

CRUSADERS IN CRISIS: TOWARDS THE RE-ASSESSMENT OF THE ORIGINS AND NATURE OF THE “PEOPLE’S CRUSADE” OF 1095-1096

PHILIP SLAVIN
MCGILL UNIVERSITY
CANADA

Date of receipt: 21th of May, 2009

Final date of acceptance: 16th of June, 2009

ABSTRACT

Many explanations have been offered for the commencement of the crusading movement in the late eleventh century. However, the ecological and socio-economic background of the 1090s has been, largely, neglected by scholars up until today. The current paper surveys and analyzes the ecological and economic crisis of 1093-1096, as the prelude to the First Crusade, chiefly in its “popular” form. The pestilence of 1093-1094, drought and famine of 1095 have increased the religious zeal and social violence of the popular masses in regions of Germany, the Low Countries and France. This combination has turned into the (failed) crusade. The collective behaviour of the crusading rustics reflects their economic distress, religious zeal and violent mood, at the same time.

KEYWORDS

The First Crusade, Ecological Crisis, Pestilence, Famine, Apocalyptic Visions, Violence, Religious Zeal, Anti-Semitism.

CAPITALIA VERBA

Sacrae crucis militia prima, Natura rerum in discrimine, Pestilentia, Fames, Simulacra ad Apocalypsim referentia, Violentia, Grauis religio, Ira in Iudaeos.

In his *Historia Ierosolymitana*, completed within one generation of the First Crusade, Albert of Aachen tells a curious story about some rustics, guided by divinely inspired goose and a she-goat to take the holy path to Jerusalem. The rustics followed their animal leaders wholeheartedly. For Albert, and some other contemporary authors, it was “abominable wickedness” of “stupid and insanely irresponsible mob pilgrims” (*scelus detestabile in hac congregatione pedestris populi stulti et vesane levitates*).¹ This anecdotal episode, popularized by Terry Jones in his 1995 TV series *The Crusades*, though may be regarded as a *curiosum*, reflects, in fact, the popular mentality and collective concerns of the earliest crusades, consisting of rustic masses. Although the origins of the early crusading movement and of the First Crusade (1095/6-9) in particular, have been a subject to much scholarly debate and investigation, the roots of the popular crusading movement have yet to be studied at length.² This reflects, to a certain degree, the tendency of the crusading scholars to look at *long durée* causes leading to *long durée* consequences; namely to concentrate on long-term processes and contexts, *structures* and *conjonctures*, affecting collective *mentalités* into which the long-term concept and movement have been born. It could be rewarding, perhaps, to consider and analyze the *histoire événementielle*, consisting of immediate events and facts leading to the mass human movement of 1096. The present paper examines the environmental and socio-economic background of the earlier 1090s, as a prelude to the popular crusading movement of 1095-6. A close analysis of the sources, both written and proxy may reveal the roots and causes of the “People’s Crusade” in particular, and of the early crusading movement in general.

1. The Ecological Crisis of the 1090s

The period between c.1060 and 1130 can be viewed as a transitional sub-stage within the cooling phase (c.1000 and 1200) of the Medieval Warm Period (c.900-1250). These seventy years are characterized by relatively steady global temperatures, whose average anomaly fluctuated between 0.08 and 0.14 degrees Celsius.³ In Western Europe, the period in question seemed to have been marked by a pronounced gap

1. Aachen, Albert of. *History of the Journey to Jerusalem*, ed. and trans. Susan B. Edgington. Oxford: Clarendon Press, 2007: 58-9.

2. For the origins of the First Crusade, see, among others, Runciman, Steve. *The History of the Crusades*. Cambridge University Press, 1951: 1-115; Duby, George. *La société aux XIe et XIIe siècles dans la région mâconnaise*. Paris: Armand Colin, 1953: 435; Riley-Smith, Jonathan. “The Motives of the Earliest Crusaders and the Settlement of Latin Palestine, 1095-1100”. *English Historical Review*, 98 (1983): 721-36; Bull, Marcus. “The Roots of Lay Enthusiasm for the First Crusade”. *History*, 78 (1993): 353-72.

3. Loehle, Craig. “A 2000-Year Global Temperature Reconstruction based on Non-Treeing Proxies”. *Energy and Environment*, 18/7-8 (2007): 1049-1058; Loehle, Craig; McCulloch, J. Husto. “Correction to ‘A 2000-Year Global Temperature Reconstruction based on Non-Treeing Proxies’”. *Energy and Environment*, 19:1 (2008): 93-100.



between warm summers and cold winters.⁴ Particularly illuminating is a recent reconstruction of seasonal and annual temperatures in the Low Countries, which sheds much light on climatic variances on the eve of the First Crusade.⁵ Indeed, the proxy-data-based reconstruction of annual temperatures is complimented by textual evidence. Thus, there were disastrously dry summers in 1090 in Flanders, Western Germany and Eastern France.⁶ In Normandy, the following year was characterized by a dry summer and exceedingly wet winter.⁷ In Eastern Germany and Bohemia, the winter of 1091-2 lasted well into April. The fall of 1093 saw abundant downpour in various parts of Germany and Flanders, which extended until April of the following year.⁸ In 1095, there was a prolonged drought in Flanders and France. An earthquake is reported in Flanders on 10 September 1095, while one nearly contemporary author states that it was felt all over Northern Europe, from France to Denmark.⁹ In Kievan Rus', there were exceedingly dry summers in 1092, 1094 and 1095, alongside with locust migrations.¹⁰ The annalists of the British Isles also complain about inclement weather and cold winters.¹¹ In addition, there may have been indirect evidence about atmosphere corruption around that time. A large concentration of Ammonium particles, as found in Greenland Ice Core (GRIP) layer of the early 1090s, may point into air pollution in Northern Europe.¹² This fact will be discussed later in a more detail.

Inclement weather and possibly air pollution had an immediate and profound impact on living organisms, human and non-human alike. This was also a period of disease outbreaks, crop failures and famines. The year of 1090 saw a widespread outbreak of ergotism, or "St. Anthony's Fire", in Germany, France and Flanders. But the crisis became especially acute in September 1093, when an unknown disease of

4. Pfister, C.; Luterbacher, J.; Schwarz-Zanetti, G.; Wegmann, M. "Winter Air Temperature Variations in Western Europe during the Early and High Middle Ages (AD 750-1300)". *Holocene*, 8/5 (1998): 535-552.

5. Shabalova, Marina V.; Van Engelen, Aryan F. V. "Evaluation of a Reconstruction of Winter and Summer Temperatures in the Low Countries, AD 764-1998". *Climatic Change*, 58 (2003): 219-242.

6. Curschmann, Fritz. *Hungersnöte im Mittelalter. Ein Beitrag zur Deutschen Wirtschaftsgeschichte des 8. bis 13. Jahrhunderts*. Leipzig: B.G. Teubner, 1900: 123; Alexandre, Pierre. *Le climat en Europe au Moyen Age, contribution à l'histoire des variations climatiques de 1000 à 1425, d'après les sources narratives de l'Europe occidentale*. Paris: Éditions de l'École des Hautes Études en Sciences Sociales, 1987: 342.

7. Delisle, Léopold. *Études sur la condition de la classe agricole et l'état de l'agriculture en Normandie au Moyen Age*. Évreux: A. Hérissay, 1851: 630.

8. Fritz Curschmann, *Hungersnöte im Mittelalter. Ein Beitrag...*: 123.

9. Gemblacensis, Sigeberti. "Chronica Sigeberti Gemblacensis", ed. D. L. C. Bethmann, *Monumenta Germaniae Historica Series Scriptores*, Georg Heinrich Pertz, ed. Hanover: Impensis Bibliopolii Aulici Hahniani, 1844: VI, 367; Aachen, Albert of. *Historia Ierosolimitana...*: 8-9. This quake is noted in Alexandre, Pierre. *Les séismes en Europe occidentale de 394 à 1295. Nouveau catalogue critique*. Brussels: Observatoire royal de Belgique, 1990: 144-5.

10. Borisenkov, Evgenii Panteleimonovich; Pasetskij, Vasilii Mikhailovich. *Ekstremal'nye Prirodnye Iavleniya v Russkikh Letopisyakh XI-XVII vv.* Leningrad: Gidrometeoizdat, 1983: 119.

11. *The Anglo-Saxon Chronicle: A Collaborative Edition*, ed. Janet M. Bately. Cambridge: D.S. Brewer, 1986: under 1095; *Annals of Ulster*, ed. Bartholomew MacCarty. Dublin: Her Majesty's Stationery Office by Alexander Thom, 1893: under 1094 and 1095.

12. GRIP Ice-core data, available online at: "Ice Cores". *NOAA Paleoclimatology*. 23th January 2009. National Environmental Satellite, Data and Information Service-National Climatic Data Center- U.S. Department of Commerce. 23th April 2009 <<http://www.ncdc.noaa.gov/paleo/icecore.html>>.



disastrous proportions broke out in Germany and the Low Countries, lasting into the following year. Several chronicles also report an outbreak of cattle pestilence around the same time.¹³ In France, a harsh drought of spring and summer 1095 brought about a widespread famine, which, in turn, caused starvation and mortality. The crisis of 1093-1095 brought much hardship on the local population, and chiefly the rustics. It was in this context that the origins and nature of the "People's Crusade" of 1096 should be viewed and appreciated.

Although the crisis of 1093-1095 has not yet received a proper treatment by both crusading students and scholars of European High Middle Ages, it had been mentioned in connection to the people's crusading movement. Thus, late nineteenth-century German historians, Theodor Wolff and Heinrich Hagenmayer mentioned the famine of 1095, but failed to appreciate its full extent.¹⁴ In his posthumous *la Chérienté et l'idée de Croisade* (1954), Paul Alphandery treated the socio-economic crisis of the early 1090 as a background to the popular crusaders, in somewhat greater length.¹⁵ This connection, however, was negated by Frederic Duncalf, first in his PhD dissertation from 1909 and, twelve years later, in an influential, yet controversial article.¹⁶ For Duncalf, the famine of 1095 did not play any role in the origin of the popular crusade. He regarded it, quite erroneously, as a small-scale and local.¹⁷ Several other crusading historians spoke *en passant* about the famine, but did not connect it to the movement.¹⁸ In 2004, Robert Fossier in his vivid article on rural economy of the eleventh and twelfth centuries called it "doubtless local".¹⁹ Only most recently, the severity of the 1093-5 crisis was rehabilitated by Pere Benito i Monclús, who regarded it as one of the harshest subsistence crises of the High Middle Ages.²⁰ In any event, the environmental crisis, which immediately preceded the First Crusade, was anything, but "local famine". Its extent and impact is attested in a large number of contemporary sources, mostly chronicles, whose language and terminology suggest that it was of indeed disastrous proportions, as we shall see later.

