which are by Gerbert but which are not usually included in the collection of letters. For this study the following editions of the letters have been used: Lattin, Havet, Riché-Callu, and Fritz Weigle, MGH Briefe. Sachs, "Cognomento," which includes the organ excerpts of the letters, has also been used. Sachs, "Cognomento," 262-3.
8. Sachs calls it a *Brieftraktat*. Sachs, "Cognomento," 264.
9. The word *frater* refers to Constantine, Gerbert's fellow Benedictine and one of his most illustrious pupils. Constantine was a monk of the monastery of Fleury. See Lattin, Letters, 38, n.1.
10. *Ibid.*, 36.
11. *Ibid.*, 37. Sachs, "Cognomento," 264.
12. Lattin, Letters, 37. See Sachs, "Cognomento," 264.
13. Sachs, "Cognomento," 264. Sachs's comments about *Sphaera, mi frater* come at the end of his discussion of the other references to organs in Gerbert's letters.
14. Leflon curiously mentions only two letters dealing with organs, 70H and 92H. Leflon, 95 and n.43. In general Leflon shows himself ready to dismiss any claims, legitimate or legendary, that Gerbert was an organbuilder. Leflon, 94-5.

15. Some sources do not say where the letters originated. All the sources which do name a city say Reims.
16. Perrot, L'Orgue, 291. Perrot, Organ, 226.
17. Part of the reason for this uncertainty is due to the fact that the word *organa*, which is usually the plural of *organum*, can be used "as a feminine singular noun." Williams, Organ in western culture, 138, n.2, citing Riemann.
18. Ibid., 284, citing Perrot, L'Orgue.
19. Mann, V, 20, n.3.
20. Lattin and Riché-Callu translate the term *organa* to mean "organs." Lattin, Letters, 116. Riché-Callu, I, 175. Weigle speaks in his commentary of *Musikinstrumente*. In his translation of the passage from Gerbert's letter, Sachs leaves the word *organa* in the original Latin. In his commentary he uses the word "instrument," not "organ." Regarding the number of instruments, he says the text does not make clear whether one or more is meant. Sachs, "Cognomento," 262.
21. *Organa porro et quae vobis dirigi praecepistis, in Italia conservantur, pace regnorum facta, vestris optutibus repraesentenda.* Havet, 67.
22. It will be recalled that when Otto II died in December, 983, Gerbert's already uncomfortable position with the monks became untenable. He was forced to flee for his life, leaving the organs (we presume) behind.
23. We have seen before that, when Gerbert's patron died, he usually was forced into making other living arrangements. (It happened in Bobbio, Reims and Rome.)
24. See Havet, 83, n.7. Gerbert, it will be recalled, was abbot of Bobbio--and therefore a vassal of the German court--until 998.
25. Lattin, Riché-Callu and Weigle all translate *organa* to mean "organs." Lattin, Letters, 137. Riché-Callu, I, 217. Weigle, 118. Havet likewise speaks of *orgues*. Havet, 83, n.5. Sachs expresses the same thoughts as before. Sachs, "Cognomento," 262. See the commentary above on Letter 70H/77L.
26. Lattin, Letters, 137. *Nunc non habeo quid certum scribam super organis in Italia posititis, ac monacho dirigendo qui ea condiscat, presertim cum sine praesentia dominae meae Th. credere me non ausim fidei meorum militum . . .* Havet, 83.
27. Lattin, Letters, 137.

28. See *ibid.*, 138, n.8.
29. For more on this phrase, see the discussion below.
30. One of Gerbert's students. See the discussion about *Sphaera, mi frater* above.
31. *Ergo si quisquam vestrum cura talium rerum permovetur, vel in musica perdiscenda, vel in his quae fiunt ex organis, quod per me adimplere nequeo, si cognovero certum velle domni abbatis R., cui omnia debeo, per Constantinum Floriacensem supplere curabo.* Havet, 85.
32. Various translations include "those things . . . 'which are made from organs' or 'which arise from instruments,'" and "in . . . those matters concerning organs." Williams, *Organ in western culture*, 285. Perrot, *Organ*, 225. Another possible variant is "in those things which come from organs."
33. Lattin, *Letters*, 140.
34. *Ibid.*, 141, n.5.
35. Sachs, "Cognomento," 263-4.
36. See *ibid.*, 263 regarding Perrot, *Organ*, 225.
37. Sachs, "Cognomento," 264.
38. Several authors commenting on the phrase note the apparent distinction made between theoretical music (one of the areas of the quadrivium) and practical music. See Lattin, *Letters*, 141, n.4; Riché-Callu, I, 221, n.6; Sachs, "Cognomento," 263.
39. See the overview of the letters for comments by Mann regarding the meaning of the word *organa*. Mann, V, 20, n.3. Regarding the question of whether the word *organa* is singular or plural, the verb which follows--*conservantur*--indicates that *organa* is plural in this instance.
40. *Eaque res iter meum in Italiam penitus distulit, ubi et organa conservantur, et optima portio meae suppellectilis.* Havet, 145. This letter was written at some time after Arnoul's betrayal of Reims.
41. His sojourn of about two years in Rome had been some fifteen or twenty years earlier. See also Sachs, "Cognomento," 262.
42. There was also a real need, according to Perrot. Perrot, *L'Orgue*, 291. Perrot, *Organ*, 226.

