Weather, Hunger and Fear: Origins of the European Witch-Hunts in Climate, Society and Mentality

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I

When Jules Michelet eloquently suggested that the image of the witch coincided with an 'Age of Despair', his concept of despair differed from that of today's historian.1 We can hardly accept his formulation, which held the Church responsible for the prevalence of despair. Instead, we might agree with Bronislaw Malinowski that witchcraft persecutions are symptomatic of anxieties arising in times of intense social transformation.2 In any case, historiography has moved in that direction in recent decades and, since spectacular symptoms seem to require equally spectacular causes, theories have assumed appropriate dimensions: no less a force than the transition from Feudalism to Capitalism-mirrored in changing micro-economic relationsis held accountable for early modern accusations of witchcraft.3 Capitalism as an essential problem from its very inception: certainly a seductive theory twenty years ago. Today, not much remains of this perception. Brian P. Levack speaks in vague terms of the 'birth-pangs of the modern world' to distinguish the crisis around 1600 from others, but leaves us with little more than a poetic metaphor.4

Whether it will ever be possible to elucidate the complex phenomenon of European witchcraft persecutions in monocausal terms appears increasingly doubtful. Still, important new perspectives have evolved since the 1980s, requiring the re-evaluation of earlier scholarship and its fundamental premises.

² Bronislaw Malinowski, 'Gedanken zum Problem des Zauberwesens,' ibid., Die Dynamik des Kulturwandels (Vienna, 1951), pp. 185-96.

Brian P. Levack, The Witch-Hunt in Early Modern Europe (London, 1987), p. 140.

Jules Michelet, La Sorcière (Paris, 1862), introduction.

Alan Macfarlane, Witchcraft in Tudor and Stuart England. A Regional and Comparative Study (London, 1970), p. 205; Keith Thomas, Religion and the Decline of Magic. Studies in Popular Beliefs in Sixteenth and Seventeenth Century England (Harmondsworth, 19803; 1st edn, London, 1971), pp. 669 ff., 675.

One easily recognizable premise is the assumption of variance between 'English' and 'continental' witch trials. Keith Thomas writes, 'On the Continent the persecution of witches as a sect of devil-worshippers inevitably started from above. But in England the initial driving force was the fear of maleficium. It therefore emanated from below'. I will presently demonstrate why this premise is no longer tenable, since virtually every trial and every persecution on the continent originated with accusations from the populace for reasons of maleficient magic as well. Furthermore, Christina Larner designated those areas with persecutions as 'territories with a bureaucratized form of inquisition supplemented by torture and where appeal was had to the Canon Law manuals of witchcraft'. This may ring true for a comparison of England with Scotland, but what about Portugal, where demonological theory, judicial torture, and an organized legal system were also present? As Francisco Bethencourt reveals, fewer magicians were executed there than in England; the same appears true for Southern Europe, as recent inquisition research has shown.7

In the past decade, researchers have finally begun to actually read the sources from the core area of witchcraft persecutions, Central Europe, with its extensive archival records. The examination of serial documents—council protocols, judicial account books, registers of executions, interrogatory files, etc.—still far from complete—has changed our picture of witch trials and their distribution in space and time. We have learned that trials were not as numerous as once imagined and, when they occurred, they were dramatic local events worthy of investigation solely because of the richness of documentary evidence. The perception of a continuous ubiquitous witchcraft persecution in Europe is, even in the core areas of the persecutions, no longer tenable. Nevertheless, these singularly local occurrences do display a chronological pattern within a regional, at times supra-regional, context. For some time, researchers have referred to these patterns metaphorically as 'waves of

¹ Jules Michelet, La Sorcière (Paris, 1862), introduction.

² Bronislaw Malinowski, 'Gedanken zum Problem des Zauberwesens,' ibid., *Die Dynamik des Kulturwandels* (Vienna, 1951), pp. 185-96.

³ Alan Macfarlane, Witchcraft in Tudor and Stuart England. A Regional and Comparative Study (London, 1970), p. 205; Keith Thomas, Religion and the Decline of Magic. Studies in Popular Beliefs in Sixteenth and Seventeenth Century England (Harmondsworth, 1980³; 1st edn, London, 1971), pp. 669 ff., 675.

⁴ Brian P. Levack, The Witch-Hunt in Early Modern Europe (London, 1987), p. 140.

⁵ Thomas, (1980), p. 595.

⁶ Christina Larner, Enemies of God. The Witch-Hunt in Scotland (London, 1981), p. 187.

⁷ Francisco Bethencourt, 'Portugal: a scrupulous Inquisition', in B. Ankarloo and G. Henningsen (eds), Early Modern European Witchcraft. Centres and Peripheries (Oxford, 1990), pp. 403-24; G. Henningsen, The Witches' Advocate. Basque Witchcraft and the Spanish Inquisition (1601-1614) (Reno, 1980); G. Henningsen and John Tedeschi (eds), The Inquisition in Early Modern Europe. Studies on Sources and Methods (Dekalb, 1986); Stephen Haliczer (ed.), Inquisition and Society in Early Modern Europe (London, 1987).

⁸ For example, a detailed analysis by Lyndal Roper, 'Angst und Aggression. Hexenanklagen und Mutterschaft im frühneuzeitlichen Augsburg', *Sozialwissenschaftliche Information* 21 (1992), 68–76.

persecutions'.9 In terms of economic theory, we might rather speak of 'conjunctures'.

Let us consider the spatial and chronological distribution of the largest witchcraft persecutions in order to examine these conjuctures at their peaks. Twenty years hence, Henry Kamen's query whether or not major persecutions actually took place can now be unconditionally answered in the affirmative. 10 Despite Norman Cohn's fictionalized accounts of events in Southern France during the fourteenth century, of Pierre Delancres in the Basques Country or Henry Bouget in Burgundy, 11 several terrible persecutions in Central Europe during the sixteenth and seventeenth centuries will not be explained away: in Savoy, the Swiss Waadtland/Vaud, Lorraine, Silesia and the Electorates of Cologne, Mainz, and Trier respectively, persecutions resulted in the execution of hundreds of victims over periods of several years. According to present research, the most adamant of all persecutors, Cologne Archbishop Ferdinand of Bavaria (1579–1650), had up to 2,000 persons burned as witches in the years after 1626 in the Duchy of Westphalia and his own archbishophric. 12 In such cases, the term 'large witch hunt', coined by H. C. Erik Midelfort to describe all persecutions with more than twenty executions, rings of understatement.¹³ On the other hand, the appellation 'national witch hunt', employed by Larner for Scotland,14 awakens false associations, because those regions between the Baltic and Mediterranean witnessing major persecutions, with their weak central authorities and fragmented legal jurisdictions, were not nations at all. My aim here is not to solve these taxonomical dilemmas, but instead to investigate the circumstances of the major witch-hunts in Europe.

If we imagine the persecutions statistically, the largest ones structure a general pattern along a time line: the gravest persecutions of witches in France, Germany, Scotland, and Switzerland occurred in the same rhythm. And this was no coincidence. What I hope to establish is a historical context in which major persecutions occurred. I want to demonstrate that the long, medium, and short term conditions for conjunctures of witchcraft persecutions can be identified, indeed certain conditions are measurable. In that regard, it should be remembered that most early modern societies were agrarian. Therefore, recognition of characteristic 'agrarian crises and agrarian con-

⁹ Gerhard Schormann, Hexenprozesse in Deutschland (Göttingen, 1981), pp. 52-62; Heide Dienst, 'Magische Vorstellungen und Hexenverfolgungen in den österreichischen Ländern', in E. Zöllner (ed.), Wellen der Verfolgung in der österreichischen Geschichte (Vienna, 1986), pp. 20-94.

¹⁰ Henry Kamen, *The Iron Century. Social Change in Europe 1550–1650* (London, 1971), p. 236.

¹¹ Norman Cohn, Europe's Inner Demons: an Enquiry Inspired by the Great Witch-Hunt (London, 1975), p. 130; Robin Briggs, 'Witchcraft and the community in France and French-Speaking Europe', ibid. (ed.), Communities of Belief. Cultural and Social Tensions in Early Modern France (Oxford, 1989), pp. 7-65, esp. 10.

¹² Gerhard Schormann, Der Krieg gegen die Hexen. Das Ausrottungsprogramm des Kurfürsten von Köln (Göttingen, 1991).

H. C. Erik Midelfort, Witch-Hunting in South-Western Germany (Stanford, 1972), p. 9.
 Larner (1981), p. 61.

junctures' provides the decisive point of access to approach these societies. ¹⁵ With this in mind, the specific causes of the largest persecutions can, to a large degree, lead us to the causes behind European witchcraft persecutions in general. The following hypothesis is based upon a survey of older international literature, more recent studies of witch trials in German-speaking regions, as well as my own research. ¹⁶

II

This argument does not begin by addressing the continental legal system, but a more fundamentally anthropological theme: the continental climate, changes in the ecological system and, as its indicator, the weather-at first glance a banal phenomenon. However, during the major witchcraft persecutions of Central Europe in the sixteenth century, accusations of weather-magic (Wettermacherei) recurred with striking frequency. Midelfort has already shown how important the question of weather-magic was for the revival of witchcraft persecutions in Southwestern Germany in 1562-3.17 The charge of weatherrelated magic was not new; it reflected a pattern of beliefs present in pagan antiquity and survived in popular culture into the Early Middle Ages. Virtually all Germanic law codes professed a belief in weather-magic, contained in proscriptions against it.¹⁸ In contrast, the Church denied the possibility of weather-magic, threatening the belief therein with severe penalties, exemplified by prohibitions established by the Council of Brega in 563.19 However, examples from the High Middle Ages reveal that this campaign met with little success and, long before the rise of a cumulative concept of witchcraft, groups of individuals were collectively persecuted for alleged weather-magic: Agobard of Lyon implicated southern French peasants in repressions, while a chronicler from the Bavarian monastery at Weihenstephan accused peasants in the Bishophric of Freising of being instigators of a persecution of weathermagicians—against the will of their ecclesiastical and secular overlords.20

In the late fifteenth and early sixteenth centuries, the discussion of weathermagic accusations achieved new prominence. Although the belief was long

¹⁵ Wilhelm Abel, Agrarkrisen und Agrarkonjunkturen in Mitteleuropa vom 13. bis zum 19. Jahrhundert (Berlin, 1935).