Perhaps the main reason for the relative silence about the 1093-1095 crisis and its connection to the popular crusade lies in the fact that many scholars, following Duncalf, denied, or at least doubted this very term, namely the "popular" element of

13. For instance, "Annales Wirzburgenses (Annales s. Albani Moguntini)", *Monumenta Germaniae Historica Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1829: II, 246.

14. Hagenmeyer, Heinrich. *Peter der Eremit. Ein kritischer Beitrag zue Geschichte des ersten Kreuzzuges*. Leipzig: Otto Harrasowitz, 1879: 111; Wolff, Theodor. *Die Bauernkreuzzüge*. Tübingen: 1891: 108-119.

15. Alphandery, Paul. *La Chérienté et l'idée de croisade*. Paris: Albin Michel, 1954: 43-50.

16. Duncalf, Frederic. *The Peasants' Crusade*. Madison: University of Wisconsin (PhD. Dissertation), 1909; Duncalf, Frederic. "The Peasants' Crusade". *American Historical Review*, 26/3 (1920-1921): 440-453.

17. Duncalf, Frederic. "The Peasants' Crusade"....: 452.

18. Runciman, Steven. *The History of the Crusades*....: 114-115; Riley-Smith, Jonathan. *The Crusades: A Short History*. New Haven-London: Yale University Press, 1987: 20.

19. Fossier, Robert. "The Rural Economy and Demographic Growth", *New Cambridge Medieval History. Vol. IV, c. 1024-c. 1198*, David Luscombe, Jonathan Riley-Smiths, eds. London: Cambridge University Press, 2004: I, 15.

20. Benito i Monclús, Pere. "Et si sterilitas, ut solet, in terra illa fuerit...": frecuencia, longevidad y gravedad de las carestías en Cataluña durante la "fase del crecimiento" de la economía medieval (siglos XI-XIII)", *Crisis de subsistencia y crisis agrarias en la Edad Media*, Hipólito Rafael Oliva Herrero, Pere Benito i Monclús, eds. Sevilla: Secretariado de Publicaciones Sevilla, 2007: 79-110.



the “unorganized” crusade, which preceded the “official”, or the “Princes’ Crusade”.²¹ According to the thesis formulated by Duncalf, it was the movement of middle-class landholders and townsmen, driven not by distress, but by prosperity, which characterized the eleventh-century economy, while the “*via sancta* was not for the pauper”.²² This view was accepted developed further by René Grousset, Steven Runciman, Hans Eberhard Mayer, Jean Flori and most notably, Jonathan Riley-Smith.²³ At the same time, there were still some exceptions holding the “populist” position, most notably Joshua Prawer and Michel Mollat.²⁴ For the latter, “the crusade was originally, and in its very essence, an affair of the poor”.²⁵ Most recently, the Duncalf thesis was challenged once more.²⁶ As we shall argue later, however, any categorization or labeling of the movement may be problematic and irrelevant for our understanding of the causes and motifs of the earliest crusaders. A close analysis of the source material, in the context of the environmental and socio-economic crisis of the 1090s, may reveal an alternative interpretation of the origins, nature and significance of the crusading movement in its incipient phase.

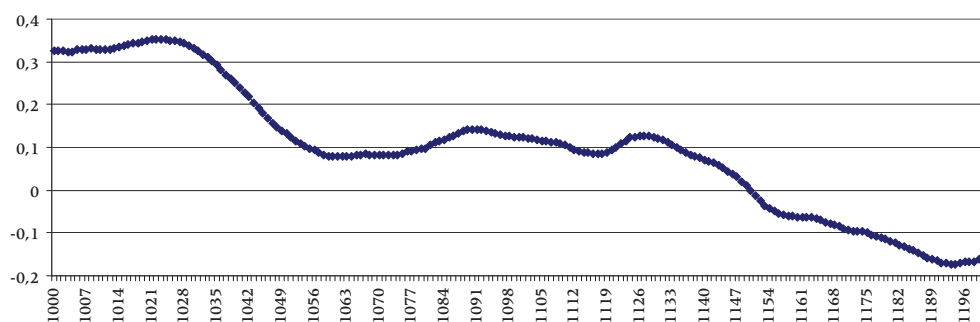


FIGURE 1. RECONSTRUCTED GLOBAL TEMPERATURE ANOMALIES, 1000-1200. SOURCE: LOEHLE, CRAIG; McCULLOCH, J. HUSTON. “CORRECTION TO ‘A 2000-YEAR GLOBAL TEMPERATURE RECONSTRUCTION BASED ON NON-TREEING PROXIES’”. *ENERGY AND ENVIRONMENT*, 19/1 (2008): 93-100.

21. The arguments are summarized in Kedar, Benjamin Z. “Crusade Historians and the Massacres of 1096”. *Jewish History*, 12:2 (1998): 11-31; Malkiel, David. “The Underclass in the First Crusade: A Historiographical Trend”. *Journal of Medieval History*, 28 (2002): 169-197.

22. Duncalf, Frederic. “The Peasants’ Crusade”. *American Historical Review*, 26:3 (1920-1921): 453.

23. Grousset, René. *Histoire des croisades*. Paris: Librairie Plon, 1934: I, 9; Runciman, Steven. *A History of the Crusades...* I, 134-135; Mayer, Hans Eberhard. *The Crusades*, trans. John Gillingham. Oxford: Oxford University Press, 1988: 40-41; Flori, Jean. “Une ou plusieurs ‘première croisade’? Le message d’Urbain II et les plus anciens pogroms d’occident”. *Revue historique*, 285 (1991): 4-5; Riley-Smith, Jonathan. *The Crusades: A Short History...*: 18-20.

24. Prawer, Joshua. *The Latin Kingdom of Jerusalem: European Colonialism in the Middle Ages*. New York: Praeger, 1972: 11.

25. Mollat, Michel. *The Poor in the Middle Ages: An Essay in Social History*, trans. Arthur Goldhammer. New Haven and London: Yale University Press, 1986: 72.

26. Malkiel, David. “The Underclass in the First Crusade...”: 169-197.



2. 1094: The Year of Plague

By late 1093, vast parts of Germany, the Low Countries and France were devastated by human mortality. Various chroniclers from these regions spoke about “(most) grave” or “enormous” human mortality / pestilence (*gravis(sima) / maxima hominum mortalitas / pestilencia*). In Germany, the epidemics are reported in Saxony,²⁷ Thuringia,²⁸ Westphalia,²⁹ Franconia,³⁰ Rhineland-Palatine,³¹ Baden-Württemberg,³² Hessen³³, Swabia³⁴ and Bavaria.³⁵ In the Low Countries, the pestilence ravaged Flanders,³⁶ Liège,³⁷ Hainaut³⁸ and Brabant.³⁹ According to some German and Flemish sources, the entire France, including Normandy, Alsace and Burgundy was devastated, although this statement is not supported by French narratives.⁴⁰ Some annalists also report death tolls and hint at the proportions. Thus, Bernold of Constance (c.1054-1100), himself a contemporary witness, recorded that in Regensburg alone 8,500 men died within the period of twelve weeks. He then

27. “Annales Augustani”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1839: III, 134.

28. “Annales Sancti Petri Erphesfurdenses”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1859: XVI, 16.

29. “Annales Brunwilarenses”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1859: XVI, 726.

30. “Annales Wirzburgenses (Annales s. Albani Moguntini)”, *Monumenta...*: II, 246.

31. “Annales Sancti Disibodi”, ed. G. Waitz, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1861: XVII, 14.

32. “Annales Rosenveldenses”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz, Hanover: Bibliopolii Hahniani, 1859: XVI, 100; “Annales Neresheimenses”, ed. Ottone Abel, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1852: X, 21; “Annales Sancti Georgii in Nigra Silva”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1861: XVII, 294; “Annales Zwifaltenses”, ed. Ottone Abel, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1852: X, 54.

33. “Annales Ottenburani”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1844: V, 8; Von PrAG. Cosmas. “Die Chronik der Böhmen des Cosmas von Prag (Cosmae Pragensis Chronica Boemorum)”, eds. Bertold Bretholz, Wilhelm Weinberger, *Monumenta Germaniae Historica. Scriptores rerum Germanicarum, Nova Series*. Berlin: Weidmannsche Buchhandlung, 1923: II, 163.

34. “Annales Augustani”...: III, 134.

35. “Bernoldi Chronicon”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1844: V, 459-461; “Annales Ottenburani”...: V, 8; Von PrAG. Cosmas. “Die Chronik der Böhmen...”: II, 163.

36. “Gesta Abbatum Gemblacensium, Continuatio Auctore Godescalco”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1849: VIII, 547.

37. “Annales Leodienenses”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1841: IV, 29.

38. “Gesta Abbatum Lobbiensium”, ed. Wilhelmo Arndt, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1869: XXI, 313.

39. “Annales Parchenses a Nativitate Iohannis”, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1859: XVI, 604.

40. Gemblacensis, Sigeberti. “Chronica Sigeberti Gemblacensis”...: VI, 366; “Bernoldi Chronicon”...: V, 461; “Annales Sancti Disibodi”...: XVII, 14.



added that the pestilence was especially devastating on the Bavarian countryside. In one village, more than 1,050 peasants perished in just six weeks, namely more than forty people in one day. So high was the death toll that church graveyards could not provide enough space for survivors to bury their dead relatives.⁴¹ Another contemporary witness, Cosmas of Prague (c.1045-1125), related how bishops Andrew of Olomouc and Cosmas of Prague,⁴² passing through Amberg (Bavaria) on their way home from their consecration in Mainz, found a multitude of corpses lying on a pavement and blocking their way to a local parish church. Similarly, Cosmas added, in Kager (south of Schönsee, in Bavaria), there were three or four fatalities per house.⁴³ The contemporary *Annales Augustani* mentioned that in the Augsburg region there were many villages without farmers and many churches without priests, all decimated by the pestilence.⁴⁴ An annalist of Disibodenberg spoke about monastic mortality at Bec Abbey (Normandy).⁴⁵ The mysterious mortality, just as the Black Death, did not discriminate its victims by social class.