43. They might have inquired closer to home; Constantine of Micy and Fleury, Gerbert's student, may have been knowledgeable in the building of organs. Perrot calls him "this organ-building monk" who possibly learned the craft from Gerbert. Perrot, Organ, 225.

## **BOBBIO**

There is evidence, besides Gerbert's own references to organs in his letters, which suggests that he may have been involved in the art of organbuilding in Bobbio during his period as abbot there. (Oddly enough, Bobbio is mentioned much less frequently by organ historians than is William of Malmesbury's widely disseminated report on the "Reims organ.")

### Scholars' References to Bobbio

Some scattered references do exist, however, which mention Gerbert and organs in Bobbio. Most come from organ historians and musicologists; some come from scholars in other disciplines.

#### Organ Historians and Musicologists

One such reference to Gerbert and organbuilding in Bobbio is to be found in an article by Renato Lunelli. He refers to "the experiments of Gerbert" in the area of organbuilding during his tenure as abbot of Bobbio.<sup>1</sup> Another testimony comes from Théodore Gérold, who says that organs built by Gerbert were requested by Abbot Gerauld of Aurillac and were to be sent back to Gerbert's native Auvergne.<sup>2</sup> Perrot speculates that Gerbert may have built an organ or organs while in Bobbio.<sup>3</sup> Helen Robbins Bittermann notes that Gerbert appears to have learned the art of organbuilding while at Bobbio.<sup>4</sup> This assertion is not implausible, though the absence of any letters of Gerbert before his stay at Bobbio (with the exception of Lattin's Letter 2) makes the whole matter fairly uncertain. Most recently (1993), Peter Williams refers to Gerbert's possible organbuilding activity in Bobbio.<sup>5</sup>

#### Scholars from Other Disciplines

Guy Beaujouan, speaking of Gerbert's apocryphal mathematical works at the symposium in Bobbio in 1983, recalls that Gerbert speaks with sadness in several of

his letters about the organ (singular in Beaujouan's text) which he has left at Bobbio.<sup>6</sup> Michele Tosi, speaking on the abbatial government of Gerbert in the same symposium, has much to say about Gerbert and organbuilding. We will be referring to his study throughout this section.

### Manuscript Evidence

Manuscript evidence may provide enlightenment on Gerbert's purported organbuilding activity at Bobbio. It is the illustrative material in particular which is helpful.

One manuscript is of special interest. *Amb. C. 128 Inf.*, now in the Ambrosian Library in Milan, includes a classification of instruments. In the classification is an illustration of an organ.<sup>7</sup>

The date given by scholars for the manuscript varies widely, with estimates ranging from the seventh or eighth century to the twelfth century. Using paleography as a guide, Tosi thinks that the manuscript originates from the second half of the tenth century, although he is aware of scholars who place it as early as the seventh century.<sup>8</sup>

Regarding the provenance of the manuscript, Tosi thinks that it originated in Bobbio, even though it is normally not included in the Bobbio collection.<sup>9</sup>

"The organ is pictured amongst other wind-instruments (*inflatilia*)."<sup>10</sup> Tosi is impressed by the illustration of the organ: "it is not a question of a miniature, but rather of a design executed for a didactic purpose. This particularity, though in very rough form, renders the design all the more precious: the designer has transmitted the form of the medieval organ, conceding nothing to fantasy."<sup>11</sup>

The drawing "is composed of a vertical structure which terminates with ten pipes; under these are the keys, on which are placed the player's hands."<sup>12</sup>

Tosi, a scholar (but not an organ historian), has done extensive research on the Milan manuscript. His conclusions are of the greatest interest in our discussion.



The manuscript includes texts by Boethius and by Gerbert. The Gerbertian text is the *Scholium ad Boethij Arithmeticam Institutionem*, sometimes called the *Saltus Gilberti*.<sup>13</sup> Early on, Tosi begins to wonder whether the manuscript arose primarily as a Gerbertian or a Boethian document.<sup>14</sup> The question comes to mind because "the decoration assigned to the beginning of the Boethian text is extremely modest; only the initial letter is decorated."<sup>15</sup> By contrast, the text of Gerbert is lavishly decorated.<sup>16</sup>

We have already mentioned Tosi's examination of the paleography of the manuscript, causing him to date it in the second half of the tenth century, and his conclusion that the manuscript originated in Bobbio rather than in Milan. In other words, the manuscript was produced, in all probability, in Bobbio during Gerbert's tenure there.