¹⁷ Midelfort (1972), pp. 88-90.

19 Joseph Hansen, Zauberwahn, Inquisition und Hexenprozess im Mittelalter und die Ent-

stehung der großen Hexenverfolgung (Munich, 1900), p. 73.

Wolfgang Behringer, Hexenverfolgung in Bayern. Volksmagie, Glaubenseifer und Staatsräson in der frühen Neuzeit (Munich, 1987); ibid. (ed.), Hexen und Hexenprozesse in Deutschland (Munich, 1988); ibid., Mit dem Feuer vom Leben zum Tod. Hexengesetzgebung in Bayern (Munich, 1988); ibid., 'Erträge und Perspektiven der Hexenforschung', Historische Zeitschrift 249 (1989), 619-40.

¹⁸ Edith Kiessling, 'Zauberei in den germanischen Volksrechten', Diss. jur. (Frankfurt, 1940); Valerie Flint, *The Rise of Magic in Early Medieval Europe* (Oxford, 1991), pp. 108-116.

²⁰ Agobard of Lyon, 'Contra insulsam vulgi opinionem de grandine et tonitruis', in J. P. Migne (ed.), Patrologiae cursus completus, Series Latina (Paris, 1844-64), vol. 104, pp. 147-58; Annales St. Stephani Frisingensis, Monumenta Germaniae Historica, Scriptores XIII, p. 52.

considered theologically suspect, the Malleus Maleficarum²¹ unquestionably impuned to witches the ability to affect weather-magic, even as jurists and other theologians argued against this possibility on the dawn of modernity.²² In his consideration of the Malleus in 1489, Ulrich Molitor placed the question of weather-magic before all others in his 'Tractatus de phytonicis mulieribus'.²³ After witchcraft persecutions set in again in the 1560s, the issue of weather magic returned to the centre of debate: an influential evangelical preacher, Thomas Naogeorgus of free-imperial Esslingen, blamed witches for hail damage to the harvest, calling for their persecution,²⁴ just as the representatives of Lutheran orthodoxy at Tübingen in the neighbouring Duchy of Württemberg energetically struggled against these beliefs with the traditional argument that only God was in a position to influence the weather.²⁵

Why did theologians argue so vehemently about the role of weather-magic? That the charge played such a decisive role is not surprising when one considers the importance of climate in agrarian societies. 26 The exact time and location of this debate is even more conspicuous. Most participants were from the Upper German-French-Swiss border regions: Institoris, an Alsatian, came from Selestat, Molitor was the Episcopal Procurator of Constance and Brenz was a Tübingen reformer. Although the agrarian infrastructure of Central Europe lacked large urban areas on par with Istanbul, Naples, and London, it suffered from chronic over-population with a population density greater than England, Scandinavia, or Eastern Europe, probably parts of Italy and the Iberian peninsula as well, all areas recently consigned to the 'periphery' of witchcraft persecutions.²⁷ Central Europe suffered from a particularly sensitive infrastructure and backward agricultural practices when compared to England, Italy, and the Netherlands. Owing to its location, the agrarian economy of Central Europe, largely dependent on vineyards and wheat, was especially vulnerable to climatic disaster.²⁸

Nevertheless, the primary motivation behind the engagement of continental theologians with weather-magic derived more from its dramatically virulent

²¹ See Peter Segl (ed.), Der Hexenhammer. Entstehung und Umfeld des Malleus maleficarum von 1487 (Cologne, 1988).

²² Ulrich Molitor, De laniis et phitonicis mulierbus . . . (1489); Martin Plantsch, Opusculum de sagis maleficis (Pforzheim, 1507); Johann Spreter, Hexen Büchlein . . . (Basel, 1540); Johann Brenz, 'Ein Predig von dem Hagel und Ungewitter', Evangelien der fürnembsten Fest- und Feyertagen . . . (Frankfurt, 1558).

Wolfgang Ziegeler, Möglichkeiten der Kritik am Zauber- und Hexenwesen im ausgehenden Mittelalter (Cologne, 1973), 112.

²⁴ Günther Jerouschek, Die Hexen und ihr Prozess. Die Hexenverfolgung in der Reichsstadt Esslingen (Sigmaringen, 1992).

²⁵ Matheus Alber and Wilhelm Bidembach, Ein Summa etlicher Predigen vom Hagel und Unholden . . . (Tübingen, 1562).

²⁶ Aldo de Maddalena, 'Das ländliche Europa, 1500-1700', in C. M. Cippola and K. Borchardt (eds), Europäische Wirtschaftsgeschichte. Sechzehntes und Siebzehntes Jahrhundert (The Fontana Economic History of Europe) (Stuttgart, 1979), vol. 2, pp. 171-221.

²⁷ Ankarloo and Henningsen (1990).

Wilhelm Brouwer, 'Die Beziehungen zwischen Ernte und Witterung in der Landwirtschaft', Landwirtschaftliches Jahrbuch 26 (1926), 1-81.

manifestations. Whereas common maleficium involved individuals in conflict, charges of weather-magic were frequently raised by entire communities. These collective accusations directed against a fictive collective rather than individual culprits justified the employment of any means necessary to track down the conspiracy. In this sense, peasant perceptions corresponded with those of Christian demonology. That a crime as heinous as the destruction of crops by weather-magic could be committed by a single person seemed inconceivable, a preconception lending the crime an added dimension. If the authorities refused to bend to popular pressure, communities occasionally responded with open unrest.²⁹

A characteristic example is provided by the largest witchcraft persecution in German-speaking regions during the sixteenth century in Trier which claimed some 300 victims and was previously written off to the personal persecution complex of the Prince-Elector. In an impressive dissertation on the witch trials in Trier and the County of Sponheim, Walter Rummel proves the inadequacy of this old interpretation. Actually, the persecuting impulse 'was fostered almost completely "from below", from communities and their representatives'. The administration of the ecclesiastical territory was nearly paralysed as communal committees wrested judicial authority from its hands as a consequence of this campaign of extermination, while the administration fought in vain to win back the initiative. A local witchcraft ordinance of 1591 mentions that 'communities . . . have conspired and established a pact very nearly resembling a revolt'. 31

And this was no mere apology, as confirmed by Eva Labouvie's recent investigations into the social logic behind 'village inquisitions' conducted in the territories of today's Saarland (the counties of Nassau-Saarbrücken and Pfalz-Zweibrücken), of the Teutonic Order, as well as Electoral Trier, the Duchy of Lorraine and their associated territories. With a dynamism shocking for the 'age of absolutism', subject populations imposed their will on politically weak administrations. Their methods of witch-finding reflected precious little of the refined techniques attendant on Roman law or inquisitorial theory. Committees formed by free primitive elections held within their respective communities acted without legitimation from the ruling élite and naturally beyond élite interests. Instead, they represented the 'self-initiative of comradeship toward witch-hunting'. The committees acted on behalf of village

²⁹ Walter Rummel, Bauern, Herren und Hexen. Studien zur Sozialgeschichte sponheimischer und kurtrierischer Hexenprozesse, 1574–1664 (Göttingen, 1991), pp. 317–21. The same held true of weather-related prejudices against suicide: David Lederer, 'Aufruhr auf dem Friedhof: Pfarrer, Gemeinde und Selbstmord im frühneuzeitlichen Bayern', in G. Signori (ed.), Trauer, Verzweiflung und Anfechtung. Selbstmord und Selbstmordversuche in spätmittelalterlichen und frühneuzeitlichen Gesellschaften (Tübingen, 1994), pp. 189–209.

³⁰ Rummel (1991), 88 ff.

³¹ Behringer, Hexen und Hexenprozesse (1988), p. 267.

³² Eva Labouvie, Zauberei und Hexenwerk. Ländlicher Aberglaube in der frühen Neuzeit (Frankfurt, 1991), 82–95.

communities, following the interests of the peasant population alone.³³ These circumstances unmistakably explain the laconic remarks of a contemporary chronicle from Trier on the causes of the great persecution: 'Because everyone generally believed that crop failures over many years had been brought on by witches and malefactors out of devilish hatred, the whole land rose up to exterminate them'.³⁴

Obviously, rain, snow, and hail were not invented in the sixteenth century and illness and death are constant companions in humanity's path through history. However, just as people differentiate between 'natural' and 'unnatural' illnesses-even Theophrastus Paracelsus did so35-so too have they differentiated between 'natural' and 'unnatural', i.e. magically conjured weather. One important cause of witchcraft persecutions in the second half of the sixteenth century appears to have rested in popular perceptions of 'unnatural' types of weather (e.g. cold winters, persistent snowfall, evening frosts late in the spring, wet summers, floods, severe hailstorms, etc.). In the eyes of contemporaries, 'unnatural' weather deviated from long-experienced norms. Most historians fail to take contemporary pronouncements to that effect seriously. Complaints of decreasing harvests, deteriorating quality of wine, depleted stocks of fish in rivers, and declining weight of cattle are regarded as woeful tropes, a yearning for the golden days of yore that passed from a silver into an iron age. On the other hand, Henry Kamen's conceptualization of an 'iron century' between 1550 and 1650 has much to recommend it as a useful approach to climatic history, a discipline that makes sense of contemporary complaints.