In other words, we are dealing here with human mortality of very large proportions. The lack of statistical sources, which exist for later epidemics, most notably the Black Death, does not allow to estimate an approximate death toll. It is unclear if those few actual figures given by the chroniclers are trustworthy. Bernold's figure of 8,500 victims in Regensburg does not seem impossible: around 1000, there may have been around 40,000 inhabitants and it is possible that in 1094 the figure was even higher.⁴⁶ On the other hand, it is rather hard to imagine a late eleventh century Bavarian village with over 1,000 people. At the same time, however, there is no doubt that the language of the chroniclers points to the severity of the disaster. It is equally unknown what kind of disease it was, because the sources do not provide any symptoms. One later chronicler, Berthold of Zwiefalten (c.1089-1169) noted that people died of a "sudden pestilence" (*subita peste*) and, thus, hinted that people died shortly after the pathogen reached their community.⁴⁷ Although the disease has not yet caught enough scholarly attention, some isolated "diagnoses" had been made. Some, including William J. Simpson and Raymond H.R. Crawford labeled the mortality as "plague".⁴⁸ Jacques Le Goff and Horst Fuhrmann diagnosed the

41. "Bernoldi Chronicon"....: V, 460.

42. Andrew of Olomouc (1090-1097) and Cosmas of Prague (1090-1098). See, Frind, Anton. *Die Kirchengeschichte Böhmens im Allgemeinen und in ihrer besonderen Beziehung auf die jetzige Leitmeritzer Diözese in der Zeit vor dem erblichen Königthume*. Prague: Friedrich Tempsky, 1864: 190-193, 245.

43. Von PRAG. Cosmas. "Die Chronik der Böhmen...": II, 63.

44. "Annales Augustani"....: III, 134.

45. "Annales Sancti Disibodi"....: XVII, 14-15.

46. Bairoch, Paul; Batou, Jean; Chèvre, Pierre. *La population des villes européennes: 800-1850: banque de données et analyse sommaire des résultats*. Geneva: Droz, 1988: 8.

47. "Bertholdi Liber de Constructione Monasterii Zwivildensis Libri II", ed. Ottone Abel, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1852: X, 111.

48. Simpson, William John. *A Treatise on Plague Dealing with the Historical, Epidemiological, Clinical, Therapeutic and Preventive Aspects of the Disease*. Cambridge: Cambridge University Press, 1905: 20. He considered it "the worst plague in Europe in the eleventh century". See also, Crawford, Raymond H. R. *Plague and Pestilence in Literature and Art*. Oxford: Clarendon Press, 1914: 104, "a severe epidemic of plague".



mortality as ergotism, alias Saint Anthony's fire.⁴⁹ Both interpretations, however, are dubious and problematic, because the textual evidence gave no further symptoms. In fact, an epidemic of ergotism did not break out in 1094 at all. There were two localized outbreaks in the 1090s, the one in Germany in 1090 and the other one in Aquitaine in 1095.⁵⁰ In both cases, the chroniclers specified the nature of these outbreaks and indeed referred to them as "Holy Fire" (*ignis sacer*). As for the 1094 pestilence, however, no source spoke about ergotism. Whatever this disease was, it seems that it was endemic in its nature: as far as our sources tell, its pathogen did not spread beyond Northern France, Germany and the Low Countries.

What caused this mysterious disease? One Bavarian chronicle, the *Annales Ottenburani*, hinted that there was a connection between famine and mortality.⁵¹ Some scholars take this connection at face value.⁵² However, apart from this source, this alleged link is found nowhere. Moreover, this was the only contemporary chronicle which spoke about famine in 1094. There were indeed isolated famine outbreaks in Catalonia, Ireland and the Kievan territories, brought about by bad weather and migratory locusts, respectively, but these seem to have been local cases, unrelated to the continental mortality.⁵³ Several chroniclers mentioned severe downpour and flooding in 1093.⁵⁴ Thus, one Flemish annalist reported that the rain fell continuously for six months, from 14 October 1093 until 1 April 1094.⁵⁵ An Augsburg chronicler reported the autumn of 1093 as "rainy" (*pluviosus*).⁵⁶ In Bavaria, the flood was accompanied by harsh storms.⁵⁷ Moreover, dendrochronological data suggest the year of 1093 was indeed exceedingly wet in Central and Western Europe (Figure 2). At Liège, the level of precipitation was about 37 per cent above

49. Le Goff, Jacques. *Civilisation de l'Occident médiéval*. Paris: Arthaud, 1964: 301; English translation: *Medieval Civilization, 400-1500*, trans. Julia Barrow. Oxford, MA: Blackwell Publishing, 1991: 239; Fuhrmann, Horst. *Deutsche Geschichte im hohen Mittelalter: von d. Mitte d. 11. bis zum Ende d. 12. Jh.* Göttingen: Vandenhoeck und Ruprecht, 1978: 23. English translation: *Germany in the High Middle Ages*, trans. Timothy Reuter. Cambridge: Cambridge University Press, 1986: 11.

50. "Herimanni Liber de Restauratione Monasterii S. Martini Tornacensis", *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Waitz. Hanover: Bibliopolii Hahniani, 1883: XIV, 277; "Chronicon Gaufredi Vosiensis", ed. Martin Bouquet, *Recueil des Historiens des Gaules et de la France*, Léopold Delisle, dir. Paris: Victor Palme, 1877: XII, 427.

51. "Annales Ottenburani"....: V, 8.

52. Thus, Rutkowska-Plachcińska, Anna. "The 'Fire' Disease and the Anthonites". *Acta Poloniae Historica*, 81 (2000): 146, note 5: "The plague (caused by hunger and destructive disease)".

53. Benito i Monclús, Pere. "Et si sterilitas, ut solet...": 79-110; Borisenkov, Evgenii Panteleimonovich; Pasetskij, Vasilii Mikhailovich. *Ekstremal'nye Prirodnye Iavleniya v Russkikh...*: 119; *Annals of Ulster*, ed. Bartholomew MacCarty....: under 1094 and 1095.

54. "Annales Ottenburani"....: V, 8; "Annales Blandinienses", ed. Ludovicus Bethmann, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1844: V, 27; "Ekkehardi Uraugiensis Chronica", ed. Georg Waitz, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1844: VI, 207.

55. "Annales Blandinienses"....: V, 27.

56. "Annales Augustani"....: III, 134.

57. *Frutolfs und Ekkehard's Chroniken und die anonyme Kaiserchronik*, eds. Franz-Josef Schmale, Irene Schmale-Ott. Darmstadt: Wissenschaftliche Buchgesellschaft, 1972: 106-7.



average; at Namur, it was some 30 per cent above average; in Burgundy, it was 40 per cent above average; and in East Pomerania, it was 12 per cent above average. But there is no further evidence showing that the rain destroyed crops, brought about widespread hunger, and contributed to human mortality.⁵⁸

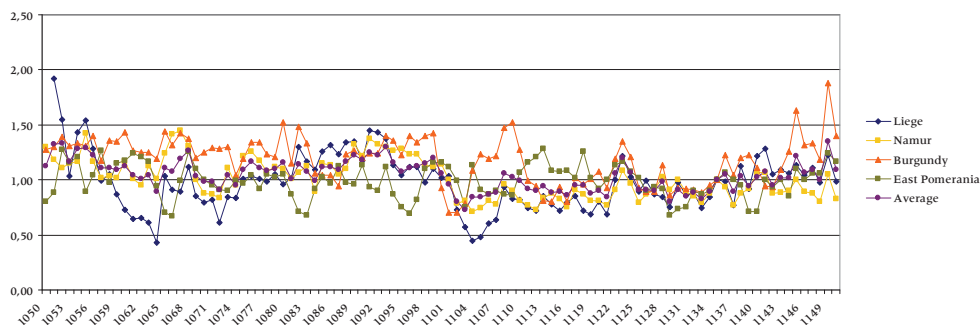


FIGURE 2. TREE-RING WIDTH INDICES, 1050-1150, LOGGED AT 1135 (THE YEAR WITH AN "AVERAGE WIDTH". SOURCE: THE TREE-RING DATABASE, NOAA PALEOCLIMATOLOGY PROGRAM AND WORLD DATA CENTER FOR PALEOCLIMATOLOGY ([HTTP://WWW.NCDC.NOAA.GOV/PALEO/TREERING.HTML](http://www.ncdc.noaa.gov/paleo/treering.html)) (LAST ACCESSED APRIL 2009).

A handful of sources mention two cosmic events, which terrified local populations on the eve of the pestilence: a solar eclipse (23 September 1093) and a flying fireball (1 August 1093). According to Berthold of Zwiefalten, on that day "In the first year (of the indiction), on the Ninth of the Calends of October (23 September 1093), a solar eclipse appeared for nearly three hours; then, around the middle of the day the sun began to blacken in black or dark spots and to grow pale in frightful sights. Right after, once a new year followed,⁵⁹ a great human pestilence followed'.⁶⁰ The eclipse, as a prelude to the pestilence was mentioned by several other sources. Some of them also specified that the eclipse befell on the sign of Libra.⁶¹ The eclipse of 1093 was an annular solar eclipse, described and classified by the NASA astronomers Jean Meeus and Fred Espenak as Eclipse 07347. Its magnitude (namely, the ratio between angular diameters of the Moon and the Sun) was 0.9777, meaning that the Moon disk may have covered the Sun disk almost completely, yet it was not large enough to be reckoned as

58. In 1951, Steven Runciman spoke indiscriminately about "floods", without considering their extent and geographic limits. See, Runciman, Steve. *The History of the Crusades...*: 114.

59. Berthold, as many other medieval German chroniclers used the "Bedan Indiction" (*Indictio Bedana*) to date the events. The indiction in question extends 24 September of the previous to 23 September of the given year.

60. "Bertholdi Liber de Constructione Monasterii Zwivildensis Libri II"...: X, 111.