Tosi concludes that the manuscript *Amb. C. 128 Inf.* was created, if not by Gerbert himself, most certainly in a Gerbertian atmosphere. Anything else is out of the question.<sup>17</sup>

From a discussion of the manuscript and its heavy Gerbertian overtones, Tosi turns immediately to a discussion of the organs left at Bobbio and mentioned by Gerbert in his letters.<sup>18</sup> Using as evidence the manuscript, the references to the organs in Gerbert's letters, and the fact that in his teaching at Bobbio Gerbert experimented in the construction of musical instruments, Tosi reasons that:

- 1) Gerbert did construct organs (as well as other instruments) at Bobbio;
- 2) The organ pictured in *Amb. C. 128 Inf.* (which we discussed above) is a reasonable likeness of what those organs looked like.<sup>19</sup>

In the question of whether Gerbert built organs at Bobbio, Tosi's testimony is important for the following reasons. He is not an organ historian seeking to prove a point, and he is not relying on the findings of other organ historians to present his case. Precisely for that reason, he qualifies as an objective source. But neither is he an uninitiated "layperson" speculating disinterestedly in the question.<sup>20</sup> Rather, Tosi is a

scholar who has searched the manuscript *Amb. C. 128 Inf.* carefully for clues about Gerbert's organbuilding from paleontology.

The weight of Tosi's evidence and scholarly opinion allows us to state with some measure of certainty that it is quite likely that, when Gerbert spoke in his letters of *organa* in Italy, he was indeed speaking of organs as we understand the term today--organs which he, with his students, had built.

## NOTES

1. Renato Lunelli, "Organo," Enciclopedia italiana di scienze, lettere ed arti, 35 vols. (Rome: Istituto Giovanni Treccani, 1929-37), XXV, 520.
2. Théodore Gérold, La Musique au Moyen Age (Paris: Honoré Champion, 1932), 418. Leflon says that Gérold "keeps complete silence" regarding Gerbert's musical accomplishments, not acknowledging Gérold's reference to the organs. Leflon, 95.
3. Perrot, L'Orgue, 290. Perrot, Organ, 226. However it is worth noting that the Bobbio reference is a passing mention, while the account of William of Malmesbury is analyzed in tortuous detail. Perrot, L'Orgue, 291-2. Perrot, Organ, 226-7.
4. Bittermann, 410.
5. Williams, Organ in western culture, 284-5. In previous works, as recently as 1988, Williams made no reference to Bobbio in speaking of Gerbert as an organbuilder. The sole reference was to his reputed activity at Reims, as reported by William of Malmesbury.
6. Beaujouan, Gerberti Symposium, 647.
7. Williams, Organ in western culture, 181. Tilman Seebass, Musikdarstellung und Psalterillustration im frühen Mittelalter: Studien ausgehend von einer Ikonologie der Handschrift Paris Bibliothèque Nationale Fonds Latin 1118, 2 vols. (Bern: A. Francke, 1973), II, Pl.43. Lunelli features the same illustration in his article cited above. Lunelli, 521.
8. Tosi, 125-6, n.165; 184. Seebass refers to it each time as (10)/12 century. See, for example, Seebass, I, 179.
9. Tosi, 124; 184. Lunelli maintains also that it came from Bobbio. Lunelli, 520. In fact it was in Lunelli's article that Tosi first encountered the opinion that the manuscript was originally of Bobbio provenance. Williams says it comes from Italy. Williams, Organ in western culture, 181. Seebass thinks the same, though he is in some doubt. Seebass, I, 179.
10. Williams, Organ in western culture, 181. See Appendix C for a reproduction of the drawing.
11. Tosi, 129.

12. Ibid. Peter Williams, comparing the Milan document to a later manuscript (*Piacenza 65*) is of the opinion that "pipes seem to have replaced keys." Williams, Organ in western culture, 181. How he has arrived at such a conclusion is unknown.

13. Bubnov, 32 and n.3. The origin of the expression *Saltus Gilberti* is as follows:

"In a manuscript early in the thirteenth century is a statement that Gerbert became archbishop and pope by demon aid and had a spirit enclosed in a golden head whom he consulted as to knotty problems in composing his commentary on arithmetic. When the demon expounded a certain very difficult place badly, Gerbert skipped it, and hence that unexplained passage is called the *Saltus Gilberti*." Thorndike, I, 705.

See Bubnov, 391.