Let us examine climatic history in the period identified by researchers as the high point of the European witchcraft persecutions, the decades between 1560 and 1630.³⁶ Closer analysis reveals a striking correlation between this epoch and a period of general climatic deterioration after 1560, sometimes known as the 'Little Ice Age'.³⁷ Although dates for the onset of the 'Little Ice Age' vary slightly, there is general consensus that a climatic deterioration occurred in Early Modern Europe, marked by falling annual temperatures, a curtailed growing season, pervasive meridional cold streams from the poles,

³³ Rummel (1991), p. 36; Labouvie (1991), 88 ff.

³⁴ Italics = my emphasis; see Emil Zenz (ed.), *Die Taten der Trierer. Gesta Treverorum* (Trier, 1964), vol. 7, p. 13.

³⁵ T. Paracelsus, 'De occulta philosophia', in Will-Erich Peuckert (ed.), Werke (Darmstadt, 1976), vol. 5, pp. 169–74.

³⁶ Robert Muchembled, Kultur des Volkes—Kultur der Eliten (Stuttgart, 1982), p. 236; W. Behringer, 'Erhob sich das ganze Land zu ihrer Ausrottung. Hexenprozesse und Hexenverfolgungen in Europa', in Richard van Dülmen (ed.), Hexenwelten (Frankfurt, 1987), pp. 131–70; Brian P. Levack, The Witch-Hunt in Early Modern Europe (London, 1987), pp. 170–75.

³⁷ Emanuel Le Roy Ladurie, L'Histoire du climat depuis l'an mil (Paris, 1967); H. H. Lamb, Climate. Present, Past and Future (London, 1977), vol. 2; Christian Pfister, 'The Little Ice Age: Thermal and Wetness Indices for Central Europe', Journal of Interdisciplinary History 10 (1980), 665-96; J. M. Grove, The Little Ice Age (London, 1988).

extreme winters, a lowering of the snowline on mountains, and the advance of Alpine glaciers.

Statistics based on an interdisciplinary study by Christian Pfister regarding the history of Swiss climate permit precise conclusions for individual years in Central Europe. Pfister provides the following median climate fluctuations: after a 'warm-phase' (1530-64), comparable to the recent 'warm peak' for the years 1943-52, there followed a climatic deterioration between 1565 and 1629.38 Both epochs correspond closely to the boundaries recognized by witchcraft researchers. A relative lull in witchcraft persecutions for about a generation after the Reformation ended after they began to revisit Europe in 1563, provoking Johann Weyer to utter his famous remark that one would have believed that the age of witch-hunts had long passed.39 Unfortunately, a period now unanimously recognized as the peak of persecutions followed, years which conceal hidden climatic surprises; Pfister identified 'cumulative cold-sequences' for the years 1560-74, 1583-9, and 1623-8.40

Thanks to his conclusions, changes in the ecological system in the late sixteenth century can now be identified and placed in precise context. Apparently unrelated reports of catastrophes by contemporaries, such as constant flooding after 1560, were part of an overall pattern of increased rainfall, and damage to mountain forests and pastures was exacerbated by clearing and cattle grazing necessitated by increased grain cultivation in valleys. Erosion, soil exhaustion, and the tillage of marginal lands in continental Europe led to declining yields, both in agriculture and livestock, the latter evidenced by falling milk production. Cold wet years resulted in meagre late harvests and the need to stall feed livestock for longer periods on reduced quantities of fodder. Low temperatures also increased demand for kindling and caloric intake. A monostructure of consumables enhanced human vulnerability to fluctuations in crop yields. The common people's fear of hail storms, regularly attributed to the activity of witches, derived primarily from the threat to subsistence agriculture rather than from religious reasons. Pfister applies the term 'Grindelwald fluctuation' to describe the decisive years 1570-1630 within the 'Little Ice Age', because data on the Grindelwald Glacier in the Alps near Bern indicates particularly significant changes relevant to perceptions of ecological catastrophe in the late sixteenth and early seventeenth centuries;41 although we should keep in mind that glacial growth occurs only years after actual climatic change. By 1562, a heavy increase in wet weather was already apparent. Extreme cases, such as the freezing of Lake Constance, the largest

³⁸ Christian Pfister, Klimageschichte der Schweiz 1525-1860. Das Klima der Schweiz von 1525-1860 und seine Bedeutung in der Geschichte von Bevölkerung und Landwirtschaft (Bern, 1988), pp. 118-27.

Johann Weyer, De Praestigiis Daemonum (Frankfurt, 1586), preface.

⁴⁰ Pfister (1988), p. 150.

⁴¹ Christian Pfister, 'Die Schwankungen des Unteren Grindelwaldgletschers im Vergleich mit historischen Witterungsbeobachtungen und -messungen', Zeitschrift für Gletscherkunde 11 (1976), 74-90.

alpine lake, in 1563 and again in 1572–3 for a full sixty days impressed contemporaries as unusual climatic developments and were recorded for posterity by chroniclers as centennial events. ⁴² The climax of the cooling off that began in 1560 was reached in 1573. 'At that time, nature seems to have left its usual course,' was the sober conclusion of one glacial researcher on the years after 1570, a comment very close to the view of contemporaries. ⁴³ In the early 1570s, Central Europe was visited by a major famine, which must have profoundly shocked this relatively affluent society. ⁴⁴

After 1586, colder winters were intensified by a period of cold wet springs. In 1587, snow fell until the beginning of July and, by mid-September the valleys were again covered with snow. In 1588, storms besetting the Spanish Armada coincided with the wettest year of the century. The years 1584–9, particularly cold and wet, provided climatic impetus to the witch-hunts in Trier, the largest up to that time in German-speaking lands. The Trier witchcraft persecution was no isolated incident; a simultaneous hunt occurred in the Duchy of Lorraine, reported in the Daemonolatria of the witch-hunting judge Nicolas Rémy. 45 Potential witch-hunts also threatened other parts of France, Germany, Switzerland, and Scotland. Furthermore, increased interest in maleficient magic—though without major persecutions—is apparent in Austria, England, Hungary, Italy, Poland, Spain and the Baltic region. 46 In light of interwoven ecological factors, we cannot dismiss the unusual accumulation of reports concerning ecological catastrophes by contemporary authors as mere tropes. For, as the anonymous author of a pamphlet appearing in southern Germany noted in 1590:

So many kinds of magic and demonic apparitions are gaining the upper hand in our time that nearly every city, market and village in all Germany, not to mention other peoples and nations, is filled with vermin and servants of the devil who destroy the fruits of the fields, which the Lord allows to grow with his blessing, with unusual thunder, lightening, showers, hail, storm winds, frost, flooding, mice, worms and many other things . . . causing them to rot in the fields, and also increase the shortage of human subsistence by spoiling livestock, cows, calves, horses, sheep, and others, using

⁴² M. Schmidt, 'Der zugefrorene Bodensee. Beitrag zur Geschichte sehr strenger Winter in Süddeutschland und der Nordschweiz', *Meteorologische Rundschau* 20 (1967), 16–25.

⁴³ Bernhard Friedrich Kuhn, 'Versuch über den Mechanismus der Gletscher', Höpfners Magazin 1 (1787), 119-36, esp. 135.

Wilhelm Abel, Massenarmut und Hungerkrisen im vorindustriellen Deutschland (Göttingen, 1972).

⁴⁵ Nicolaus Remigius, *Daemonolatria* (Lyon, 1595), preface.

⁴⁶ Alan Macfarlane, 'Witchcraft in Tudor and Stuart Essex', in James S. Cockburn (ed.), Crime in England, 1500–1800 (Princeton, 1977), pp. 72–89, esp. 79; Jean-Pierre Dedieu, 'The Inquisition and Popular Culture New Castile', in S. Haliczer (ed.), Inquisition and Society in Early Modern Europe (London, 1987), pp. 129–46, esp. 140 ff; Ruth Martin, Witchcraft and Inquisition in Venice 1550–1650 (Oxford, 1989), 259 ff.; Maya Madar, 'Estonia I: Werewolves and Poisoners', in B. Ankarloo and G. Henningsen (eds), Early Modern European Witchcraft. Centres and Peripheries (Oxford, 1990), pp. 257–72, esp. 260; Gabor Klaniczay, 'Hexenverfolgung in Ungarn. Soziale oder kulturelle Spannungen?', ibid, Heilige, Hexen, Vampire. Vom Nutzen des Übernatürlichen (Berlin, 1991), pp. 52–72.

all their power, not just against the fruit of the fields and livestock, but yes, not even sparing kinsfolk and close blood-relatives, who are killed in great numbers . . . old people are bent, lamed and suffer painful illnesses ending in death, and they direct all their industry in order that all kinds of woe and dearth arise among the people.⁴⁷

The direct connection between weather-magic, witchcraft persecutions and harvest failures made by contemporaries is even more obvious when one reconstructs the circumstances of individual hunts, for example, in the county court of Schongau, where sixty-three women were legally executed as witches in the years 1589-91. These hunts were not initiated by denunciations arising from previous hunts nor from outside accusations. Nor did they commence at the instigation of the authorities, local judges, or the parish clergy. Instead, popular pressure obviously motivated the authorities to act. In so far as documentary reconstruction is possible, the prerequisite was a series of storms damaging crops and resultant crop failures, as chronicled for the regions near Kempten, Memmingen, and Augsburg, 48 culminating in peasant unrest. On 26 June 1588, a severe hailstorm decimated crops in the community of Schwabsoien, a Bavarian border community partially under the jurisdiction of the Bishophric of Augsburg whose 100 households the protocols of the episcopal Court Council in Dillingen referred to as consisting mostly of poor cottagers. 49 Although the Bishop expressed his willingness to provide new seed for the coming year, the inhabitants remained unsatisfied: the village prominence, among them the village judge Hans Kerbl, and the committee of four appeared before the county judge of Schongau requesting the 'extermination' of the witches held responsible for the disaster. For the relatively poor community, any means to that end was justifiable. They were even prepared to sell the communal forest to pay for the services of the reknowned executioner of Biberach.50 In a communal meeting with their pastor, the villagers explained that they would gladly sell the forest, if the proceeds would go toward the extermination of the witches.⁵¹ Bearing this connection in mind, let us examine a letter of Duke Ferdinand of Bavaria responding to the report from the county judge in Schongau, Hans Friedrich Herwarth of Hohenburg. This letter, which initiated the Schongau inquisition on 24 July 1589, contains the following remarks:

My dear servant, we have seen with our own eyes and not from your report alone, how inclement weather, showers and hail spoiled these poor people's dear fruits of

⁴⁷ Wolfgang Behringer, 'Hexenverfolgungen im Spiegel zeitgenössischer Publizistik. Die 'Eyweytterte Unholden Zeyttung' von 1590', *Oberbayerisches Archiv* 109 (1984), 339–60, quotation 346.

