

Margaret C. Jacob

The crisis of the European mind: Hazard revisited (pp. 251-271)

in: *Politics and Culture in Early Modern Europe. Essays in Honor of H. G. Koenigsberger*

edited by Phyllis S. Mack and Margaret C. Jacob

Cambridge University Press 1987, 2002

p. 251

It is now fifty years since the brilliant French historian, Paul Hazard, published in 1935 his classic work, *La crise de la conscience europeenne 1680-1715* (Paris, 1935). In it he propounded a thesis that has admirably withstood the passage of time and been capable of absorbing many, but by no means all, of the historical studies appearing since the Second World War. Briefly stated, Hazard and all subsequent historians have discerned at the end of the seventeenth and the beginning of the eighteenth centuries a crisis within the European mind, a moment of profound uncertainty, *une zone incertaine, malaisee*. Out of that crisis emerged a new understanding of people and nature, of government, of religion in society which, as he saw it, prepared the way for the French Revolution. At that moment emerged a *mentalite* discernibly enlightened and modern, one with which Hazard and his generation of liberal French intellectuals could still identify.

Hazard identified one of those extraordinary cultural shifts - simultaneously the decline of traditional religious culture and the rise of a culture discernibly secular - which have so fascinated cultural historians. Helli Koenigsberger speculated about one such transformation within sixteenth-century Venetian culture (1). Here I seek to explore the nature of Hazard's crisis, accepting his model of its being a critical turning point in European culture but offering a new reading of its origins and resolution.

In exploring *la crise* I shall return frequently to Hazard, to contrast his views with what contemporary historians would now describe as the sources of that crisis, its resolution, and its implications for eighteenth-century thought and society. There can be no higher tribute to an historian of any generation than to acknowledge that he or she set the

p. 252

terms of an historical discussion. We simply cannot understand the extraordinary transformation that occurred within European thought in those decades without invoking the concept of *la crise* as first identified by Hazard. We may assign different causes to it, and differ with him as to the nature of the culture it produced, but few deny the existence of a crisis which affected the educated classes in every European society with the possible exception of Russia and Spain, where it would seem the process out of which the Enlightenment was born was considerably delayed.

Central to Hazard's understanding of the crisis were the apparently contradictory impulses commonplace in the period. Within one mind of the late seventeenth-century it is possible to find both Calvinism and rationalism, both science and profound religiosity, both Christianity and heresy. The contradictions - more apparent than real - are present in the thought of Isaac Newton, scientist and alchemist, as they are manifest among many of his lesser-known followers. They can be found in the minds of Continental thinkers as diverse as the French

refugee scholar and first encyclopedist, Pierre Bayle, or in the polemical writings of that Dutch opponent of magic and superstition, Balthazar Bekker. In all three their cultural postures were inextricably bound up with an understanding of what constituted safety and order in the polity. In diverse ways their lives had been touched by revolution or by the fear of the persecutions and injustices they associated with monarchical absolutism.

Hazard, of course, rightly saw that politics, or rather, given his resolutely idealist approach to history, political theory, was central to the crisis as he defined it. For him its central feature was the shift from a civilization founded upon *duty*, to one founded upon rights. In the realm of theory the formula works well enough. The retreat from any version of the theory of the divine right of kings was well underway by the 1690s. In its place we see an increasing emphasis upon natural law, contract theory, classical republicanism, even, although very rarely, utopian communism. Yet in characterizing the culture produced by this crisis, Hazard's formula tends to exaggerate the democratic implications of this transformation. Historians now see the crisis, in the first instance, as leading to the consolidation of a high European culture self-consciously distinct from popular culture and hostile to it.