14. Tosi, 126.

15. Ibid., 127.

16. Ibid., 126.

17. Ibid., 128.

18. Ibid.

19. Ibid., 129.

20. Some biographers, for instance, are willing to make statements that Gerbert did a number of things--practiced medicine, for example--without having put forth serious effort to determine if there is any substance to such claims.

### *ROGATUS*

At Bobbio Gerbert's likely organbuilding arose out of his teaching. Now we turn to his arithmetic and geometry works as they relate to organbuilding.

It has long been known that Gerbert was the author of the *Regulae de numerorum abaci rationibus* (the treatise on the use of the abacus) and the *Geometria*. Recently scholars began to suspect that a treatise on pipe measurement, *Rogatus*, once attributed to Bernelinus, was actually the work of Gerbert.

Bernelinus lived in the eleventh century.<sup>1</sup> At one time he was thought to have been Gerbert's student,<sup>2</sup> but recent scholarship has concluded that the relationship is more distant; he can no longer be considered a direct student of Gerbert.<sup>3</sup>

The text of *Rogatus* came to be known when Martin Gerbert published it in 1784 in the first volume of his Scriptores ecclesiastici de musica sacra potissimum, Bernelini cita et vera divisio monochordi in diatonico genere.<sup>4</sup>

The confusion over the authorship of *Rogatus* arose when Martin Gerbert attributed it to Bernelinus, since it appeared in the same manuscript as a treatise on the abacus which was written by Bernelinus.<sup>5</sup>

The work, which . . . is preserved in a manuscript of the Vatican Library,<sup>6</sup> presents a summation of lectures which the learned Gerbert, later pope, held during his young years in Reims.<sup>7</sup> In the manuscript, immediately following the Liber abaci of Bernelinus, is a music treatise. On the basis of the allusion on the front of the manuscript, this treatise likewise was attributed to Bernelinus.<sup>8</sup>

Sometime, at least by the nineteenth century, doubts arose about Bernelinus' authorship of the tract. Scholars (for example, Riemann) began to speak of the document as "the Pseudo-Bernelinus."<sup>9</sup> Bubnov also (in 1899) began to have doubts

about ascribing the work to Bernelinus.<sup>10</sup> Some years later, scholars began to wonder whether the work might be by Gerbert.<sup>11</sup>

Evidence Pointing to Gerbert as the Author of *Rogatus*

Bubnov did not know of the existence of *Ma 9088*, the best and most important of the manuscripts containing *Rogatus*.<sup>12</sup> In that manuscript, dating from the twelfth century,<sup>13</sup> the text is attributed to Gerbert on the basis of a superscription which reads *Gerbertus*.<sup>14</sup> Though it appears only in the Madrid manuscript,<sup>15</sup> that attribution is not contradicted in any of the other manuscripts.<sup>16</sup> And it predates Martin Gerbert's attribution to Bernelinus by some six hundred years. Sachs notes further that, had Bubnov had access to the Madrid manuscript, he would most certainly have included it in his catalogue of Gerbert's mathematical works.<sup>17</sup> Furthermore, Sachs adds, the burden of proof must also be assumed by those who would deny the authenticity of the superscription found in the Madrid manuscript.<sup>18</sup>

The treatise, whose full title is *Rogatus a pluribus quam sepe pro captu ingeniole*, "arises mainly in the context of arithmetic and geometry treatises from the circle of Gerbert of Reims."<sup>19</sup> At this juncture it would be well to recall two points made in the discussion about the *Geometria* in the biographical portion of this paper: the view that the treatise is substantially the work of Gerbert, even if the manuscript did not come directly from his hand, and the remark concerning the complexity of the mathematics found therein. With these pieces of information at hand, we can proceed with our present discussion.<sup>20</sup>

Sachs uses, as a further basis for establishing Gerbert's authorship of *Rogatus*, a chart comparing this treatise with other Gerbertian writings on mathematics. He concludes that the mind which conceived the *Geometria* could surely have produced *Rogatus*.<sup>21</sup>

It is worth noting that Beaujouan, who mentions that some scholars disagree with Bubnov regarding Gerbert's authorship of the *Geometria*, does not hesitate to assert that *Rogatus* can very well be attributed to Gerbert.<sup>22</sup>

The treatise is found in five early manuscripts: *Ma 9088*, ff.125-128v (Madrid, Biblioteca Nacional);<sup>23</sup> *Montpellier H 491*, f.81;<sup>24</sup> *Pn lat.7377 C*, ff.44v-47;<sup>25</sup> *I-Rvat lat.4539*, ff.85-91v<sup>26</sup> and *Rvat Regin. lat.1661*, ff.34v-39v.<sup>27</sup> Each of the five manuscripts contains some of the undisputedly genuine works of Gerbert or at least of his circle.<sup>28</sup>