61. "Annales Augustani"...: III, 134.



a total eclipse. The central duration of the eclipse was 02m 03s and its path width (the complete visibility of the umbra's strip) was 101 km. The point of greatest eclipse was in the East Mediterranean, slightly north of Port Said in Egypt (31.5N and 32.4E). The eclipse started in West India, and having crossed the Indian Ocean, traversed through the Arabian Peninsula, North-East of Egypt, the Mediterranean Sea, parts of Bosnia, Austria, Germany and the Netherlands, to move over the Atlantic through Iceland and terminate its journey at the western edge of Greenland.⁶²

The mysterious fireball has similarly attracted the attention of the chroniclers, whose reports differed from one another. Some observers mention that a fire-breathing dragon was seen flying in the sky.⁶³ Several others reported a "great" or "miraculous" fire, which appeared in the evening to the entire world.⁶⁴ One chronicler added that a fiery javelin (*jaculum ignitum*) flew in the sky from south to north.⁶⁵ Both events are said to have happened on the Feast of St John Advincula (1 August) and it is clear that the dragon and the fire refer to the same event. A depiction of fiery or fire-breathing dragons was a commonplace in medieval chronicles. Despite some scholarly skepticism, it should not be dismissed as a mere fantasy. As Mike Bailey has recently contended, flying dragons are likely to have referred to fireballs, meteors or meteorites.⁶⁶ The reference to "*jaculum*" indicates that this may have been a meteor. Some astrophysicists indeed interpret the "great fire" of 1093 as a meteor.⁶⁷ An examination of ammonium deposits in Greenland Ice Core (GRIP) layers might provide a further clue. As Figure 3 indicates, the largest concentration of ammonium in the forty-eight years interval between 1076 and 1124 is in the layer dated c.1092. It should be noted, however, that the GRIP layers are not centered on a specific year and hence, they are dated with the precision of about ± 2.5 years. It has been established that the concentration of ammonium of ice reflects some sort of biomass burning or comet/meteor-derived chemical deposits.⁶⁸ The GRIP chronology suggests that around 1093, there was indeed

62. Based on the NASA Five Millenium Calendar of Solar Eclipses: Spenak, Fred. "Solar Eclipses". *NASA Eclipse Web Site*. 11th February 2009. National Aeronautics and Space Administration. 19th April 2009 <<http://eclipse.gsfc.nasa.gov/5MCSEmap/1001-1100/1093-09-23.gif>>.

63. "Annales Laubienses", *Monumenta Germaniae Historia Series Scriptores*, Georg Heinrich Pertz, ed. Hanover: Bibliopolii Hahniani, 1841: IV, 21; "Gesta Abbatum Lobbiensium"....: XXI, 313; Alberto, M. "Annales Stadenses", ed. I. P. Lapenberg, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1859: XVI, 317; "Annales Colonienses Maximi", ed. Karolus Pertz, *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1861: XVII, 744.

64. "Annales Brunwilarenses", *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1859: XVI, 726; Gerhardo. "Annales Stederburgenses", *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1859: XVI, 203.

65. "Annales Remenses et Colonienses", *Monumenta Germaniae Historia Series Scriptores*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1859: XVI, 732.

66. Baillie, Mike. *New Light on the Black Death. The Cosmic Connection*. Stroud: Tempus, 2006: 181-185.

67. Dall'Olmo, Umberto. "Meteors, Meteor Showers and Meteorites in the Middle Ages: From European Medieval Sources". *Journal for the History of Astronomy*, 9 (1978): 128-129.

68. Wickramasinghe, Chandra. *Cosmic Dragons: Life and Death on Our Planet*. London: Souvenir Press, 2001: 91; Bird, M. K. et al. "Radio-detection of Ammonia in Comet Hale-Bopp". *Astronomy and*



a larger concentration of ammonium in the air, which may have corrupted the atmosphere. Consequently, air toxic pollution of such high proportions was likely to have irritated the respiratory tract and weakened the immune system of humans.⁶⁹ Is it possible, then, that the air corruption brought about by the large concentration of ammonium may have stood behind or contributed to the sudden outbreak of human mortality in Central and Western Europe?

These may be somewhat speculative attempts to decipher the nature of these events and connect them to the mass pestilence on the eve of the First Crusade. Even if it was indeed the case, we should not be sufficed with the modern "scientific" interpretation. As Paul Dutton has recently pointed out, when studying medieval weather events, it is important to appreciate their cultural significance to the mentality of the contemporaries, apart from deciphering their nature.⁷⁰ Very much the same can be said about cosmic events. Medieval people not just saw or heard these events, but also experienced them, drawing on the rich system of their moral and religious values. These events represented celestial signs carrying pronounced symbolic meanings and foretelling the immediate and usually bad future. Hence, to some contemporary observers the solar eclipse or fireballs on the one hand, and the mortality on the other, were clearly related. The link between the sign of Libra, a solar eclipse and a pestilence goes back to the Greek astrology. Thus is his *Tetrabiblos*, translated into Latin by Plato of Tivoli in 1138, Ptolemy stated that the sign of Libra is changeable and its southern parts are moist and pestilential.⁷¹ Similar views are found in the Islamic science. Māshā'allāh of Baghdad, (fl. ca. 762-815) in his *Epistola in Rebus Eclipsis* (translated into European by John of Seville in the first half of the twelfth century), contended that eclipses and planetary conjunctions provoke ecological disasters and mortality.⁷² It is clear, however, that the tenth-century German and French monastic chroniclers, ignorant of both the Greek and Arab sources, would have inherited this concept from elsewhere, namely from the existing European tradition. For instance, in his *Historia Ecclesiastica*, Bede stated that in 664 a severe pestilence ravaged England and Ireland after a (total) solar eclipse on 1 May.⁷³ The *Anglo-Saxon Chronicle* recorded flying dragons in the sky, which forewarned

Astrophysics, 325 (1997): L5-L8.

69. Baillie, Mike. *New Light on the Black Death. The Cosmic Connection*. Stroud: Tempus, 2006: 176.

70. Dutton, Paul Edward. "Observations on Early Medieval Weather in General, Bloody Rain in Particular", *The Long Morning of Medieval Europe*, Jennifer R. Davis, Michael McCormick, eds. Aldershot: Ashgate, 2008: 167-180.

71. Ptolemy. *Claudii Ptolemaei Opera Quae Exstant Omnia*, ed. Wolfgang Hübner. Stuttgart: B. G. Teubner, 1998: III/1, 2.11.

72. *Messahallach de ratione circuli et stellarum, et qualiter operantur in hoc seculo*. Basel: Ex Officina Joannis Hervagii, 1533: 116-117. He was followed by the thirteenth-century Guido Bonatus in his: Bonatti, Guido. *Animae Astrologiae*, ed. William Lilly. London: B. Harris at the Stationers Arms in Sweetthings Rents near the Royal Exchange, 1676: 50, 56.

73. Bede dated the eclipse 3 May: Bede. "Historia Ecclesiastica", *Patrologiae cursus completus*, ed. Jacques Paul Migne. Paris: Vrayet de Surcy, 1862: XCII, 27.



the subsequent famine and the advent of the Vikings in England in 793.⁷⁴ Several French chroniclers mentioned fiery blades in the sky, foretelling the civil strife between King Charles the Simple and his barons (922-923).⁷⁵ Fourteen years later, bloody blades in the sky predicted the Hungarian raids into Aquitaine and Burgundy, the baronial revolt against King Louis IV, a harsh famine and exceedingly high wheat prices.⁷⁶ William of Conches, one of the most learned scholars of his days, stated in his compendium *Philosophia* (c.1125) that comets, unlike stars, are fires appearing to signify the change in power (*in mutatione imperii*) and are sent according to the Creator's will.⁷⁷ Countless more examples can be cited here, especially from the millennial era.⁷⁸ What is clear, then, is that for the contemporary observers, the solar eclipse and the flying fireballs signified the forthcoming evil, namely human mortality.

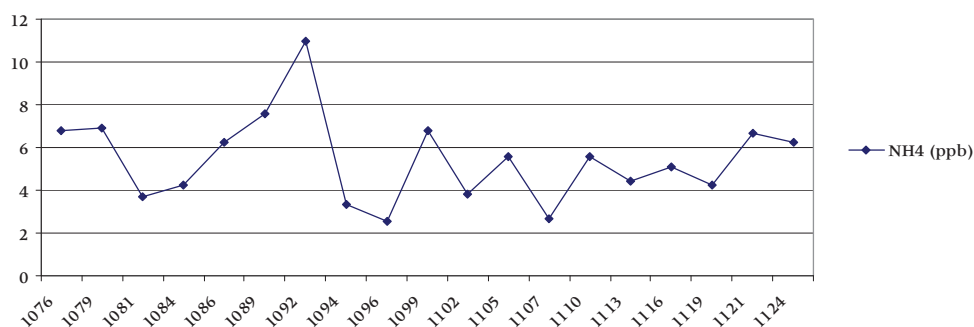


FIGURE 3. AMMONIUM CONCENTRATION (R5 NH4) (IN PARTS-PER-BILLION), AS SAMPLED FROM GREENLAND ICE CORE (GRIP), 1076-1124. SOURCE: GREENLAND ICE-CORE PROJECT (1997) (AVAILABLE ONLINE, COURTESY OF NOAA PALEOCLIMATOLOGY PROGRAM AND WORLD DATA CENTER FOR PALEOCLIMATOLOGY. ([HTTP://WWW.NCDC.NOAA.GOV/PALEO/ICECORE/GREENLAND/SUMMIT/INDEX.HTML](http://www.ncdc.noaa.gov/paleo/icecore/greenland/summit/index.html)) (LAST ACCESSED APRIL 2009).

74. *The Anglo-Saxon Chronicle*...: under 793.

75. Monachi S. Dionysii. "Historia Regum Francorum Monasterii Sancti Dionysii", *Patrologiae cursus completus*, ed. Jacques Paul Migne. Paris: Vrayet de Surcy, 1856: CLXIII, cols. 929C-D.

76. Monachi S. Dionysii: *Historia Regum Francorum*...: CLXIII, cols. 930B-D.

77. As of April 2009, there is still no critical edition of the treatise in print. The old *Patrologia Latina* edition wrongly ascribes the treatise to Honorius of Autun. See, Augustodunensis, Honorius. "De Philosophia Mundi Libri Quatuor", *Patrologiae cursus completus*, ed. Jacques Paul Migne. Paris: Vrayet de Surcy, 1895: CLXXII, col. 80A. A critical edition is being prepared by Paul Edward Dutton, of Simon Fraser University.