This crisis occurred first among the literate classes, the readers and buyers of books, who in the course of the seventeenth-century increasingly distinguished their values from the superstitions (as they saw them) of the non-literate as well as from the hegemony in intellectual and religious matters enjoyed by the clergy, particularly in Catholic

p. 253

Countries (2). Of course, clergymen did also frequently play a major role in resolving this crisis. When they did, however, they addressed themselves to the interests and values of the literate and secular laity. Predictably the greatest clerical participation in this early stage of the Enlightenment occurred largely in an Erastian and Protestant context. Not least, the high culture that emerged from this crisis was, as we now know, fundamentally dependent upon the new science, both of Descartes and Newton, on a body of learning inaccessible to the uneducated.

Yet if the new science, when combined with the needs and interests of the educated laity, led to a resolution of the crisis - as well as also actually provoking it - we now see that the most fundamental cause of the crisis was directly political. Without the rise of French absolutism, coupled with the revolutionary upheaval in mid seventeenth-century England, and its important legacy for Continental opponents of absolutism, the crisis of the European mind would have been largely and simply a matter of shifting religious beliefs coupled with anti-clericalism. Its impact would never have been so general, encompassing every aspect of intellectual life, as to permit Hazard to relate it to the French Revolution. The crisis of the late seventeenth-century brought the intellectual legacy of the first of the great modern revolutions into the mainstream of Continental thought where it merged with indigenous traditions of anti-clericalism, philosophical heresy, and anti-absolutism.

To anchor the origins of *la crise* in the political experience of the English revolution and the European-wide fear of absolutism, to proclaim, therefore, the centrality of politics and ideology is to depart significantly from the vision of Hazard. His method, so rooted in idealism and *Ideengeschichte*, rendered mental processes into the essence of historical change, those things which, in his words 'commandent la vie' and take precedence over 'les forces materielles' (3). Many contemporary historians no longer admit of such a discrete separation

of human activities; the record of *la vie materielle* survives in the language of the past and language mediates between the material order, and the order of ideas. The origins, as well as the resolution of *la crise*, grew out of opposition to the power of kings and churches, courts and their bureaucracies, out of an earlier, political crisis of the mid seventeenth-century which manifested itself in revolutions and rebellions throughout the European state-system. Only the English Revolution of the mid-century, however,

p. 254

produced a body of political, religious and scientific thought so rich and complex that once discovered by the European opponents of absolutism it laid the foundations for a new synthesis, for the phenomenon we describe as the Enlightenment. Yet in their voyage across the Channel the political philosophies and new science brought forth by the English Revolution were transformed, sometimes beyond all recognition, and the resulting Enlightenment was more truly European, or Scottish, or French, even Dutch and German, than it was English. The deeper *la crise* the greater the tendency to radicalize ideas that may have been revolutionary in their origin but which became strangely enervated or even forgotten in England, in their country of origin (4).

Three traditions of political discourse emerged from the English Revolution, and by the late seventeenth-century all were antipathetic to Continental absolutism. The English Revolution, that social and political upheaval which began in 1640 and was only finally resolved in 1688-9, offered profoundly new and compelling justifications for the existence of the state just as it redefined who would have access to its power. In *Leviathan* (1651) Hobbes placed the origin of government among men grown weary of incessant internecine warfare, of endless competition 'that ceaseth only in the grave'. In their exhaustion they would seek peace by making a contract among themselves to accept a sovereign whose power would be absolute within the limits of certain natural laws. Although in fact seeking a new and *de facto* foundation for the absolute state, Hobbes appeared to the next generation of his interpreters, particularly on the Continent, not as a supporter of absolutism, but rather as a brilliant theorist of government by contract and as a materialist. Hobbes took his materialism, his characterization of human beings as solely pieces of matter in motion, creatures driven by passions and interests, directly from the new mechanical science. He had little use for an independent clergy, those 'bugbears', he called them, who prick the sides of their princes. Hobbes (d. 1679) wrote in response to revolutionary upheaval and he was a royalist. But where we find Hobbism in European thought after 1680 it will be used largely to mock the clergy or to lay the materialist foundations of government by contract, or simply to assert a more naturalistic definition of human needs and passions.