Three aspects of *Rogatus* which are generally singled out for praise also point to a Gerbertian authorship. These aspects are "its scope in exceeding all other pipe-measurement texts, its prose-style and its wider mathematical framework."<sup>29</sup> The treatise is not limited to technical details of organ pipe measurement. It shows instead the author's attention to style in writing and his interest in philosophy. Even the most casual glance reveals a broad range of interests: in his opening remarks the author cites Aristoxenos, Boethius, Pythagoras, Macrobius and Censorinus; later he mentions Calcidius and Plato.<sup>30</sup>

Taking the information gathered about *Rogatus* from the manuscripts and from an analysis of its style and content, we can see that the evidence points to Gerbert as the author: the earliest attribution is to him, and the elements of the treatise--from philosophical leanings to mathematical framework--indicate a Gerbertian authorship.

#### Date and Place of Composition

The date of *Rogatus* is given as ca.980.<sup>31</sup> This date coincides approximately with the dates of both of Gerbert's mathematical treatises: the *Regulae* was written about 980<sup>32</sup> and the *Geometria* was compiled ca.980-2<sup>33</sup> or in 983.<sup>34</sup>

Where was Gerbert during the period between 980 and 983? It is difficult to say with certainty, as we mentioned in the biography. In December, 980 or January,

981, he debated Otric of Magdeburg in Ravenna before Emperor Otto II. Sometime after that, Otto named him abbot of Bobbio.

Sachs, each time he speaks of *Rogatus*, mentions it in connection with Reims.<sup>35</sup> It may have been written in Reims, but it seems more likely that it was written at Bobbio, since at this time Gerbert was probably in Italy, not in France. Peter Williams mentions that Gerbert "may have left a legacy of pipe-measurement texts" at Bobbio.<sup>36</sup> Kurt Vogel, one of the scholars at the Gerbert Symposium, says that Gerbert's *Geometria*, one of the treatises out of which *Rogatus* arises, was written in 983, during or after his stay at Bobbio.<sup>37</sup>

#### Features of *Rogatus*

One significant feature of the treatise is its use of Arabic numerals.<sup>38</sup> (The reader will recall, from the biographical portion of this paper, that Gerbert is credited with bringing Hindu-Arabic numerals to Europe.) Not all the figures in the treatise are Arabic numerals, however; a fair number of them are Roman numerals. This mixture of Roman and Arabic numerals may have been used by Gerbert to enable his contemporaries to understand the document. It may also have been due to the fact that there was great resistance at first to the idea of Arabic numerals.<sup>39</sup>

Gerbert devises a new lettering system in his treatise. Unlike Boethius, he does not have the notes proceed from A-LL (a different letter for each note). Instead he uses

octave repetitions returning to A, thus:

A H c d e f g a b c' d' e' f' g' a'

according to the tone-semitone sequence but

F G A B C D E F G A B C D E F in Gerbert's nomenclature. One B-flat is included in table-calculations, between notes 8 and 9.<sup>40</sup>



Peter Williams notes that Gerbert felt compelled to explain the nomenclature; thus it must have been new and unfamiliar to his contemporaries.<sup>41</sup>

An important technical feature of this treatise is that it "adds to each pipe-length a comparable proportion from the diameter as a theoretical basis for the phenomenon of end-correction, a phenomenon familiar to observation but one needing 'legitimation.'"<sup>42</sup>

One of the oft-cited features of this tract is the conclusion that the method of measurement for the monochord and for pipes cannot be the same (*De commensuralitate fistularum et monocordi cur non convenient*).<sup>43</sup>

#### Gerbert's Enduring Contribution

*Rogatus* is the most enduring part of the Gerbertian legacy to organbuilding. Whereas any organs he may have built have vanished, this product of Gerbert's knowledge and ingenuity lives still, a millenium after it was written. In fact it is one of the only ways we have of knowing, as Sachs says, what the medieval organ was like.<sup>44</sup>