78. This, Lobrichon, Guy. "Stalking the Signs : The Apocalyptic Commentaries", *The Apocalyptic year 1000. Religious expectation and social change , 950-1050*, Richard A. Landes, Andrew C. Gow, David C. Van Meter, eds. Oxford: Oxford University Press, 2003: 67-80.



3. 1095: The Year of Famine

The year after the mortality, another natural scourge came to attack: famine. Unlike the 1093-1094 mortality, whose causes are uncertain, it is known that the famine of 1095 was caused by a disastrous drought and, consequently, failed harvests in Northern France and Low Countries. With the exception of one source, the famine is not reported in the Germanic lands and we may assume that it did not penetrate there.⁷⁹ A large number of contemporary chronicles speak about a “great drought / sterility of land” (*magna siccitas / sterilitas terre*).⁸⁰ A Poitier chronicler reports that the drought lasted from 25 March until 16 August,⁸¹ while a Maillezais annalist notes that it continued from April until September.⁸²

The immediate effect of the drought was a ubiquitous harvest failure. Contemporaries spoke about the destruction of grains and legumes.⁸³ Some chroniclers also mentioned that fruits and plants dried.⁸⁴ In the Vigeois regions (Aquitaine), one rustic is credited with the discovery of “choke peer” (*poire d’angoisse*), an astringent fruit with bad and hard taste.⁸⁵ The drought seems to have been particularly serious in Flanders and Northern France. In England, on the other hand, it is unclear if the harvest was as bad as on the Continent. Evidence has it that the harvest was “mediocre”, because “the the weather was very unseasonable”, as the *Anglo-Saxon Chronicle* indicates.⁸⁶ The chronicle does not say a word about a famine in England.

The chronology of drought implies that it was oats, barley and legumes that were the primary victims of the disaster. In Northern Europe, these crops are sown in spring, germinate in summer and reaped in fall. Summer is the most critical time for their growth and the success of their harvest is largely dictated by the amount of precipitation during this season. Abundant downpour or insufficient precipitation is likely to result in low yields. Naturally, our sources do not specify the crop yields and we are left to guess how low they might have been in 1095. In general, our information on crop yields in that period is very fragmentary and frequently indirect. In 1155 five Mâconnais demesnes of Cluny Abbey achieved, on average,

79. “Ex Chronico Saxonico”, *Recueil des Historiens des Gaides et de la France*. ed. M. Bouquet. Paris: Victor Palmé, 1869: XII, 714-715.

80. For instance, “Annales Blandinienses”...: V, 27; “Chronicon S. Maxentii”, ed. Martin Bouquet, *Recueil des Historiens des Gaules et de la France*, Léopold Delisle, dir. Paris: Victor Palme, 1877: XII, 403; “Chronicon Stephani Cadomensis”, ed. Martin Bouquet, *Recueil des Historiens des Gaules et de la France*, Léopold Delisle, dir. Paris: Victor Palme, 1877: XII, 779.

81. Alexandre, Pierre. *Le climat en Europe au Moyen...: 342.*

82. “Chronicon S. Maxentii”...: XII, 403.

83. For instance, Vitalis, Orderici. *The Ecclesiastical History*, ed. and trans. Marjorie Chibnall. Oxford: Clarendon Press, 1975: V, 8-9.

84. “Annales Sancte Columbe Senonensis, Cosmic Dragons: Life and Death on Our Planet”, *Monumenta Germaniae Historia Series Scriptores*, Georg Heinrich Pertz, ed. Hanover: Bibliopolii Hahniani, 1826: I, 107.

85. “Chronicon Gaufredi Vosiensis”...: XII, 427.

86. *The Anglo-Saxon Chronicle*...: under 1095.



the yields of 3:1 for wheat; 5:1 for rye; and 2.5:1 for barley.⁸⁷ There was neither bad weather, nor famine in the Mâconnais region in that year and it seems that these figures reflect yield ratios of normal years in that period. Assuming that the 1095 yields were even lower, we may conclude that they were low enough to ensure a subsistence crisis.

One of the aspects of a subsistence crisis is food shortage, a condition experienced and described by the contemporaries. One chronicler spoke about “a great and unavoidable scarcity of grain” (*magna et inevitabilis annonae raritas*).⁸⁸ Another source described the situation as “want of bread and all fruits” (*penuria panis et omnium fructuum*).⁸⁹ Although the drought seems to have destroyed the “spring crops”, there is clear evidence that “winter grains”, namely wheat and rye, were deficient.⁹⁰ This likely reflects the fact that their supply was quickly exhausted, on the account of disastrous harvests of oats, barley and legumes.

In some cases famines may be caused not as much by food shortage, as by unequal access, or “entitlement” to food, as Amartya Sen has contended.⁹¹ In other words, famines can be “class-discriminatory”, with lower echelons deprived of an equal access to (scarce) food supply. Was it the situation on the eve of the First Crusade? There is no doubt that, as in other pre-Industrial famines, it was the rustics that suffered the most. Guibert de Nogent gave more particulars on the severity of the crisis. So harsh was the famine that French rustics had to feed on roots of wild plants, as the only substitute for bread.⁹² At least in some places, starvation led to mortality among the lower social strata. Gottschalk of Gembloux relates that so many poor and mediocre ones perished in that famine that there was not enough room to bury the dead in local cemeteries. As a result, corpses were thrown into pits.⁹³

The rustics, however, were not the only visible victims of the crisis. As Guibert reports, the famine created a great poverty even among some very wealthy ones, who had to sell their assets to make the ends meet.⁹⁴ Some nobles, not willing to starve, had to pay much money to provision their households.⁹⁵ Clergy and monks suffered too. The Gembloux chronicler complained that the demesnes and tithes of

87. Bath, Bernard H. Slicher Van. *Yield Ratios, 810-1820*. Wageningen: Afdeling agrarische geschiedenis, 1963: 30. For other figures in France and the Low Countries, see Derville, Alain. *L'agriculture du nord au Moyen Age*. Villeneuve d'Ascq: Presses Universitaires du Septentrion, 1999: 15-7.

88. “Gesta Abbatum Gemblacensium, Continuatio Auctore Godescalco”....: VIII, 547.

89. “Chronicon S. Maxentii”....: XII, 403.

90. “Herimanni Liber de Restauratione...”: XIV, 307.

91. Sen, Amartya Kumar. *Poverty and Famines: an Essay on Entitlement and Deprivation*. Oxford: Clarendon Press, 1981: 43.

92. Nouigento, Guibertus de. *Historia quae inscribitur “Dei gesta per Francos”*, ed. Robert Burchard, Constantijn Huygens. Turnhout: Brepols, 1996: book 2.6.

93. “Gesta Abbatum Gemblacensium, Continuatio Auctore Godescalco”....: VIII, 547.

94. Nouigento, Guibertus de. *Historia quae inscribitur*....: book 2.6.

95. “Gesta Abbatum Gemblacensium, Continuatio Auctore Godescalco”....: VIII, 547.



his abbey were hardly sufficient to provide the monks with food for two months.⁹⁶ At the monastery of St. Martin of Tournai, there were no wheat, rye and wine in the local granary and cellar. As a result, the brethren had to live on unprocessed oats (that is, unthreashed and unsieved grain, which included chaff), baked into bread, for the entire year. Fortunately for the Tournai brethren, they were supported by a wealthy relative of their abbot, who conceded his garden, lend forty marks of silver and often sent fish for their use.⁹⁷

On the other hand, there may have been clear instances of food hoarding, which, undoubtedly, disrupted the equal access (entitlement) to grain storage. Thus, the *Gesta Pontificum Cenomannensium* describes how Hoël, Bishop of Le Mans (1085-1097) treated Pope Urban II, during the latter's crusading campaign in France. According to the *Gesta*, the bishop "received the said Pope with incredible honors in his Le Mans palace, and provided him and his retinue cheerfully and in the most abundant way with all their necessities, for three days; this is despite the fact that it is known that there was immense scarcity not only of grain, but of everything pertaining to food, in that year".⁹⁸

As expected, food scarcity resulted in high grain prices. Thus, Gottschalk of Gembloux relates that grain was purchased for exceedingly high prices.⁹⁹ Unfortunately, our sources do not provide any concrete figures for grain prices. In the late eleventh century, there were still no comprehensive price statistics, which reflect the degree of harvest failure or success. It was not until the late twelfth-century that we are in possession of solid annual data, which allows to reconstruct long-term price movements. The pioneer in this department was England, first with its twelfth-century pipe rolls, and from 1208 onwards with manorial accounts.¹⁰⁰ In eleventh-century France and the Low Countries, on the other hand, the information on prices is virtually non-existent. There are few references from chronicles, pertaining exclusively to famine years, but these are scattered over the time with vast gaps. Nevertheless, we may dare to extrapolate these few references, in order to estimate the approximate value of grain in 1095. In France, during the harsh famine of 1033-1034, one *modius* (= *muid*) of wheat was selling for 60s (approximately, at 5d per bushel).¹⁰¹ During the 1043 famine in England, one *sester* of wheat was valued at 60d (at 5d per bushel).¹⁰² In Normandy, wheat and oats were selling for 40s and 16s per one *somme* (5d and 2d per bushel) in 1146.¹⁰³ At Tournai, one *sester* of wheat

96. "Gesta Abbatum Gemblacensium, Continuatio Auctore Godescalco"....: VIII, 547.

97. "Herimanni Liber de Restauratione...": XIV, 307-311.

98. "Gesta Pontificum Cenomannensium", *Recueil des Historiens des Gaules et de la France*. ed. Martin Bouquet. Paris: Victor Palme, 1869: XII, 545.

99. "Gesta Abbatum Gemblacensium, Continuatio Auctore Godescalco"....: VIII, 547.

100. The early price-series has been tabulated by Farmer, David L. "Prices and Wages", *Agrarian History of England and Wales. II. 1042-1350*, Herbert Enoch Hallam, ed. Cambridge: Cambridge University Press, 1988: 800-801.

101. Glaber, Raoul. *Histoires*, ed. Mathieu Arnoux. Turnhout: Brepols, 1996: book 4:4, 242.

102. *The Anglo-Saxon Chronicle*....: under 1043.