But the political legacy of the English Revolution was not confined to Hobbes. English republicans of the 1690s would look back to the

p. 255

Commonwealth of the 1650s and the theories of James Harrington (*Oceana*, 1656) to argue for republican principles of government as the only alternative to court-centered and oligarchic government. In a Continental setting such republican arguments proved particularly appealing against the danger of French absolutism. In the early eighteenth-century the English freethinkers (as they called themselves) joined ideological forces in The Netherlands with the victims and opponents of French absolutism, the Huguenot refugees, as well as with the

Dutch supporters of the English alliance (5). These freethinking agents of the Whig party could trace their republican ideals back to a time when government in England had been established as the result of regicide (the parliamentary execution of Charles I in 1649). That kind of revolutionary heritage gave one a certain *cachet* in the republic of letters where millenarians as well as republicans dreamt about king-killing. The content of their fantasies were remarkably similar despite their profoundly different explanations of who ultimately justified the swinging of the axe.

The last of the three legacies drawn from the English Revolution is more difficult to trace on the European Continent. We may describe it as levelling, or democratic, and in the case of Winstanley, communistic. Its transmission to the New World, to the colonies in New England as well as to the Caribbean has now been documented (6), but its Continental European impact is as yet difficult to establish. The communistic writings of Winstanley were in the library of the Quaker refugee, Benjamin Furly of Rotterdam, from at least the 1690s, if not earlier (7). With some justification modern British socialists have invoked the legacy of the Levellers and Diggers; indeed in the 1790s Welsh radicals were reading Winstanley (8) while in the same decade the British supporters of the French Revolution were labelled 'levellers'. Yet despite the attempts of the original Levellers to find converts at Calais during the 1650s, and despite the occasionally levelling sentiments found a generation later in the writings of that Whig agent and pantheist, John Toland - an English radical with a vast Continental reputation if not a following - *la crise* and its resolution apparently owed little to English ideas we may now

p. 256

rightly describe as democratic and communistic. Continental spectatorial literature from this early period, for example, *Le Censeur* emanating from The Hague and quite possibly by Rousset de Missy, a follower of Toland, attacked private property, while the 1715 free translation into French of More's *Utopia* (by Gueudeville) preserved *in toto* the attack on private property (9). Yet the radically democratic response to *la crise* is a mere whimper by comparison to the nearly universal attack upon the beliefs, values, and educability of *le peuple*. In that sense Hazard's assumption that there is an easily established link between the resolution of *la crise* and the origins of the French Revolution - in all but its earliest phase - requires considerable qualification.

To illustrate further the dangers awaiting the historian who assumes a direct link between *la crise* and the late eighteenth-century revolutions we need only investigate the career of John Locke (d. 1704) and his political writings. From any perspective Locke is central to the resolution of the constitutional crisis at the heart of the English Revolution. Yet his *Two Treatises of Government* published in 1689 was actually, as we now know, written before the Revolution of 1688, and therefore was never intended, at its origin, to justify it (10). In that sense the post-1689 and largely Continental and American reading of Locke - in Europe almost always in French translation - missed his context and in some cases distorted his actual meaning. In 1935 Hazard saw Locke as having offered a resolution of *la crise*, and with regard to Lockean epistemology Hazard was undoubtedly correct. He could not have known that Locke's major political treatise was written in the early 1680s when he was deeply involved in Whig party circles, conspiratorial and therefore treasonable in their opposition to Stuart absolutism (11).

Not only is Locke's treatise more a symptom of *la crise* than an attempt to offer a magisterial resolution of it, it also purposefully eschewed the republican tradition of the earlier revolution just as it repudiated Hobbist materialism with its democratic implications. In his 'appeal to heaven' for a 'dissolution of government' Locke sought a revolution led by magistrates - if the *Two Treatises* may be read as a call to action - and

p. 257

it was intended to bring about a change of government initiated by the landed and propertied classes to secure legally their privileges and interests. His political thought is probably much more closely related to the writings of civil law theorists than it is to that body of mid-century political theory that provided social and historical justifications for revolution (12). Locke would have political transformations without social upheaval; a rearrangement of offices and responsibilities among the responsible opponents of tyranny, in a Continental sense among the propertied members of the second and third estates intent upon guaranteeing their right to engage in market transactions and to protect their property and liberty. The resolution of the English Revolution after 1660 depended upon political and intellectual leadership that feared above all else a 'turning of the world upside down' such as had nearly occurred in the 1650s when the lower classes threatened the very foundation of property rights and hierarchical control over the standing army (13). In the first instance Locke belongs to that post-1660 reaction.