## NOTES

1. Lattin, Letters, 47, n.10.
2. See Huglo, 250.
3. Bergmann, 197.
4. Beaujouan, Gerberti Symposium, 648. Olleris, 590. Martin Gerbert (we will use his full name in order not to confuse him with the man who is the subject of this paper) was the first to make medieval treatises on pipe measurement accessible. Sachs, "Relationship," 87.
5. Beaujouan, Gerberti Symposium, 648.
6. The reference is to *Rvat Regin. lat.1661*.
7. See Olleris, 357.
8. Heinrich Hüschen, "Bernelinus," Die Musik in Geschichte und Gegenwart, 17 vols., ed. Friedrich Blume (Basel and Kassel: Bärenreiter, 1949-86), XV, 704.
9. Ibid.
10. Bubnov, 565; c.
11. In 1938 Professor A. Van de Vyver wondered whether the Pseudo-Bernelinus treatise could be by Gerbert. Klaus-Jürgen Sachs, Mensura fistularum: Die Mensurierung der Orgelpfeifen im Mittelalter 2, Studien zur Tradition und Kommentar der Texte (Murrhardt, Germany: Schriftenreihe der Walcker-Stiftung für orgelwissenschaftliche Forschung 2, 1980), 172, n.32. Van de Vyver is a scholar whose works are studied, not only by musicologists such as Sachs, but by scientists as well. See, for instance, the works of Bergmann, Poulle, Borst and Beaujouan which are cited in this paper.
12. Beaujouan, Gerberti Symposium, 648. Sachs, "Cognomento," 267. See Bubnov, xvii, where he mentions all the existing manuscripts of *Rogatus* except *Ma 9088*.
13. Klaus-Jürgen Sachs, Mensura fistularum: Die Mensurierung der Orgelpfeifen im Mittelalter 1, Edition der Texte (Stuttgart: Schriftenreihe der Walcker-Stiftung für orgelwissenschaftliche Forschung 1, 1970), 27.

14. Higinio Anglés and José Subirá, Catálogo Musical de la Biblioteca Nacional de Madrid, 3 vols. (Barcelona: Consejo Superior de Investigaciones Científicas, Instituto Español de Musicología, 1946-51), I, 146.
15. Sachs, "Cognomento," 267.
16. Ibid. Sachs, Mensura fistularum 2, 172.
17. Sachs, "Cognomento," 267.
18. Ibid. For more on Gerbert's authorship, see Joseph Smits van Waesberghe, Musikerziehung: Lehre und Theorie der Musik im Mittelalter, vol. III of Musikgeschichte in Bildern, ed. Heinrich Besseler and Werner Bachmann (Leipzig: VEB Deutscher Verlag für Musik, 1969), 34.
19. Sachs, Mensura fistularum 2, 32.
20. Mann, V, 118.
21. Sachs, Mensura fistularum 2, 173.
22. Beaujouan, Gerberti Symposium, 648.
23. Huglo, 250. Williams, Organ in western culture, 283, n.10.
24. Bubnov, c. Huglo, 250.
25. Huglo, 250.
26. Ibid.
27. Ibid. Bubnov, c.
28. Sachs, "Cognomento," 267. The text can also be found in PL, attributed to Bernelinus. Bernelini cita et vera divisio monochordi in diatonico genere, PL, CLI, cols.653-74.
29. Williams, Organ in western culture, 284, citing Sachs, "Cognomento." See also Sachs, Mensura fistularum 2, 173-4.
30. Sachs, Mensura fistularum 1, 59-61.
31. Williams, Organ in western culture, 284. Sachs, Mensura fistularum 2, 176.

32. Lattin, Letters, 45-7.
33. Bubnov, 46.
34. Vogel, 592.
35. See, for example, Sachs, Mensura fistularum 2, 183 and Mann, V, 118.
36. Williams, Organ in western culture, 181, n.32.
37. Vogel, 592, citing Bubnov.
38. Huglo, 250. See, for example, Bernelini, cols.655-6.
39. Durant reports that, "as late as 1299 the abacists of Florence had a law passed against the use of the 'new-fangled figures.'" Durant, IV, 990.
40. Williams, Organ in western culture, 284, citing Sachs, Mensura fistularum 1.
41. Williams, Organ in western culture, 284.
42. Ibid., citing Sachs, Mensura fistularum 2.
43. See, for example, Huglo, 250.
44. Sachs, "Relationship," 87.

## CONCLUSION

We have examined the life of this extraordinary man, Gerbert of Aurillac. We have studied the legend which grew up after his death. We have looked at his reputation as an organbuilder--the legendary and the factual--not as an entity in itself, divorced from the rest of Gerbert's story, but as an integral part of his life and legend.

We have concluded that Gerbert was the author of *Rogatus*. Thus we know that he was involved in the theoretical aspect of organbuilding. We know also of his interest in organs and his likely experimenting with them. Does the evidence tell us anything more? Can we conclude with certainty that he not only wrote about organs but actually built them?

### Additional Evidence

To answer this question, let us consider some additional pieces of evidence, intangible proofs, as it were, which cement the case for Gerbert the practical builder of organs.

First is the sum of the three sources of information contemporaneous with Gerbert: his letters about organs, the information from Bobbio, and the treatise *Rogatus*. Taken alone, any one of these sources would not provide a wholly convincing answer to our question. But taken together they constitute, if you will, a fourth piece of evidence, evidence which is sufficient to establish that Gerbert did actively engage in the building of organs and had a reputation for doing so.