⁴⁸ Kemptner Chronik, Universitätsbibliothek München 2 Cod. MS 500, 42; Paul von Stetten, Geschichte der Heyl. Röm. Reichs Freyen Stadt Augsburg (Frankfurt, 1743/58), vol. 1, pp. 691–700; Stadtarchiv Memmingen, Unold-Chronik, p. 195.

⁴⁹ Hauptstaatssarchiv München (=HStAM), Hochstift Augsburg, NA, Akten Nr. 2629; ibid., Nr. 1201, 106–7v; ibid., HP Dillingen 1589, 106–7; Stadtarchiv München, HVU Nr. 2051.

HStAM, Hochstift Augsburg, NA, Akten Nr. 2629 sine folio.
 Stadtarchiv München, Historischer Verein Urkunden Nr. 2051; HStAM, Hochstift Augsburg, NA, Akten Nr 2629.

the field . . . but are even more concerned with their plight . . ., as the Almighty has allowed them to be so sorely afflicted by the evil enemy and his damnable agents ('Werckhzeug'), and we order that you should secretly pay close attention to evil persons and witches and in case any should come under sufficient suspicion, you should stealthfully nab them and immediately search their lodgings, chests, bed and containers with all industry to discover if suspicious magical affects, such as salves, wicked powders, concoctions, wax images stuck with pins, human limbs or legs, charms, insignia or other equally wicked objects can be found.⁵²

Explicit reference is made to a common characteristic of major witch-hunts, the public demand for persecutions from a community whose harvest, i.e. their source of livelihood, indeed of their very existence, had been destroyed by inclement weather. The letter also reveals that this was not Herwarth's first report of suspected witchcraft:

In particular, we recall that you recently mentioned the sighting of a woman by two goodmen in a wood not far from Peissenberg followed shortly thereafter by a storm. You should investigate this incident industriously and, if circumstantial evidence is present, make arrests and immediately thereafter inform the executioner from Biberach that he should examine the woman's entire body to determine whether signs, notes or marks of the type the evil enemy uses to mark his servants are present on her, and ask the executioner how to recognize the witches, and, according to your findings, to report back to us and, if necessary, to accompany the report personally.

Suspicion of witchcraft was given top priority. As we can see from the background and the contents of the letter, the Duke was not a fanatical witchhunter, but simply responded paternalistically to the concerns of his subjects. Contrary to the situation in Trier, an example well-known throughout Germany, he wanted to remain on top on the situation and master the investigation against the witches, whose existence he never questioned, rather than allow himself to be driven by the populace. This much is clear from his instructions to the county judge. Despite the large number of victims, no one in the county seemed displeased with the results of the persecution. In 1594, four years after the conclusion of this great persecution, the County Judge of Schongau requested that Duke Ferdinand erect an 'eternal pillar' to commemorate the witch-hunt, because the power of the witches had been broken and harvests had returned to normal. Tangentially, his request sought to underscore costs incurred during the hunt in the hope of reimbursement, but one assumes that the request for a monument would have been appropriate only if it fit the mood of the populace.53

Similar correlations between climatic catastrophes and witch-hunts like that of the 1580s recurred thereafter. In particular, climatic conditions in the years 1621–30 resembled those between 1586 and 1599, marked by cold winters, late springs and cold wet weather in the summer and autumn. 1628, the year

⁵² Behringer, Hexen und Hexenprozesse (1988).

⁵³ Stadtarchiv München, Historischer Verein Urkunden, Nr. 2005.

in which witchcraft persecutions in Germany, indeed Europe in general, reached their absolute peak, is referred to by Pfister as 'the year without a summer'. 54 These persecutions 'benefitted' from the experience of witch-hunts conducted since the 1580s. When crop failures beset the Saar region in 1627, communities gathered under the 'village linden trees' (a traditional meeting place) to discuss plans of action and elect representatives in order to organize witch-hunts.55

In summary, the age of the great persecutions corresponded generally to the 'Little Ice Age' and the individual hunts corresponded to specifically catastrophic years. The era of extremely poor weather was followed by a phase that was cool, but dry. In those lands which played a role in subsequent development, in England, Holland, and France, the witch-craze was overcome by ruling élites and the number of persecutions began to decline.56 One might find it historically ironic that the philosophy of Western Europe corresponded to climatic conditions, for it was cool and dry as well. Empiricist and Cartesian philosophy in the subsequent epoch formed the bulwark against a major relapse into the witch-craze, even when global cooling in the last thirty years of the seventeenth century peaked in an 'Ice Age summer' in 1675. The years between 1688 and 1701 have gone down in the literature as a renewed highpoint of the 'Little Ice Age'. 57 During this period, several great witchcraft persecutions did occur, although I shall not address them here. After a time of renewed warming (1702-1730) there followed a period (1730-1811) in which cold winters and wet, but warm summers predominated. The rise of the sun at the beginning of the eighteenth century not only melted glaciers, but a change in mental climate set in as well. Demands for witchcraft persecutions declined as the sun of the intellectual Enlightenment ushered in the end of belief in witchcraft.

Naturally, parallels between great intellectual movements and the history of climate are nothing more than an intellectual game. However, the same cannot be said of the synchronicity of climatic epochs and persecutions, because the weather played a prominent role in the origins of the great witchhunts. Both phenomena had something in common; their simultaneity, at least in Central Europe. 58 A look at the social history gives further indication that this was no coincidence.

III

In one of many local studies of the witchcraft persecutions in Europe, an examination into the witch trials in the Swiss canton Unterwalden, this laconic and atheoretical comment appears: 'In 1572 famine and inflation broke out

⁵⁴ Pfister (1988), 40 f., 118 ff.

⁵⁵ Labouvie (1991), 86 f.

⁵⁶ Hans de Waardt, Toverij en Samenleving. Holland 1500-1800 (Den Haag, 1991).

⁵⁷ Pfister (1988), pp. 127-29.

⁵⁸ Pfister (1988), p. 128.

and it is hardly a coincidence that this year also saw the first execution of a witch, Verena Gehrig. After the new famine-year 1589 again brought the executions of several witches in its wake, the bubonic plague broke out in the land in 1628, causing many casualties from among the populace . . . Responsibility for all these occurrences was attributed to witches and it is not surprising that precisely the years around these occurrences formed the highpoint of the persecutions, during which the accused openly admitted their guilt for these catastrophes under torture'. ⁵⁹

The dates are familiar and, indeed, it is not surprising to run across them again in social and economic history. Famine and inflation were not limited to the canton Unterwalden and affected large parts of Central Europe. This is the decisive point: because adverse climatic anomalies of the late sixteenth century were Europe-wide rather than just local events, the same holds true of social-historical events, such as crop failures and rising grain prices, changing structures of demand, market failures for manufactured goods, indebtedness, broken contracts, the firing of employees, poor nutrition among the lower classes, increased susceptibility to disease, and famine.

Hunger was the mark of inflationary crisis—its dreadful symbol, so to speak. Changes in social relationships were already underway, but serious transformations of the conditions of reproduction directly threatened subsistence and often provided the conditions for witchcraft persecutions. We are familiar with the anthropologically oriented research of Alan Macfarlane which cites the role of neighbourhood conflicts in witchcraft accusations. Rainer Walz has gone beyond Peter Burke's 'Macfarlane—Thomas model' in recent years to suggest that not just one specific constellation of conflict, in this case alms-giving, but nearly every human relationship which went wrong might lead to a charge of witchcraft, owing in part to an imaginary scale of honour attached to such interactions. Conversely, one might suppose that situations which seemed to call for magical assistance actually increased in these crisis-years; magic for the recovery of lost objects, absconded spouses, love, and health or countermagic against witches—all revolved around the question of existential security.

Despite the multiplicity of factors, the individual experience of threatening situations can be integrated into social history. In a primarily agrarian society, providing sustenance was of paramount importance. Malnutrition during famines in the early modern period increased susceptibility to disease. Crop

⁵⁹ Guido Bader, Die Hexenprozesse in der Schweiz (Affoltern, 1945), pp. 116 ff.

⁶⁰ A. B. Appleby, 'Epidemics and Famine in the Little Ice Age', *Journal of Interdisciplinary History* 10 (1980), 643-63.