103. Delisle, Léopold. *Études sur la condition de la classe agricole*: 632.



cost 56s (approximately, 4.67d per bushel) in the same year.¹⁰⁴ Since the prices were nearly identical during the famines of 1033-4, 1043 and 1146, we may speculate that they should not have been significantly different in 1095-1096 as well. These prices were considerably higher than those in “normal” years in the late twelfth century, when we have first indications on price movements and when inflation was under way.¹⁰⁵ In 1180, for instance, a bushel of wheat was valued at approximately 3.36d in England and 2.75 in Normandy.¹⁰⁶ It was not until the early thirteenth century, a period of continuous inflation, demographic expansion and ongoing warfare, that the grain prices reached the level of the 1033, 1043 and 1146 famines.

While the grain prices rose, the prices of other commodities, mainly livestock, went down. It was a marvel to behold, stated Guibert de Nogent, “that everyone bought high and sold cheap” (*caro omnes emere et vili vendere*). A herd of seven sheep was offered for as little as five *deniers*.¹⁰⁷ In other words, one bushel of wheat could buy as many as seven sheep: an exceptional ratio by any standard. To appreciate this abysmal gap between the grain and livestock prices, it would be instructive to look at it in a wider perspective. In England, between 1086 and 1181, the prices of sheep stayed largely unchanged, with one ewe selling for between 4 and 4.5d. In the 1160s, the price of one ewe was approximately equal to the value of 1.88 bushel of wheat, at 2.25d per bushel, and this ratio remained constant throughout the late Middle Ages, with the exceptions of famine years.¹⁰⁸ But even in times of grain dearth, the gaps between livestock and grain prices were not nearly that vast. For instance, during the disastrous years of 1316-7, one bushel of wheat was worth, on average, 24d, while one ewe cost 1.38s (=16.56d). This gives the ratio of one bushel of wheat to 1.45 ewes, which is considerably lower than the presumed ratio of one bushel to seven sheep. As we shall see later, this gap reflects a strong will of the rustics to leave their hardships behind and join the crusade. This gave rise to widespread “panic sales”, which characterizes the collective nature of the popular crusading movement of 1096 on the other hand, and the individual mood of a rustic crusader, on the other.

104. Bouquet, Herman M., ed. *Recueil des historiens des Gaules et de la France*. Paris: Victor Palmé, 1869: XIII.

105. Harvey, Paul D. A. “The English Inflation of 1180-1220”. *Past and Present*, 61 (1973): 3-30; Latimer, Paul. “Early Thirteenth-century Prices”, *King John: New Interpretations*, Stephen David Church, ed. Woodbridge: Boydell and Brewer, 1999: 41-73; Latimer, Paul. “Wages in Late Twelfth and Early Thirteenth-century England”. *Haskins Society Journal*, 9 (1997 (2001)): 185-205; Latimer, Paul. “The English Inflation of 1180-1220: Reconsidered”. *Past and Present*, 171 (2001): 3-29.

106. Farmer, David L. “Prices and Wages”...: 800-801; Theiller, Isabelle. “Prix du marché, marché du grain et crédit au début du XIIIe siècle: autour d’un dossier rouennais”. *Le Moyen Age*, 115/2 (2009): 253-276.

107. Nouigento, Guibertus de. *Historia quae inscribitur*...: book 2.6.

108. John Munro’s revised Phelps Brown and Hopkins “basket of consumables” commodity price series and craftsmen’s wage series: Munro, John. “The Phelps Brown and Sheila Hopkins “Basket of Consumables” Commodity Prices and Craftsmen’s Wages, in Southern England, 1264 to 1700: revised data, converting index numbers into prices (in pence sterling English)”. *Home page of John H. Munro*. Department of Economics. University of Toronto. 14th April 2009 <<http://www.economics.utoronto.ca/munro5/Eng-BasketPrices.xls>>.



Although the famine brought about much distress and poverty, there were some lords that actually seem to have profited from it. The famine gave rise to usury activities. As Gottschalk of Gembloux states, “the money-lenders oppressed their debtors in all sorts of ways, and as long as they did not receive their money back on the scheduled day, they would double the sum on the day of payment, under promise and oath (of the debtors)”.¹⁰⁹ Guibert de Nogent describes how some lords, having managed to hoard quantities of grain in fertile years before the crisis, accumulated their wealth by selling the grain or lending it with “their brutal rates of interests”.¹¹⁰ Perhaps, this description supports Sen’s view that in some cases, starvation is caused not necessarily by bad harvests and food shortage, but rather by the unequal access to food supplies. In any event, attempts to profit from high grain prices by wealthier elements are often reported in famine years. Medieval examples include the Great Famine of 1314-22,¹¹¹ the Catalan Famine of 1374-5,¹¹² while in the modern period this was the situation in the Irish Potato Famine (1845-52),¹¹³ and the Bengal Famine of 1943.¹¹⁴

4. Reaction to the Crisis

How did the victims react to the disaster? Clearly, the disasters of 1095 were perceived as the divine punishment for the sins of the contemporaries. For instance, Gottschalk of Gembloux spoke about “the sword of God’s wrath”, which “stroke all around”.¹¹⁵ A Saxon chronicler, reflecting the apocalyptic spirit of these days, considered the pestilence, famine and various celestial signs as the “Evangelic trumpet proclaiming the advent of the Just Judge”.¹¹⁶ Hence, it was only natural that the immediate and obvious reaction of the contemporaries was to turn to the existing religious practices. These practices provide a unique glimpse into the cultural interaction of medieval people with nature. Some religious communities conducted public, usually barefoot, rogatory processions for rain. These processions were usually built around antiphon and psalm chanting and were similar to Lent

109. “Gesta Abbatum Gemblacensium, Continuatio Auctore Godescalco”...: VIII, 547.

110. Nouigento, Guibertus de. *Historia quae inscribitur*...: book 2.6.

111. Kershaw, Ian. “The Great Famine and Agrarian Crisis in England, 1315-1322”. *Past and Present*, 59 (1973): 9, 15.

112. Franklin-Lyons, Adam. *Famine – Preparation and Response in Catalonia after the Black Death*. New Haven: Yale University (PhD Thesis), 2009: 77, 93, 121.

113. Ó Gráda, Cormac. *Black ‘47 and Beyond: The Great Irish Famine in History, Economy, and Memory*. Princeton: Princeton University Press, 1999: 134-6.

114. Stevenson, Richard. *Bengal Tiger and British Lion: An Account of the Bengal Famine of 1943*. Bloomington: iUniverse, 2005: 124.

115. “Gesta Abbatum Gemblacensium, Continuatio Auctore Godescalco”...: VIII, 547.

116. “Ex Chronico Saxonico”, *Recueil des Historiens des Gaules et de la France*, ed. Martin Bouquet. Paris: Victor Palme, 1869: XII, 714-715.



processions.¹¹⁷ Sometimes the processions included carrying or oblation of relics. At Sens, for instance, the relics of St. Lupus were placed at St. Stephen's Cathedral. Once the procession and prayers were over and the relics taken out of the cathedral, a relieving downpour followed.¹¹⁸ These processions played an important part in the attempts of medieval people to cope with frequent ecological vagaries, famine in particular.¹¹⁹

Another liturgical practice included two special, votive masses, the one against the sterility of land (*Missa pro sterilitate terrae*) and the other one is for rain (*Missa ad pluviam poscendam / postulandam*). The masses in question reflect the contemporary perception of the crisis and its causes. Sinful humans filled the earth with their wickedness and made it arid and sterile. No earthly life can survive without "heavenly water" (*aqua celestis*), namely the rain. Only God, who does not wish anyone to perish in pestilence and famine, can save the fragile race of humans, through penance.¹²⁰ These masses are found in various liturgical books, both before and after 1094-1095,¹²¹ and they seem to have been a widespread practice during the crisis. Thus, Odo of Cambrai (1050-1113), who certainly witnessed the crisis of 1094-5, recollected shortly before his death that his mass celebrations always included the prayers against drought, tempest, bad harvests, human and animal mortality.¹²² At Bec Abbey, which was hit by the mortality in 1094, many brethren offered a multitude of prayers.¹²³ In Bavaria, where the crisis seems to have been especially acute, many people did penance and rushed to confess their sins. Laymen abstained from engaging in games and drinking.¹²⁴ At the same time, some German magnates joined the side of Menegold of Lautenbach in his struggle against Emperor Henry IV. Bernold of Constance saw it as a token of penance, through which the magnates hoped to be saved from pestilence and receive the papal absolution.¹²⁵ Religion, politics and ecology were interwoven into each other.

117. Thus, *Processionale ad usum insignis ac praeclare ecclesiae Sarum*, ed. William George Henderson. Leeds: M'Corquodale, 1882: 164-165.

118. "Annales Sancte Columbe Senonensis", *Monumenta Germaniae historica. Scriptores (in folio)*, ed. Georg Heinrich Pertz. Hanover: Bibliopolii Hahniani, 1826: I, 107.

119. Jordan, William Chester. *The Great Famine: Northern Europe in the Early Fourteenth Century*. Princeton: Princeton University Press, 1996: 157; Glick, Thomas. *Irrigation and Society in Medieval Valencia*. Cambridge: Harvard University Press, 1970: 133-145, Appendix 6.

120. These prayers are found in numerous books. Just a few printed examples: *Winchcombe Sacramentary*: Orléans, *Bibliothèque Municipale* 127 (105), ed. Anselme Davril. London: Henry Bradshaw Society, 1995: 234-235 (tenth century); *The Leofric Missal*, ed. Nichola Orchard. Woodbridge-London: Boydell and Brewer, 2001-2002: 344-345 (tenth century).

121. For instance, *Fontes Liturgici: Libri Sacramentorum* 2:1, ed. Ferdinandus Dell'Oro. Trento: Società studi trentini di scienze storiche, 1985: 303 (doc. n° 1020-1022); *Winchcombe Sacramentary*...: 234-235 (doc. n° 1648-54); *Leofric Missal*...: 344-345 (doc. n° 2066-2068); *The Ordinal of the abbey of the Holy Trinity Fécamp*, ed. David Chadd. Woodbridge-Rochester: Boydell Press, 2000: II, 734 (doc. n° 62-64).

122. "Expositio in Canonem Missae", *Patrologiae. Cursus completus*. Paris: Jean Paul Migne editore, 1880: CLX, col. 1058A.