Second is Gerbert himself. Is it really possible that Gerbert could have written a treatise about pipe measurement and not have experimented in the craft himself? Could the maker of spheres have written a tract about the workings of an organ without firsthand experience of how it was made? The answer must be an unqualified no. Gerbert--the inquisitive scientist endlessly tinkering with gadgets of one kind or another,

the ardent teacher constantly in search of visual aids for his students--would have been constitutionally unable to write academically about the organ without experimenting with it himself. Here is yet another instance where familiarity with Gerbert's story and his personality provides critical information needed to fill in the pieces of the puzzle.

This brings us to our third bit of additional evidence, the account given by William of Malmesbury. Gerbert did not invent the "Reims organ"; William did. In all likelihood, what William did was to take Gerbert's reputation as an organbuilder (a reputation which by that time had endured for over a hundred years) and couple it with a description of a steam organ which he perhaps had seen. Thus he produced the account we have read, an account which has caused such hand-wringing over terms such as *aquae calefactae* and *artes mechanicae*--all of it unnecessary if one realizes that William was simply spinning a yarn.

Scientific fact it is not. But William's story contains a truth of a different kind. The bit of data at the base of William's account, namely the fact that Gerbert was a builder of organs, provides in its own way yet another proof establishing Gerbert as someone who actually engaged in organbuilding. This is a relatively new use for William's story, one overlooked by most organ historians.<sup>1</sup>

### Gerbert's Organs

#### Where He Built Them

And where did Gerbert build these organs? Certainly in Bobbio, where we have manuscript illustrations, from Gerbert's own time, of what these organs might have looked like.

The findings in this paper thus indicate the need for a shift in thinking. Heretofore organ historians, following William of Malmesbury, have generally considered Reims as the primary center of Gerbert's organbuilding. But the evidence from Gerbert's life suggests that the site where he most likely built organs was not Reims but Bobbio.

Bobbio is the place to which his letters refer. Bobbio is the place where the manuscript illustration is found. And Bobbio is the place where Gerbert probably wrote the treatise *Rogatus*.

Perhaps Gerbert also built organs at Reims. There are several conjectures which can be put forth in support of such a claim, all of them inconclusive. First, Gerbert did run a fine school in Reims, where he might have built organs as well as spheres. (Richer's failure to mention organs is, as we know, not convincing proof that there were none.) Second, the letters about organs in Italy were written from Reims, as we mentioned in the chapter on Gerbert's letters. (This fact actually strengthens the case for Bobbio: why would Gerbert write to Aurillac about organs left in Italy if he were engaged in building them in Reims?) Third, he could have been in Reims when he wrote *Rogatus*, although the evidence for that claim is doubtful. As a final comment, let it be said that the one piece of information which cannot be used as proof that Gerbert built organs at Reims is William of Malmesbury's account!

We do not know whether Gerbert built organs in Reims. We do know that there is at present no hard evidence to suggest that he did, as there is in Bobbio. In view of the information currently available, it would seem fitting that Bobbio should henceforth assume primary importance as the locus of Gerbert's organbuilding activities. It is left to further "excavations" to determine if Gerbert did any organbuilding while at Reims.

#### Purpose of the Organs

Everything about Gerbert's life as a *scholasticus* suggests that the organs he built were teaching aids. There is no evidence to support the notion that Gerbert constructed organs for liturgical use. Gerbert's letters to Aurillac about the organs in Italy are silent on this matter; they neither support nor contradict such an opinion. The idea

that he built an organ for use in the church comes from William of Malmesbury's fictional "Reims organ."<sup>2</sup>

### The Many Faces of Gerbert

Gerbert the Benedictine. Gerbert the politician and pope. Gerbert the scientist and teacher. And yes, Gerbert the organbuilder.

The first French organbuilder, he has been called.<sup>3</sup> This claim can be validated, but it requires more than a single sentence lifted out of context--in this case, the double context of Gerbert's life and William's account of the legend. It requires the sum of all the evidence known about Gerbert, not just as an organbuilder but as a person. To separate Gerbert the organbuilder from the many other "Gerberts" is the equivalent of the severed talking head of the Gerbert legend.

Much has been written about all aspects of the life and work of Gerbert of Aurillac. Much undoubtedly remains to be written, especially as we approach the turn of the millenium. One can hope that future studies of Gerbert as an organbuilder will consider him in all his rich diversity, as a charismatic, engaging person with a colorful history, out of whose history emerges the story of his involvement with this captivating machine which we call the organ.