Peter Burke, 'The Comparative Approach to European Witchcraft', in Ankarloo and Henningsen (1990), pp. 435-41; Rainer Walz, 'Der Hexenwahn vor dem Hintergrund dörflicher Kommunikation', Zeitschrift für Volkskunde 82 (1986), 1-18; ibid., 'Der Hexenwahn im Alltag. Der Umgang mit verdächtigen Frauen', Geschichte in Wissenschaft und Unterricht 43 (1992), 157-68; ibid., Hexenglaube und Magische Kommunikation im Dorf der frühen Neuzeit. Die Verfolgungen in der Grafschaft Lippe (Paderborn, 1993).

failures led to inflation, making it impossible for large parts of the populace to feed themselves adequately. Bread provided the staple of the early modern diet. The pious wish, 'give us this day our daily bread', was fully justified. Naturally, the lower classes were immediately affected by price-inflation on consumables, and literally starved in the streets during subsistence crises in the heart of Europe. Early modern crisis-years found their expression in the inflation of prices for basic food-stuffs and such inflation is measurable. The basic statistics of Moritz John Elsas (published during his exile in Holland), though dated, give precise details on several of the most important German cities between 1300 and 1820.62 Price figures should be viewed in relation to wages and not taken at face value. Dietrich Saalfeld's study of the basket of consumables, made on the basis of data from the imperial city Augsburg, demonstrates that, from the 1580s, a long period of inflation brought on by crop failures made all previous experiences pale into insignificance and caused a decisive decline in the standard of living in Southern Germany. Although there was no repeat of the extreme famine of 1570, the period of inflation still lasted almost a full decade, from 1585–94, with only two relatively stable years. Even wages for craftsmen fell below the existence-minimum in Augsburg and heads of middle class families could no longer feed their families on a single income. 63 Similar studies for England reveal that the trend in real wages was not limited to Central Europe.64

These periods of inflation had more dramatic impact in Southern Germany, because the Swabian textile industry had lost its traditional market in Holland as a result of the Dutch Revolt. Malnutrition spread, thereby lowering immunity to diseases. Two major plague epidemics in 1585–8 and 1592–3 decimated the population. Emanuel Le Roy Ladurie speaks in exaggerated terms of the 'accursed return of the Black Death of 1348'.65 The situation of subsistence crisis accounts for widespread witchcraft persecutions around the year 1590. The aforementioned chronicle of Trier explicitly mentions the constant lack of grain caused by crop failures as the background to the persection of 1585–92. 'Scarcely any archbishop has ruled the diocese under such great burden, trouble and emergency as Johann [Archbishop Johann VII of Schwarzenberg, 1581–99]. For the whole of his administration, he had to suffer the constant lack of grain, the ills of poor weather and the failure of crops in the fields with his subjects. For only two of nineteen years were fruitful, 1584 and 1590.'66 One assumes that the greatest European witchcraft persecution of the

⁶² Moritz J. Elsas, Umriß einer Geschichte der Preise und Löhne in Deutschland vom ausgehenden Mittelalter bis zum Beginn des 19. Jahrhunderts, 3 vols (Leiden, 1936-38).

⁶³ Dietrich Saalfeld, 'Die Wandlungen der Preis- und Lohnstruktur während des 16. Jahrhunderts in Deutschland', in W. Fischer (ed.), Beiträge zu Wirtschaftswachstum und Wirtschaftsstruktur im 16. und 19. Jahrhundert (Berlin, 1971), pp. 9–28.

⁶⁴ Roger Schofield, 'Family structure, demographic behaviour and economic growth', in J. Walter and R. Schofield (eds), *Famine*, *Disease and the Social Order in Early Modern Society* (Cambridge, 1989), pp. 279–304, esp. p. 289.

⁶⁵ Emmanuel Le Roy Ladurie, Karneval in Romans (Stuttgart, 1982), p. 9.

⁶⁶ Zenz (1964), vol. 7, 13.

sixteenth century, in the bordering Duchy of Lorraine, took place under the same conditions.⁶⁷

In order to understand the effects of crop failures, it should be made clear that the greater part of the population, in the country as well as in the city, did not participate directly in subsistence agriculture, purchasing necessities at local markets. The entire range of shortages was transmitted to the lower peasant and urban classes at the market in the form of higher prices for basic consumables. The existentially threatening connection of crop failure and inflation caused a knee-jerk reaction based on demonology, as the consecrated bishop of Trier, Peter Binsfield argued in a polemic for exceptional measures to fight witches in 1589: 'Witches are traitors to the Fatherland, because they secretly conspire, as experience shows, to destroy the wine harvest, rot the fruits and drive up prices of grain'. 68 Such inflationary crises often had a supraregional or even Europe-wide impact as a consequence of the deficient transportation infrastructure afflicting trade-routes during periods of regional hardship. The inflation mentioned by the demonologist Binsfield is the same one that afflicted northwest Germany and Bavaria after 1589 at the onset of major persecutions. 69

A similar correlation of persecutions and crop failure/inflation can be observed in the major witch-hunts of the seventeenth century, the worst ever. Thousands fell prey to them in Franconia and the Rhineland during the late 1620s. ⁷⁰ Here as well, contemporary chroniclers suggested a direct connection between 'unnatural' storms and exorbitant inflation. ⁷¹ The peasant population in these regions was doubly hit, since—insofar as they relied on the wine industry—their crop as well as their income declined measurably. According to a contemporary chronicler at the beginning of a mega-persecution:

In the year 1626 on the 27th of May, the vineyards of the bishophrics of Bamberg and Würzburg in Franconia all froze over, as did the grain fields, which rotted in any case . . . Everything froze like never before remembered, causing a great inflation . . . There followed great lamentation and pleading among the common rabble, questioning why his princely Grace delayed so long in punishing the sorcerers and witches for spoiling crops since the beginning of the year. ⁷²

⁶⁷ Robin Briggs, 'Ill will and magical power in Lorraine witchcraft', ibid. (ed.), *Communities of Belief*, pp. 83-105.

⁶⁸ Peter Binsfield, Tractat von Bekanntnus der Zauberer und Hexen (Munich, 1592), pp. 38–39.

⁶⁹ Wolfgang Behringer, *Mit dem Feuer* (1988), 210 f.: from HStAM Kurbayern Äusseres Archiv Nr. 1913, 294.

⁷⁰ Herbert Pohl, Hexenglaube und Hexenverfolgung im Kurfürstentum Mainz. Ein Beitrag zur Hexenfrage im 16. und beginnenden 17. Jahrhundert (Wiesbaden, 1988); Horst-Heinrich Gebhardt, Hexenprozesse im Kurfürstentum Mainz des 17. Jahrhunderts (Aschaffenburg, 1989); Gerhard Schormann, Der Krieg gegen die Hexen. Das Ausrottungsprogramm des Kurfürsten von Köln (Göttingen, 1991).

⁷¹ Ignaz Denzinger, 'Auszüge aus einer Chronik der Familie Langhans in Zeil', Archiv des Historischen Vereins für Unterfranken 10 (1850), 144.

⁷² Ibid., p. 143.

The Würzburg witch-hunt, one of the largest in European history, claimed some 900 victims between 1626 and 1630. Heinrich Schultheis (c. 1580–1646), a contemporary, used the term 'Wirtzbergisch Werck' as a synonym describing the extent of that Holocaust.⁷³

It is possible that persecutions in the territories of the Archbishop of Cologne, Ferdinand of Bavaria (1577-1650), managed to outstrip the Franconian hunts. Gerhard Schormann recently has argued that Ferdinand conducted a centrally directed campaign of extermination against witches and that the authorities initiated the hunt in these areas—the old argument in new clothing.74 However, this point of view has been vehemently rebutted by the latest archival research. The ostensive 'programme' of the Archbishop, published long after the persecution, was nothing more than a regurgitation of a four-decade old discussion from the Bishop's home, the Electorate of Bavaria, that dealt with the possibility of 'purging' the territory in conjunction with new domestic legislation.⁷⁵ This programme achieved new prominence in the Bishophric of Cologne in 1627. However, the political structure of the Electorate of Cologne was so complex that a centrally directed persecution without the co-operation of the general populace and the intermediary authorities (nobility, monasteries) was quite simply impossible. In 1620, the Prince-Bishop was even unable to defend his subjects against Dutch incursions and they managed to erect a hostile fortress on a Rhine-island directly opposite his capital in Bonn. Political handicaps restricted any eventuality of conducting a policy of repression. Though we can ignore neither the potential influence of religiously motived proclivities toward persecution (Prince-Bishop Ferdinand and his uncle Franz Wilhelm of Wartenberg can be counted among the Bavarian Jesuit party, which supported witch-hunting at this time) nor a desire for control, major persecutions broke out years after Ferdinand's ascension in any case, after the effects of agrarian pressure set in among the populace.76 Thomas Becker confirms that supplications from local communities preceded the outbreak here as well, in this case a petition of autumn 1626.77 This opinion is corroborated by a publication of Hermann Löher, an exile in Amsterdam, describing the simultaneous role of local committees in the Rhineland. 78 For that reason, we have to agree with Becker: the Prince-Bishop had no persecutory programme, but simply responded to the situation.⁷⁹ The

⁷³ Heinrich Schultheis, Ausführliche Instruktion in Inquisitionsprocessen (Cologne, 1634), p. 466.

⁷⁴ Schormann (1991), p. 9.

⁷⁵ Behringer, Mit dem Feuer (1988), pp. 121-64, 233-67.

⁷⁶ Behringer (1987), pp. 246–51.

Thomas Becker, 'Hexenverfolgung in Kurköln. Kritische Anmerkungen zu Gerhard Schormanns 'Krieg gegen die Hexen'', Annalen des Historischen Vereins für den Niederrhein 195 (1992), 202–214.

⁷⁸ Herrmann Löher, Hochnötige unterthanige wemütige Klage der frommen Unschültigen . . . (Amsterdam, 1676).

⁷⁹ Becker (1992).

administration did not act; it reacted. And it reacted as a weak administration does: it yielded to the desire of the populace for persecution.