A reading of John Locke which could not take into account what we now know about his English context permitted Hazard to relate him too readily to the French Revolution. The revised account of Locke's influence on Continental radicalism is somewhat more complicated. The French Huguenots in the Dutch Republic seized upon Locke and in the process transformed him. David Mazel's French translation of the *Two Treatises* published in 1691, but reprinted in a multitude of editions, simply left out the first treatise, rearranged the second, and at every opportunity attempted to radicalize the text. The French Locke is more overtly anti-absolutist, given to forming opposition parties and interested in a wider system of representation than is the English Locke. Yet even after these adumbrations the French Huguenots and their friends would not leave the text alone, nor would they permit Locke's treatise to pass as a simple vindication of parliamentary government. In 1755 that now aged follower of Toland's pantheism, Jean Rousset de Missy (b. 1686), brought out in Amsterdam yet another edition of the French text of the *Two Treatises*, and in a new preface explained to his European audience that Locke had actually been a republican and an opponent of all forms of oligarchic corruption. Indeed Rousset asserted his relevance to the Dutch Republic, while painting him as a supporter of natural law theory similar to that argued in the 1740s by Burlamaqui. A fellow freemason and Amsterdam publisher, John Schreuder, published that 1755 edition

p. 258

for Rousset, and it was the most widely circulated version of Mazel's translation on the Continent during the second half of the eighteenth-century (14).

Yet the legacy of the English Revolution would have remained a largely British and American matter had it not been for the aggressive policies initiated in the 1680s by Louis XIV and his government. All the cultural factors Hazard identified as precipitating the crisis - the new familiarity with the religions and peoples of the world, the increasing movement of books as

well as travellers within Europe, the new biblical criticism, both Catholic and Protestant in origin - came together to provoke a massive repudiation of long-cherished beliefs precisely because French absolutism threatened to destabilize the whole of Western Europe.

The revocation of the Edict of Nantes (1685) and the persecution of French Protestants revived in the minds of contemporaries the horrors of the late sixteenth-century wars of religion, while French territorial expansionism threatened the survival of the Low Countries, north and south, as well as the territorial integrity of various German principalities. The return of absolutist policies in England under James II (1685-8) made political crisis universal in Western Europe. By the late 1680s we can discern a steady stream of anti-absolutist propaganda coming from the French language presses in the Dutch Republic and various German cities, especially Cologne. These frequently anonymous tracts denounced the murderous tyranny of Louis XIV, proclaimed the virtues of the surviving European republics and darkly hinted at the right of subjects to overthrow their tyrants (15). Some of this literature was in fact millenarian in origin and represented, particularly in the writings of the Huguenot refugee, Pierre Jurieu, a revival of Calvinist militancy of a late sixteenth-century variety. This religiosity determined the character of the earliest stage of the crisis: fearful of religious persecution, militantly Protestant with theocratic elements, internationally linked through the Huguenot coteries, with their Anglican sympathizers, and finding its outlet in the exiled French language press. In the first instance the republic of letters was born out of that older international, Dutch, Swiss, German, English, and French provincial Protestant culture; urban, literate, professional and clerical, ever hostile to the intolerance of absolutism in either its French or Spanish forms (16). But the new literary

p. 259

republic quickly transcended the parochialism and the piety of that older religious consensus, and produced a cosmopolitan culture more enlightened than it was Protestant.