123. "Annales Sancti Disibodi"....: XVII, 14.

124. "Bernoldi Chronicon"....: V, 461.

125. "Bernoldi Chronicon"....: V, 461.



Although some contemporaries, such as Guibert de Nogent and Gottschalk of Gembloux spoke about the hardships of the rustics and their negligence by wealthier elements, there is also evidence on charity activities, undertaken by some religious leaders, to relieve the sufferings of the poor. At Tournai, Odo of Cambrai, Abbot of St Martin's at that time, distributed large amounts of both grain and non-grain products among the poor townsfolk, to the extent that no food remained in either granary or cellar and the monks were doomed to starve. Such reckless behavior created much disturbance in the abbey and, as a result, the brethren forced Odo to appoint a new cellarer and turn over the office of prior to another monk.¹²⁶

Religious fever was only one side of the coin. Altogether different, but not necessarily contradictory reaction to the crisis was increasingly widespread violence. In Flanders, some peasants, frustrated by famine and poverty, caused much trouble to wealthier landlords, by stealing and burning their property.¹²⁷ On the French and Belgian countryside, theft, burning, highway robbery and street violence flourished.¹²⁸ According to one chronicler, revolts, killings, robberies prevailed in the entire realm of France.¹²⁹ The ongoing violence was not endemic within the lower echelons of the society, and some sources narrate about struggle among local nobles, in Normandy in particular. Here, Duke Robert Curthose (1087-1106), was busy, and with not much success, in his attempts to cope with local opposition and crime.¹³⁰ Orderic Vitalis called the struggle "the marvelous dissension among the best men of Normandy" (*mira seditio inter optimates Normanie*).¹³¹ The anarchy and violence is reflected in some contemporary charters. Thus, according to one document from a cartulary of Marmoutier Abbey (Dunois), dated between 1084 and 1100, a certain man called Martin Tirollius conducted frequent raids on the possessions of abbey in the village of Villeberfol, at Loir-et-Cher, which included a theft of horses and conflagration of local monks' dwellings.¹³² Around 1096, Hamelin, lord of Montigny, forcefully seized flour from the monks of Marmoutier at Bosonville, Meuse.¹³³ It is hardly surprising that the ecological crisis increased violence and crime among its victims. As some studies have shown, there is a direct relationship between famine and increasing crime. For instance, during the Great Famine of 1314-1322, England was ravaged by social unrest and anarchy, with

126. "Herimanni Liber de Restauratione...": XIV, 307-311.

127. Gemblacensis, Sigeberti. "Chronica Sigeberti Gemblacensis" ...: VI, 367.

128. Gemblacensis, Sigeberti. "Chronica Sigeberti Gemblacensis" ...: VI, 367.

129. Nouigento, Guibertus de. *Historia quae inscribitur...*: book. 2.7, 120.

130. Kaueper, Richard W. *Chivalry and Violence in Medieval Europe*. Oxford: Oxford University Press, 2001: 14-15; David, Charles Wendell. *Robert Curthose, Duke of Normandy*. 2008: 42-88; Aird, William M. *Robert Curthose, Duke of Normandy, c. 1050-1134*. Woodbridge, Suffolk: Boydell Press, 2008: 42-88.

131. Vitalis, Orderici. *The Ecclesiastical History...*: 24-25.

132. *Cartulaire de Marmoutier pour le Dunois*, ed. Émile Mabille. Chateaudun: Henri Lecesne, 1874: 51 (doc. n° 57).

133. *Cartulaire de Marmoutier pour le Dunois...*: 53 (doc. n° 61).



crime rates going up. Homicide, theft, robberies, arsons, burglaries were all caused by the subsistence crisis and the will to make the ends meet.¹³⁴

Collective penance, apocalyptic expectations, religious zeal and social violence: all these resulted from the hardships experienced by the population of Western Europe in the 1090 and all these were the precursors of the early crusading movement, which should be seen as a mass human migration, in that context. When the crusading preachers, such as Peter the Hermit, arrived at various rural communities of France, the Low Countries and Germany, they found a fertile soil for their sermons. There can be little doubt that the ecological and socio-economic crisis on the one hand, and the increased religious zeal on the other, must have contributed a great deal to the success of their preaching.¹³⁵

5. Crusade as a Human Migration

Between late 1095 and August 1096, a host of between 70,000 and 90,000 people (including the princely armies of between 30,000 and 50,000 people and some 40,000 people, led by “popular” preachers) left their homes in Flanders, Germany, France and Italy and set out to the East.¹³⁶ Because of a relative diversity in the composition of the crusading movement, varying from landless and semi-free rustics to wealthy magnates and future rulers of the Outremer, the migration was not uniform in its type.¹³⁷ As it is established, the majority of the knights and nobles (about 20,000) decided to leave the Levant and return home, in the first decade of the twelfth century, once Jerusalem and other towns were liberated and the Frankish rule was, more or less, established.¹³⁸ To a certain degree, we might classify this type of migration as *periodic migration*, which involves migrant labour

134. Hanawalt, Barbara. *Crime and Conflict in English Communities, 1300-1348*. Cambridge: Harvard University Press, 1979: 238-260.

135. So far, the most complete and up-to-date study on Peter the Hermit, which indeed considers the socio-economic background of rustic communities in France on the eve of the First Crusade, is: Flori, Jean. *Pierre l'Ermite et la première croisade*. Paris: Fayard, 1999.

136. The numbers are, naturally, highly debatable. For the numbers of the Princes' Crusade, see Nicolle, David. *The First Crusade 1096-99: Conquest of the Holy Land*. Oxford: Osprey, 2003: 21, 32; France, John. *Victory in the East: A Military History of the First Crusade*. Cambridge: Cambridge University Press, 1994: 123-142; Bachrach, Bernard S. “Papal War Aims in 1096: The Option not Chosen”, In *Laudem Hierosolymitani. Studies in Crusades and Medieval Culture in Honour of Benjamin Z. Kedar*, Iris Shagrir, Ronnie Ellenblum, Jonathan Riley-Smith, eds. Aldershot: Ashgate, 2008: 325-338. The numbers of the “popular” movements are reckoned by John Julian Norwich in: Norwich, John Julian. *Byzantium, Decline and Fall*. New York: Knopf, 1996: 35.

137. On the social and ethnic composition of the crusaders, see Tyerman, Christopher J. “Who Went on Crusades to the Holy Land?”, *The Horns of Hattin: Proceedings of the Second Conference of the Society for the Study of the Crusades and the Latin East, Jerusalem and Haifa, 2-6 July 1987*, Benjamin Z. Kedar, ed. Jerusalem: Israel Exploration Society/Variation, 1992: 13-26.

138. Riley-Smith, Jonathan. “The Motives of the Earliest Crusaders and the Settlement of Latin Palestine, 1095-1100”. *English Historical Review*, 98 (1983): 723-724.



and military service.¹³⁹ Those who chose to stay and settle in Palestine, whether in towns or on countryside, reflected a different type of migration, usually classified by sociologists as *migratory movement*.¹⁴⁰ Finally, the rustics, whose failed movement predates that of the princes, formed altogether different kind of migration, *rural exodus*, or rural flight from poverty and distress, mostly to urban areas.

Just as any other mass human migration, the movement of 1096 was undoubtedly provoked by a series of “push-and-pull factors”. As far as the poor masses are concerned, it is obvious that the crisis of 1093-1095 must have been an important “push” factor in their migration. Corrupted atmosphere, mortality, bad weather, drought, starvation, high prices of the most basic food commodities, social unrest, violence and crime—all these prompted them to abandon their lands and seek their fortune in a far and imaginary land. This tendency is illustrated by Guibert de Nogent, who stated clearly that the famine and grain scarcity “encouraged innumerable people into spontaneous exile” (*ad spontaneum innumerabiles animasset exilium*).¹⁴¹ The very term *spontaneum exilium* points into an unwilling and unpredictable exodus. But were these the “push-and-pull factors” of the rustics only? What about the princes and lower nobility?

Crusading scholars, quite rightly, make a distinction between the unorganized, “popular” movement and the “princes’ crusade”. Indeed, the two movements were different in leadership, composition, scale, organization, logistics, and, perhaps, aims and objectives. At the same time, however, this distinction appears less clear and relevant, when one considers the immediate causes of the both movements. It should be understood that even greater lords, who led the “official” crusading armies, could not have been left unaffected by the agro-ecological crisis, which preceded the First Crusade. There is no doubt that their living standards were considerably higher than those of their rustic serfs and tenants and that they were better protected against vagaries of the nature than the latter. For instance, storing grain in granaries for “rainy days” was one such measure. All the same, however, does not mean that the nobles were left untouched by the disastrous harvest failures of 1095. Even though not directly involved in land tilling or livestock rearing, the noble leaders were landlords and the large share of their annual income derived from their holdings, whether in cash or in kind. Although the eleventh century saw a revival of commerce, which undoubtedly facilitated large-scale market trade in grain and other foodstuffs, the landlords, in many cases, were still provisioned by the produce of their rural demesnes. In other words, the lords depended on annual

139. As Riley-Smith has aptly shown, the individual fealty of knight to his lord played an important in the first crusade: Riley-Smith, Jonathan. “The Motives of the Earliest...”: 734-735.

140. On Frankish settlement in the Outremer, see Ellenblum, Ronnie. *Frankish Rural Settlement in the Latin Kingdom of Jerusalem*. Cambridge: Cambridge University Press, 1998; Boas, Adrian J. *Crusader Archaeology. The Material Culture of the Latin East*. London: Routledge, 1999: 1-90; Boas, Adrian J. “Three Stages in the Evolution of Rural Settlement in the Kingdom of Jerusalem during the Twelfth Century”, In *Laudem Hierosolymitani. Studies in Crusades and Medieval Culture in Honour of Benjamin Z. Kedar*, Iris Shagrir, Ronnie Ellenblum, Jonathan Riley-Smith, eds. Aldershot: Ashgate, 2008: 77-92.