Thus this administration behaved no differently than other weak administrations at the time: the ecclesiastical territories of Würzburg, Bamberg, Eichstätt, Cologne, Mainz, and others persecuted witches simultaneously from 1626–30. These great persecutions deserve better research. Where we already possess in-depth analyses, such as for the Prince-Bishophric of Mainz, the evidence shows that a 'seismographic' connection between inflation and persecutions exists. Each of the four hunts there was directly connected to an inflationary crisis; in Franconia the long-term crisis which began in 1624 led to the most excessive witch hunts under Prince-Bishop Georg Friedrich of Greiffenclau, who ruled briefly from 1626–9 and had 900 victims burned as witches.⁸⁰

As elsewhere, criticism in Mainz involved the accusation of weather-magic and its sociological consequences. As early as 1593, in conjunction with the first major persecutions, the local official Jeremias Lieb complained, 'the common man has become so mad from the consequences of crop failures, the death of livestock and similar things, that he no longer holds them for the just punishment of God for our sins, but blames witches and sorceresses'. ⁸¹ Precisely because of these pre-Christian peasant beliefs, there exists a fundamental social-historical connection between crises of the Ancien Régime and the proclivity to persecutions. ⁸² Crop failures, attributed to witches, led to inflated costs for consumables and consequently to malnutrition and disease. Hunger and disease struck all of Europe during particularly unfavourable years simultaneously. Only this method allows us to comprehend the otherwise chance synchronicity of peak waves of persecutions in lands as distant as Scotland and Bayaria. ⁸³

The recognition of these connections allows us to target persecution years in search of symptomatic agrarian crises and, vice-versa, to seek persecutions among early modern inflationary crises identified by social historians. In doing so, one immediately notices that the early the 1480s, the decade which produced the Malleus Maleficarum and the persecution which accompanied it, were years of utter difficulties in the Alpine region. Paradigmatic for southern Germany, the Inquisitor Heinrich Cramer (Institoris, author of the Malleus) participated in persecutions from 1481 onward. According to the Memmingen chronicle, the years 1481–2 witnessed severe crop failures, inflation and a very high rate of mortality. Belsas' figures for these years substantiate local events in Memmingen on a broader scale; precisely the

⁸⁰ Gebhardt (1989), 349 f.

⁸¹ Pohl (1988), p. 145.

⁸² E. Labrousse, Esquisse du mouvement des prix et des revenus en France au XVIIIe siècle (Paris, 1933); Abel (1974); Walter and Schofield (1989).

⁸³ Larner (1981), pp. 192–204; Behringer (1987), pp. 419–30.

⁸⁴ Schorer, 41 f.

The Malleus itself reports the beginning of a trial as follows: 'In the Diocese of Constance, 28 miles from Ravensburg in the direction of Salzburg, a viscious hailstorm destroyed all fields within a one-mile radius, and it was believed that no crop would be possible for three years'. As soon as the Notary of the Inquisition became aware of this occurrence and an inquisition became necessary because of the outcry of the populace, as almost all citizens thought that witchcraft was involved, an inquisition was initiated on behalf of the town council. 86 The first witch-trials in Lorraine can also be traced to these years. 87 Andreas Blauert has taken the time to verify the connection between subsistence crises and witchcraft persecutions in Switzerland during the fifteenth century, where the new cumulative concept of witchcraft first took hold in a German-speaking region. His conclusions also corroborate my thesis, if somewhat hesitantly:

One can certainly proceed from the conclusion that crisis situations forced witchcraft trials. W. Behringer's assumption that a causal nexus between agrarian crises and witchcraft persecutions exists, still requires a caveat. There was doubtless a tendency at such times, in effect times of every-day conflicts, for witch-trials to accumulate. Documentary observation can lead to no other conclusion: periods of persecution, like the intellectual pre-occupation with the image of the victorious witch reached their high-point during crises years in the region under examination.⁸⁸

IV

This link to broader social developments is an important step in historically locating conjunctures of persecution. However, the synchronicity of subsistence crises and witch-hunts should not, indeed cannot, be interpreted as mechanical determinism. Times of crisis and disaster are historical constants, but external forces do not summon forth mechanical human responses, since they are constructed within modes of cultural perception. Before the construction of an early modern, cumulative concept of witchcraft, massive persecutions were unthinkable. The complex and only partially researched phenomenon of its reception was, not surprisingly, hesitant. Characteristically, the witchcraft persecution of 1563 began in Southwest Germany, traditional home of the initial hunt conducted by the papal inquisitor Heinrich Cramer (Institoris). Interestingly, the torturers/executioners employed during

⁸⁵ Elsas I, 164 (Munich); 593 (Augsburg); 634 (Würzburg).

⁸⁶ Der Hexenhammer II (1974), 157.

⁸⁷ Briggs (1989), p. 91.

⁸⁸ Andreas Blauert, Frühe Hexenverfolgungen. Ketzer-, Zauberei und Hexenprozesse des 15. Jahrhunderts (Hamburg, 1989), p. 15.

⁸⁹ Claudia Honegger (ed.), Die Hexen der Neuzeit. Studien zur Sozialgeschichte eines kulturellen Deutungsmusters (Frankfurt, 1978), p. 15.

Willem de Blécourt and Hans de Waardt, 'Das Vordringen der Zaubereiverfolgungen in die Niederlande, Rhein, Maas und Schelde entlang', in Blauert (1990), pp. 182-240.

the trials in Southern Germany initially came from the region around the Ravensburger persecution.⁹¹

The so-called 'history of mentalities' is another important aspect. Turning first to 'collective mentalities' (i.e. expectations and outlook not merely attributable to individual views), we should consider characteristics of social groups or even entire epochs. This is not the pervasive 'fear in the west' which Jean Delumeau and others believed could be identified for the whole of the early modern period, 92 but rather a concretely dated and localized fear with concrete causes and results. Not wishing to explore the individual psychology of fear, I merely want to point out evidence of 'fear' in contemporary sources in connection with subsistence crises. 93 The 'Fugger-Zeitungen', weekly, handwritten reports sent to the merchant Philip Eduard Fugger from the major cities of Europe, specifically mentioned the term 'Angst' only in connection with extreme crisis-years; elsewhere it was not employed. In 1586, the hungry poor lost their work and begged from door to door fearing for their lives, while the rich feared to go out in public. Angst had many faces, but had a common cause. 94

Also of interest are contemporary comments pessimistically describing the condition of the world and its constant decay. These remarks have often been viewed as topical stereotypes, but when eyewitness accounts frequently recur in connection with concrete historical circumstances, suggesting that 'recent years have shown themselves ever harder and more severe as time goes on, and a reduction in living things, people and animals as well as fruits and crops', they ought to be taken more seriously. 95 Meteorological anomalies and subsequent inflationary crises, as previously noted, were attributed to the will and deeds of 'evil persons', transformed and personified as enemies according to popular beliefs in the occult. Magical explanations always enjoy the advantage of justifying direct action. Without reflecting on the esoteric game of magic and counter-magic, the populace struck an alliance with the authorities, using the latter's own demonological theories and judicial rituals to achieve a popular aim, to exterminate the evil persons and uproot the scourge. To their chagrin, many authorities, normally unable to encourage plaintiffs to bring charges of magic before the courts instead of settling them within the community, now suddenly found themselves besieged on all sides by massive pressure from peasant communities to intervene, threatening vigilante justice and open unrest if they failed to do so. In turn, collective

⁹¹ Midelfort (1972); Behringer (1987); Manfred Tschaikner, 'Damit das Böse ausgerottet werde'. Hexenverfolgungen in Vorarlberg im 16. und 17. Jahrhundert (Bregenz, 1992).

Jean Delumeau, La Peur en Occident (XVIe-XVIIIe siècles). Une cité assiégée (Paris, 1978).
 G. Hufnagel et al. (eds.), Risiko-Geschichte der Ängste (=Sowi 21 (1992), Heft 2).

⁹⁴ Österreichische Nationalbibliothek Wien, Cod. 8959, 351.

⁹⁵ Pfister (1988) II, p. 94; Hartmut Lehmann, 'Frömmigkeitsgeschichtliche Auswirkungen der 'Kleinen Eiszeit', in Wolfgang Schieder (ed.), Volksreligiosität in der modernen Sozialgeschichte (Göttingen, 1986), pp. 31–51.

action with ritualized character psychologically offset the fear of evil persons, a euphemism for witches. 96

The quality of life varied greatly between classes and groups in early modern society and dearth during subsistence crises increased want among the lower classes while others profited from shortages. In essence, the shortage of resources added to economic and social tensions. Social unease arose in the imperial city Augsburg in the wake of the famine years 1570–1 when inflation struck. Contemporary descriptions portray dramatic scenes of unexpected unemployment, the first appearances of disease and increased social tensions; the helpless anger of those whose savings proved insufficient to purchase their 'daily bread' was directed against speculators, who hoarded grain in the hope of driving up prices further. Sources describe animosity against the rich and 'unchristian utterings' against usurers leading to curses and, ultimately, to acts of maleficient magic. 97

As this example demonstrates, existential crises and the fear of the lower classes held grave consequences for the ruling élite, who escaped inflation, indeed profited from it, either directly through speculation or indirectly by using the temporary material want of the lower and middle classes to their advantage. The primary consequence, social polarisation, was matched by a secondary transformation of inter-personal relationships at these times. The use of specific terminology reveals a toughening of social relations, reflected in an accentuated hierarchical and hegemonic ideology characteristic of the early modern state, as well as other social organizations. These tendencies included limited access to guilds and the lower nobility, the construction of ideologically binding norms by religious confessions, the disenfranchisement of oppositional groups, an almost maniacal proliferation of laws, a trend toward absolutist rule and a criminal justice system that applied unprecedented brutality against crimes of violence, property damage and moral infractions, which accounted for over ninety percent of all executions, in addition to crimes involving magic. Never before or since have so many people been legally executed in such a grotesque manner as in the years 1560–1630.98

This new social toughness corresponded to a radical transformation of mentality among the ruling élite independent of nominal confessional allegiance and only indirectly connected to subsistence crises. In crass terms, they departed from an open, vivacious, pleasure-seeking, this-worldly oriented, 'renaissance' mentality, with contact with the popular world of the carnivalesque to seek refuge in dogmatic, confessional, ascetic, other-worldly oriented, religious principles that offered solace in a situation perceived as

⁹⁶ Labouvie (1991); Rummel (1991); Tschaikner (1992).