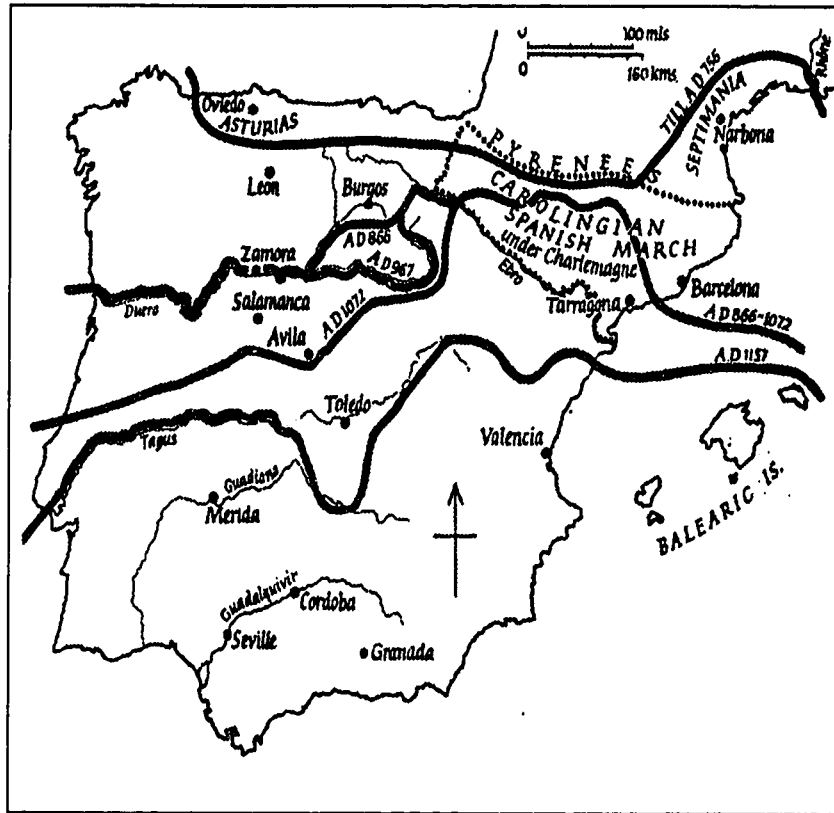


## NOTES

1. Sachs is one organ historian who does use William's story in the way we have proposed. He recounts William's version of the "Reims organ," but puts little faith in its literal truth, as we have already mentioned. However, he goes on, the quintessence of the passage is that Gerbert did indeed occupy himself with the building of organs. Sachs, "Cognomento," 261-2. Sachs presents one of the most enlightened interpretations of William's passage. But aside from a reference to William's fondness for a colorful mixture of fact and fantasy, even he makes no allusion to the context in which William's account of the "Reims organ" appears. See also Thurston, 182.
2. See Perrot, L'Orgue, 292 and Perrot, Organ, 227.
3. Garcia Llovera, 103 and n.505, citing Martinod, Répertoire des Travaux des Facteurs d'Orgues du IXe siècle à nos jours.

## **APPENDIX A**

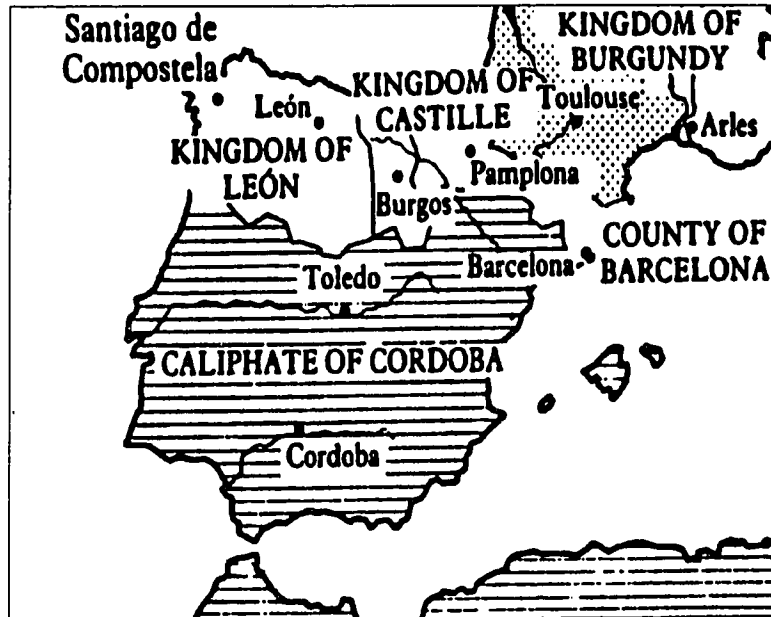
### **The Spanish March in the Tenth Century**



Alan Deyermond, "Spain," *The Middle Ages: A Concise Encyclopedia*, 306.

**APPENDIX B**

**The Iberian Peninsula in the Tenth Century**



Le Goff, 58.

**APPENDIX C**

**Illustration of an Organ from MS *Amb. C. 128 Inf.***



Seebass, II, Pl.43.

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