141. Nouigento, Guibertus de. *Historia quae inscribitur...*: book 2.6, 119.



fluctuations of land produce, dictated by vagaries of weather and other ecological factors. It was in that context of the failed harvests that Pope Urban II stated in his famous Clermont speech, according to Robert the Monk's account: "this land which you inhabit (Kingdom of France), shut in on all sides by the seas and surrounded by the mountain peaks, is too narrow for your large population; nor does it abound in wealth; and it furnishes scarcely food enough for its cultivators". He then went on promising good returns from the conquest of the Holy Land: "wrest that land from the wicked race, and subject it to yourselves. That land which as the Scripture says "floweth with milk and honey," was given by God into the possession of the children of Israel Jerusalem is the navel of the world; the land is fruitful above others, like another paradise of delights'.¹⁴² In other words, in this part of his speech, Urban turned to purely agricultural motifs, in his attempts to persuade the future crusaders to take cross and depart to Jerusalem. This ideological dichotomy between land scarcity and insufficient food production in France on the one hand, and land fertility and good returns in the Holy Land on the other cannot be appreciated fully, unless examined in the agro-ecological context of the same years. In other words, the environmental and agrarian crises of 1093-1095 must have been meaningful not only to the rustics, but also to higher social strata.

At the same time, however, there is little doubt that these crises had a more profound impact on the lower social strata. It is important to bear in mind that crusading popular movements have emerged in those regions, which are known to have been devastated by the pestilence and famine particularly badly. This phenomenon was found in Germany, the Low Countries and France. There is no evidence about crusading peasants in England, Northern Italy and Catalonia, where the crisis seems to have been of more modest proportions, or in Southern Italy or other Christian parts of Spain, which seem to have been spared by the disaster altogether.

Ecological crises played an important part in human migrations, in different historical periods. One could think about the steppe nomads, who migrated from Asia, in several waves, between the beginning of the first millennium BCE and the thirteenth century CE, in the context of climatic changes.¹⁴³ Similarly, the Irish immigration to the Americas was caused, largely, by the agrarian crisis known as the "Potato Famine". The movement of 1096, however, was unique and different in its nature from many other human migrations. In Guibert's own words, it was perceived as both *exilium* and *via Dei*, as both rural exodus and pilgrimage, as a departure from hardships and setting on the way of Christ. Given the historical context of the First Crusade, one should not find the two aspects contradictory. There is little doubt that the ecological and socio-economic crisis of 1093-5 increased the religious fever of both laymen and clergy, of different orders and standings. As we have seen, the

142. Roberti Monachi. "Historia Iherosolimitana", *Recueil des Historiens des Croisades, Historiens occidentaux*, Pierre Tudeboeuf, Raymond d'Aguilers, eds. Paris: Imprimerie impériale, 1866: III, 727-728.

143. Bokovenko, Nikolay A. "Migrations of Early Nomads of the Eurasian Steppe in a Context of Climatic Changes", *Impact of the Environment on Human Migration in Eurasia*, Ethel Marian Scott, Andrey Yu Alekseev, Ganna Zaitseva, eds. Dordrecht: Springer Science, 2005: 21-33.



disasters of those years were regarded as the divine punishment for human sins, and this view commanded a religious response of the local (Christian) communities. Penance, confessions, prayers, rogative processions are all mentioned in the sources. The departure for the *via Dei*, namely pilgrimage, should be added to this list of religious practices and acts. As the Saxon chronicler indicates, the disasters of 1093-5, proclaimed by God's trumpet, signified the nearing end of the world and called for the expedition to Jerusalem.¹⁴⁴ The "People's Crusade", however, is a unique phenomenon by itself, since it reflects the impact of the crisis on the religious zeal of lower echelons of the society, created by the environmental and socio-economic distress of those years. The episode with the divinely inspired goose and she-goat, who were believed to be the guides of the pilgrims, symbolizes the rustic nature of the movement.¹⁴⁵ The animal and the divine were interwoven into each other.

In order to appreciate the unique nature of this "pilgrimage of crisis", several points highlighting the behavior and strategies of the migrants should be analyzed. A close look at the collective behavior of the masses, as reported in the contemporary sources, supports the view that the ecological and socio-economic factors stood behind the movement of 1095-6. To begin with, the "Popular Crusade" was a hasty departure, "on the lam" flight. Hasty preparations for the crusade left the paupers with very little time. This, in turn, created ubiquitous "panic sales", when the rustics sold their humble possessions for exceedingly low prices, "lest one be late in heading out on the path of God" (*ne Dei posterior aggrediatur viam*).¹⁴⁶ In other words, the peasants attempted to get rid of their meager assets on the one hand, and to collect whatever money they could, to serve them on their journey, on the other. This fact indicates the severity of the crisis. The starvation seems to have been harsh enough to prompt the rustics to act fast, in order to avoid even more disastrous consequences.

Food plundering was another aspect of the migration movement. Upon their arrival in Hungary, the bands of Peter the Hermit discovered that this land was abundant in grain supplies and untouched by famine. They attacked local granaries and seized grain with "a remarkable madness", and "contrary to the decency of the local inhabitants".¹⁴⁷ Grain plundering was followed by burning of granaries, theft, rape and murder. In Serbia, the followers of Walter Sans-Avoir conducted a series of livestock raids in the Beograd hinterland, partially because the local authorities forbade the sales of necessities to them.¹⁴⁸ These facts reflect the desperate attempts of the popular crusaders to cope with their starvation and maintain themselves on their path to the East.

144. "Ex Chronico Saxonico", *Recueil des Historiens des Gaules et de la France*, ed. Martin Bouquet. Paris: Victor Palme, 1869: XII, 714-715.

145. Aachen, Albert of. *Historia Ierosolimitana*...: 58-59.

146. Nouigento, Guibertus de. *Historia quae inscribitur*...: book 2.6.

147. Nouigento, Guibertus de. *Historia quae inscribitur*...: book 2.8.

148. Aachen, Albert of. *Historia Ierosolimitana*...: 10-11; *Willemi Tyrensis Archiepiscopi Chronicon*, ed. Robert Burchard Constantijn Huygens. Turnhout: Brepols, 1986: book. 1.19, 143-144.



The pogroms of the Jewish communities of the Rhine by the bands of the German leaders, which consisted of both knights and rustics, were yet another aspect of the crusade. This ill-famed episode is too well known to be repeated here.¹⁴⁹ It would be sufficient to mention that in the course of their brutal attacks, the crusaders attempted to impose baptisms on the local Jews, while the majority of the victims were butchered, either by the attackers or by the Jews themselves, to avoid forced baptisms. Their property was plundered and large sums of money were carried away by the assaulters. At first, the link between the anti-Jewish pogroms and ecological crisis of 1093-1095 may not be apparent. After all, medieval Christian anti-Semitism had long roots in patristic theology, while physical attacks and pogroms were known in medieval Europe from as early as at least the sixth century.¹⁵⁰ What makes the massacres of 1096 distinct from some other pogroms is the fact that these attacks were provoked by the combination of religious zeal within the crusading context on the one hand and socio-economic crisis created by the ecological context on the other. The widespread starvation and mortality increased not only the religious zeal of the distressed masses, but also their animosity, intolerance and violence towards the "other". The most immediate and visible "other" was the local Jewish communities, which were the first ones to fall victims to this popular violence. The popular crusade of 1096, however, was not the only "pilgrimage of crisis" which was characterized by anti-Jewish violence. One may think about other instances of pogroms, which seems to have been partially related to environmental crises. Thus, the *Pastroureaux* movement of 1320 in France is to be seen in the similar context of the Great Famine of 1315-7 and a cattle pestilence, which ravaged France in 1318. Just as the "Popular Crusade" of 1096, the shepherds' movement of 1320 had a clear objective to liberate the Holy Land from the Infidel. On their way to the south, the "shepherds" attacked several Jewish communities in France, including those of Paris, Saintes, Verdun, Cahors, Toulouse and Albi. In addition, the crusaders stormed prisons, attacked castles and killed royal officials in several towns. While different views have been offered to explain the origins and nature of the Shepherds' Crusade of 1320, the environmental crisis has been clearly overlooked by scholars.¹⁵¹ Similarly, there is no doubt that the anti-Jewish violence of 1349 should be viewed against the gloomy reality of the Black Death.¹⁵² The link between environmental crises, religious zeal, popular movements and anti-Jewish violence is yet to be studied in a detail.

149. The historiography of the 1096 massacres is surveyed and analysed in Kedar, Benjamin Z. "Crusade Historians and the Massacres of 1096". *Jewish History*, 12 (1998): 11-31.

150. Katz, Solomon. *The Jews in the Visigothic and Frankish Kingdoms of Gaul and Spain*. Cambridge: Harvard University Press, 1937: 23-24.

151. Barber, Malcom. "The Pastoureaux of 1320". *Journal of Ecclesiastical History*, 32 (1981): 143-166; Ginzburg, Carlo. *Ecstasies: Deciphering the Witches' Sabbath*, trans. Raymond Rosenthal. London: Hutchinson Radius, 1990: 38; Nirenberg, David. *Communities of Violence: Persecution of Minorities in the Middle Ages*. Princeton: Princeton University Press, 1996: 43-68.

152. Ziegler, Philip. *The Black Death*. Harmondsworth: Pelican Books, 1970: 87-111, Cohn, Samuel K. "The Black Death and the Burning of Jesus". *Past and Present*, 196 (2007): 3-36.



6. Conclusions

The crusading movement of the late 1090s was a complex and eclectic phenomenon. Its origins, roots, nature, course and impact can neither be examined from a single viewpoint only, nor can they be explained with a single factor. The present study aimed to propose an additional, perhaps an alternative perspective on the origins of the movement, at least in its “popular” form. The harsh ecological crisis of 1093-1095 undoubtedly stood behind the commencement of the “People’s Crusade”. Mortality, inclement weather, corrupted atmosphere, drought, famine, poverty, economic insecurity, growing social violence have clearly contributed to the increasing religious zeal of the popular masses, which resulted in this peculiar phenomenon. The crusade of the folk was rural exodus and religious pilgrimage, piety and plunder, demonstration of both power and impotence, apocalyptic desire to fight the Infidel and practical decision to flee from hardships. Celestial images of Jerusalem were mixed with gloomy sights of corpses and sun-dried grains. Both Christ and divinely-inspired goose were followed. The popular crusade of 1095-1096 is just one example of this striking connection between ecological crisis and lay religiosity. It would be perhaps redundant to state that this phenomenon deserves to be studied at length, to appreciate the complexity of the medieval experience of life in particular, and the cultural implications of the man’s interaction with a wider biological cosmos in general. Environmental and religious history cannot, and should not be separated.