⁹⁷ Briggs (1989), p. 91.

⁹⁸ Richard van Dülmen, Theater des Schreckens (Munich, 1985); Wolfgang Behringer, 'Mörder, Diebe, Ehebrecher. Verbrechen und Straften in Kurbayern vom 16. bis 18. Jahrhundert', in R. van Dülmen (ed.), Verbrechen, Strafen und soziale Kontrolle (Frankfurt, 1990), pp. 85–132.

precarious. Normally, much breath is spent on the elucidation of opposing confessional tendencies rather than noting just how much the competing religious ideologies had in common. However, clear signs of a mentality transformation are just as apparent in Catholic as in Protestant areas, as is the case in the Jesuit province of Upper Germany, where Peter Canisius excited the population through stern sermons and sensational exorcisms. Witchcraft was a recurrent theme in his sermons, which Canisius accepted along with the theologically problematic issue of weather-magic. After the first persecution of 1563, he wrote:

Everywhere they are punishing witches, who are multiplying remarkably. Their outrages are terrible . . . Never before have people in Germany given themselves over to the devil so completely . . . They send many out of this world with their devilish arts, excite storms and wreak terrible havoc among our countryfolk and other Christians. Nothing seems safe from their horrid wiles and power. 100

The sermons of both Catholic and Protestant preachers called for witchcraft persecutions, thereby reinforcing the peasants in their demands for witch-hunts. Götz von Pölnitz characterized the reaction of the Augsburg élite to the missionary activities of Canisius as follows:

The remarkable increase in reports concerning a mood of penance and ecstatic excitement awakened in the élite testify to an atmosphere of transition. They lie somewhere between the princely exuberance of the near-decadent late-Renaissance and the ascetic rigour of certain Counter-Reformation saints.¹⁰¹

The radical transformation of mentality manifested itself in personal catharses, virtual 'bolt of lightening' conversion-experiences among the nobility and princely dynasties, such as those of Dukes Albert V and William V of Bavaria in the 1570s. Furthermore, the 'Marian state-programme' developed in Catholic regions, offering the image of the Virgin as a counter-pole to that of the witch. The Virgin Mary, immaculate symbol of fertility, stood in stark contrast to the female personification of infertility, the witch. Infertility is meant in the widest sense of the word, for witches were held responsible both for human and agricultural infertility. It is at least worth mentioning the coincidence of the first witch-burnings in the Bishophric of Augsburg and the Duchy of Bavaria with the founding of the princely Marian Congregation. 102

⁹⁹ Josef Engel, 'Von der spätmittelalterlichen respublica christiana zum Mächte-Europa der Neuzeit', in T. Schieder (ed.), *Handbuch der europäischen Geschichte* (Stuttgart, 1971), vol. 3, pp. 1–444, esp. pp. 12–19.

Bernhard Duhr, Die Stellung der Jesuiten in den deutschen Hexenprozessen (Cologne, 1900) p. 23

Götz Frhr. von Pölnitz, 'Petrus Canisius und das Bistum Augsburg', Zeitschrift für bayerische Landeskunde (=ZBLG) 18 (1955), 352-94, quote 382.

¹⁰² Benno Hubensteiner, Vom Geist des Barock. Kultur und Frömmigkeit im alten Bayern (Munich, 1978), pp. 58-65, 108-23; Friedrich Zöpfl, 'Hexenwahn und Hexenverfolgung in Dillingen', ZBLG 27 (1964), 235-45; Sigmund Riezler, Geschichte der Hexenprozesse in Bayern (Stuttgart, 1896).

In the wake of the 'second Reformation' of Calvinism and Tridentine Catholic reform, a climate of gloom set in that accurately reflected deteriorating living conditions. The dramatic transformation of attitudes transcended confessional allegiance, replacing the optimistic mood of the first half-century with pessimism. Hard times hardened social structures, even reaching into iconographic representations after 1560. Preachers inculcated an accentuated consciousness of sin in the ruling élite and directed them to attribute the origins of decline to the wrath of God, providing fertile ground for what Gerhard Oestreich describes as a comprehensive social disciplining, as well as mystic and apocalyptic visions; free from the worries of the every-day struggle for limited resources, the élite was circumspectly dragged along with the tide of change. Indeed, it was the élite who first felt the screws of selfdiscipline, work-discipline, ascetic manners, constant spiritual exercises and moral rigidity at princely courts after 1560. Norbert Elias has pointed out the manner in which the forced behavioural changes promoted fear. 103 The depressingly sober seriousness with which these changes of habit were enforced, a 'remodelling of affectation', reached into the most private of personal affairs. Duke William V (1579-97), who conducted the first Bavarian witch-hunt, lived in strict accord with a daily schedule of prayer and spiritual exercises, wore a penitential hairshirt and engaged in self-flagellation. His successors, Maximilian (1598-1651) and Ferdinand Maria (1657-79) signed devotional blood pacts to the Virgin Mary at Altötting; they have been interpreted as the anti-thesis of the witch's pact with the devil. 104

Historians now generally assume that the radicalization of attitudes toward witches took place after 1560, as mirrored in criminal legislation against witchcraft in England, Scotland, and Germany, the synchronicity of renewed witch-hunting in France and Germany around 1570, or the simultaneous climax of persecutions in Scotland, the Rhineland and Bavaria around 1590. 105 However, the complex interaction of social developments, times of crises, traditional modes of behaviour and opposing ideological interpretations makes it impossible to define the activities of élites as a simple reaction to popular demand for persecution. Here we arrive at a juncture that seriously challenges theories regarding the existence of 'collective mentalities' in the early modern era. 106 Records of criminal interrogations reveal an extraordinary range of perceptions even among the common people, one equalled in expressions recorded by literate members of society. This range of perceptions surrounding the issue of witchcraft comes more often to the fore than with other themes. The question of the existence of witches, the physical reality of their deeds, the judicial possibility and political desirability of their persecution was deb-

¹⁰³ Norbert Elias, Über den Prozess der Zivilisation. Soziogenetische und psychogenetische Untersuchungen (Frankfurt, 1978), vol. 1, p. 181.

¹⁰⁴ Hubensteiner (1978).

Behringer, Hexen und Hexenprozesse (1988), pp. 50-67, 79.

¹⁰⁶ Stuart Clark, 'French Historians and Early Modern Popular Culture', *Past and Present* 100 (1983), 62–99.

ated like hardly any other problem of the age. Behind the debate were divergent Weltanschauungen transcending the issue of witchcraft. In Catholic Germany, an ideologically motivated group supported persecutions with the opinion that both people and rulers risked the wrath of God, if they failed to uproot the evil and 'radically' weed out witches. Justifying their policy of extermination with 'correct enthusiasm for the honour of God' for which no sacrifice was too great, the radically penitential and attoning spirit earned them and their followers the name 'zealots'. Pope Urban VIII (1623-44) condescendingly referred to this group as the Zelanti. 107 The 'zealots' viewed witchcraft as no isolated occurence. For them, its elimination formed part of a domestic policy aimed at establishing a hierarchical, other-worldly, Catholic, model state, a political theory set out by Adam Contzen in his Methodus civilis doctrinae seu Abissini regis historia. 108 Other aspects of his programme included an end to fornication, the replacement of frivolities like gambling and dancing with spiritual exercises (i.e. Corpus Christi processions, ten hour prayers, etc.), the repression of popular culture and its replacement with a literate 'high culture' based on biblical authority. The total programme of internal reform accompanied foreign policies of missionary conversion and the destruction of confessional opponents with the final goal to contribute 'ad maiorem dei gloriam' under the logo 'zelus dei'. Fear of heavenly retribution provided the explicit motivation behind the desire for rigid measures. 109

The rapid advance of a gloomy world view after 1560, intensified after the 1580s—'pivotal years, if ever there were any' according to Robert Mandrou¹¹⁰—depicts a transformation of mentality which indicates, at least partially, a break with the past. This factor ultimately explains the sudden decision of ruling élites in some areas to give in to popular demands for persecutions. The traditional rejection of popular belief in weather-magic, also widespread among theologians, was temporarily rolled back along a broad front. It was the correspondence of interests, though for different reasons, between the upper and lower echelons of society that temporarily enabled the great persecutions around 1600. Where interests corresponded, as in some ecclesiastical territories of the Holy Roman Empire, or where authorities were too weak to maintain a state monopoly over violence, as in some Swiss cantons, major persecutions became possible. Religious and political factors surely played a role in the question of whether or not a hunt took place, but the fundamental forces behind persecutions have to be sought elsewhere.

¹⁰⁷ Robert Bireley, Maximilian von Bayern, Adam Contzen S. J. und die Gegenreformation in Deutschland (Göttingen, 1975), pp. 62, 143, 152–156.

¹⁰⁸ A. Contzen, Methodus civilis . . . (Cologne, 1628).

¹⁰⁹ Behringer (1987), 229 f.

Robert Mandrou, 'Le baroque européen: mentalité pathéthique et revolution sociale', *Annales* 15 (1960), 898-914.

V

As numerous discussions have demonstrated since my first article on the subject appeared, every account of the connections between social history and witchcraft persecutions has given rise to misconceptions because a variety of other factors contributed to their immediate outbreak. And the potential for misconception is actually enhanced rather than reduced by the addition of exogenous climatic factors to the discussion. One frequent critique holds that a mechanical connection between inflation and persecution cannot be substantiated. However, this critique addresses a thesis which has never been suggested. Eva Gillies demonstrates the bankruptcy of the deterministic connection between crises and witch-hunts in her introduction to the German edition of Evans-Pritchard's Witchcraft, Oracles and Magic among the Azande by posing the anachronistic question of why a major social transformation like industrialization did not lead to witchcraft persecutions.

The European witchcraft persecutions are tied to a specific epoch, the early modern period, and characterized by élite abhorance of magic and its diabolic origins. 114 In a certain sense, to use Claudia Honegger's twist on Max Weber, they were 'the other side of western rationalization', inseparable from the central components of European modernization, such as the 'civilizing process', state building, criminalization, and secularization. 115 These general trends, to include the toughening of social relationships and a depressing world view, are nothing more than an outline for the geography and chronology of witchcraft persecutions. The same holds for the judicial framework, mentioned briefly. On the other hand, strict rejection of witch-burnings by the authorities clarifies some of the regional variations in the intensity of persecutions through prohibition. This explains the absence of executions in the reformed Palatine Electorate, the fact that larger imperial cities like Frankfurt, Nuremberg, and Augsburg rejected executions, or that important territories like the Duchies of Wurttemberg and Bavaria decided after complex debate against any further persecutions. 116 Élite refusal to authoritize legal executions of witches pre-

Wolfgang Behringer, 'Sozialgeschichte und Hexenverfolgung', in Dieter R. Bauer and Sönke Lorenz (eds), *Hexenverfolgung in Südwestdeutschland. Neuere Forschungen* (Würzburg, 1995); NB: this paper was originally presented in 1986!

Presentation to an international conference in Budapest, 1988: Gabor Klaniczay and Eva Pocs (eds.), Witch Beliefs and Witch-hunting in Central and Eastern Europe (Budapest, 1994), conference report.

¹¹³ Edgar Évan Evans-Pritchard, Hexerei, Orakel und Magie bei den Zande (Frankfurt, 1978), pp. 7-35.

Johannes Burkhardt, 'Frühe Neuzeit', in R. van Dülmen, Fischer Lexikon Geschichte (Frankfurt, 1990), p. 368.

¹¹⁵ Claudia Honegger, 'Die Hexen der Neuzeit. Studien zur anderen Seite der okzidentalen Rationalisierung', In Honegger (1978), pp. 21–151.

¹¹⁶ Bernd Thieser, Die Oberpfalz im Zusammenhang des Hexenprozessgeschehens im Süddeutschen Raum während des 16. und 17. Jahrhunderts (Bayreuth, 1987); Walter Eschenröder, Hexenwahn und Hexenprozess in Frankfurt am Main, PhD Dissertation (Frankfurt, 1932); Hartmut Heinrich Kunstmann, Zauberwahn und Hexenprozess in der Reichsstadt Nürnberg (Nuremberg, 1970); Behringer (1987), pp. 43–9, 105–9, 156–9, 224–332; Midelfort (1972), pp. 36–42, 121–7, 154–8.

vented them to a certain, though not absolute degree, as one interesting example connected to the question of the origins of witchcraft persecutions illustrates. In the Austrian Vorarlberg region, the population called for witchhunts, especially in crisis-years. The administration in Innsbruck suppressed their demands. In the years 1649-50, the valley of Prättigau managed to purchase its independence from the Habsburgs and joined the Swiss canton Graubünden. The inhabitants took the judicial system into their own hands and judges were elected and controlled directly rather than by co-option. Terrible persecutions began immediately thereafter, venting peasant demands pent-up for decades. This period has gone down in the canton's history as the 'groos Häxatöödi', in quaint Swiss dialect quite literally 'the great witchkilling'. Finally the 'guilty' parties could be punished for threatening the crops and thereby the livelihood of the peasants. Demonological theory, Roman law, élite attempts at acculturation or base motives, greed, etc. played no decisive role in these persecutions. Specifically, what we are dealing with here is an archaic ritual to drive out evil. 117

It is important to recognize the social background to the major persecutions within a specific epoch. Authorities certainly bear political responsibility for witch-hunts but, as recent research indicates, hardly in the sense that they provided the impulse for intiating persecutions. This is true not only in individual cases, but for major persecutions as well, often preceded by massive pressure from the population bordering on open rebellion against the established order. The general explanatory potential of 'fear stemming from social transformation' offers a point of access to popular motivations, but requires more precise clarification. It is important to note that in areas with major persecutions, social want brought on by the structure of agrarian societies was a greater problem than social transformation. England and Holland no longer suffered from this problem by the end of the sixteenth century, but in Central Europe demographic development was pushed to the limit, as had previously occurred at the beginning of the fourteenth century. Shortages and attendant social differentiation marked this society and rendered it highly susceptible to climatic fluctuations in temperature and precipitation. 118 Crop failures resulting from inclement weather led to inflation, malnutrition, and hunger. Increased susceptibility to disease or even major epidemics were the consequences. Such climatically induced crop failures occured with greater frequency after 1560 during the period climatic historians refer to as the 'Little Ice Age', and periods of inflation dragged on. We can identify enough correspondence between cyclic agrarian crises and conjunctures of witchcraft persecutions that it is possible, without doubt, to speak of a fundamental social-historical correlation. The major persecutions were rooted in years marked by agrarian crises. The connection of persecution with agrarian crisis

¹¹⁷ Tschaikner (1992), 227 ff.

George M. Foster, 'Peasant Society and the Image of Limited Good', American Anthropologist 67 (1965), 293–315.

explains the synchronicity of witch-hunts in geographically distant regions. Furthermore, it explains the publication dates of demonological literature and territorial decrees against witchcraft. The nexus of causality between agrarian crisis and persecutions is based upon four supports. First, witches were held directly responsible for weather damage and crop failures, despite the official teachings of theologians. This explains the vehemence of discussion around the issue of weather-magic. Second, illness and death multiplied in the wake of 'Typ Ancien' crop failures, especially among children, who were also held accountable as witches. Third, latent conflicts emerged virulently because shortages of resources during agrarian crises increased social tensions, adding a psychological dimension that needed to be resolved. Fourth, witch-trials provided 'positive' feedback, leading to further accusations in the region. In an attempt to limit potential misunderstandings, let me again emphasize that the increased execution of witches after 1560, and especially after 1585, was not simply a result of agrarian crises in connection with the 'Little Ice Age'. A second decisive factor, the glum depressive world view shared by élites, also corresponded to the toughening of living conditions among the lower classes during the 'Little Ice Age'. Henry Kamen has characterized some of the conditions of this 'Iron Century' between 1560 and 1660 and Theodore Rabb has clearly demonstrated that the theme of re-establishing stable conditions dominated the seventeenth century after the unrest around the year 1600. 119 Hartmut Lehman has recently argued that the general phenomenon of witchcraft persecutions, and not just their limitation, should be viewed in the context of the struggle to re-establish order. 120 In a certain sense, it might even be useful to view witchcraft persecutions as a 'social drama', as interpreted by Victor Turner, signified by a breach of norms, an ensuing crisis, its resolution and reintegration, though one need consider that the authorities were, at least in part, instrumentalized by their subjects. ¹²¹ For, in the complex framework of interaction between communities and the authorities, witchcraft trials were an extraordinary mechanism for resolving crises. To that degree, despite the quickly recognized risk that they could become dysfunctional, the participants often initially viewed persecutions as functional rituals.

We established initially that the European witchcraft persecutions can only be understood within a specific cultural (legal, intellectual, institutional) framework common to this part of the world, that is, 'Latin Christendom'. Now we need to ask why certain regions of Europe proved particularly susceptible to persecutions at certain times. The answer lies in a fundamental correlation to agrarian crises. These shortages varied in intensity according to regional distribution of wealth, as well as structures of trade and com-

¹¹⁹ Kamen (1971); Theodore K. Rabb, *The Struggle for Stability in Early Modern Europe* (New York, 1975).

Hartmut Lehmann, 'The Persecution of Witches as Restoration of Order: The Case of Germany, 1590s-1650s', Central European History 21 (1988), 107-21.

¹²¹ Victor Turner, Das Ritual. Struktur und Anti-Struktur (Frankfurt, 1989), p. 200.

munication. Centres of international trade like Holland and England were apparently little affected. 122 Similarly, lands on the thinly settled periphery (Scandanavia, Eastern Europe, the Iberian peninsula, European colonies) were also little affected, since the possibility of diffusion in open spaces served to decrease pressure. The semi-peripheral areas with their relatively high population density were especially hard hit by witchcraft persecutions because their agricultural products, like grain and wine, were highly susceptible to meteorological disasters. This is as true of Scotland as for parts of France, Switzerland, and Germany, while the agrarian economy of Southern Europe was spared climatic deterioration as a benefit of its latitude. Behind the major European witch-hunts, we can detect three archaic factors affecting every agrarian society, but particularly so in Central Europe during the early modern era. The exact conditions were quite specific, in effect, that rulers and subjects believed commonly in the existence of 'inner enemies' and sought their eradication, each for their own reasons. The authorities fought for religious salvation, while subjects harboured more material interests. And it was their interests that called the tune of persecution. The campaign against witches might be viewed as a metaphor. Its complex origins in climatic history, social history and the history of mentalities, today understood as its major causes, were, for contemporaries, reducible to three simple concepts: Weather, Hunger, and Fear.

Translated by David Lederer

¹²² Immanuel Wallerstein, The Modern World-System. Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century (New York, 1974).