The transformation within international Protestant culture which began in the 1680s is dramatically depicted in the social gatherings at the Rotterdam home of the Quaker refugee, Benjamin Furly. His father had been a Quaker republican of the previous generation and lord mayor of Colchester in Cromwell's time. In the 1660s the family left England because of religious and political persecution. In the late 1680s John Locke, hounded by clerical spies and fearful of his own arrest after so many of his Whig associates had perished, crossed the Channel and took refuge in Furly's home. Together they freely discussed politics and philosophy amid Furly's superb library which contained the writings of almost every major early modern political theorist, including rare works by Giordano Bruno and various clandestine manuscripts about Spinoza. They were joined by itinerant visitors from Germany, medical reformers like the van Helmonts, and eventually by newly arrived Huguenot refugees (17). With Furly's inner circle or his library we may rightly associate some of the most important works of the early Enlightenment: Locke's *Two Treatises*, his *Essay on Toleration* (1690), Toland's *Christianity not Mystical* (1696), and not least, the infamous *Traite des trois imposteurs*. That impious clandestine manuscript labelled Jesus, Moses and Mohammed impostors, and it was extrapolated out of a manuscript text that the French Huguenot refugees, Charles Levier and Rousset de Missy, got in 1711 from Furly's library (18).

How right Hazard was to see the Dutch Republic as the *entrepot* wherein *la crise* first matured and found resolution. His Francophile characterization of The Netherlands was, however, based largely upon its geography and the strength of its French language press; it happened to

be the place where the migration stopped and the English freethinkers first encountered the French Huguenot refugees. But the Republic was, as we now know, more than that. It was also the urban, commercial and diplomatic center of Western commercial capitalism in the late seventeenth-century. Its small but powerful elite commonly spoke and read French as well as Dutch, and the first stirrings of the Enlightenment on the Continent, the introduction of the new science, first in its Cartesian and then in its Newtonian forms; the violent pamphlet warfare against tyranny; the growth of spinozism and free thought; and the emergence of a periodical and spectatorial press were Dutch phenomena

p. 260

before they were European ones. We need to know more about the early Enlightenment in the Dutch Republic, but we now know enough to say that here we may find some of the first European intellectuals to come to terms with the moral and intellectual implications of commercial capitalism. That economic and social reality, more than any other factor, would seem to account for the particularly radical turn that the Enlightenment took there in its early years. The Huguenot refugees and their friends encountered what they came to see as republican decadence, and some of them, such as Rousset, privately responded by repudiating the Calvinism of the Dutch elite in all of its forms, and by using ideas developed during the English revolution to foment another within the Republic itself (19).

Most Protestants affected by *la crise* did not adopt such a radical direction. The key to the nature of *la crise* as it affected the mainstream of the Protestant *internationale* seems to lie in what may be described as Calvinist rationalism. That paradoxical phrase captures the apparent contradictions, the ambiguities, common to such disparate seekers after new truths as the Anglican scientist, Isaac Newton, the Dutch Calvinist minister, Balthasar Bekker, and the Huguenot journalist, Pierre Bayle.

Calvinist rationalism permitted them to live in two worlds, to have their faith as well as their scientific enquiry, indeed to hold the tension of the crisis within their own minds without succumbing to intellectual madness, that is, to either atheism or enthusiasm. Their brand of Protestantism derived historically from Calvin, and at its core was an extreme monotheism, a God for whom the law of universal gravitation according to Newton is merely the divine will operating on the universe. Bekker described this Protestantism in his famous and brilliant treatise attacking magic as a true 'monotheism' (20). Such a God could be worshipped anywhere, in one's alchemical laboratory in Cambridge, or in the workroom of your publisher where you strove, as did the refugee Pierre Bayle, to keep body and soul together by compiling a universal dictionary. Exposure to such a God literally made salvation possible especially if you were a defrocked Benedictine monk living in Amsterdam where prostitution, and other temptations of a more cerebral sort,

p. 261

were tolerated. The spectatorial journalist and former monk, Nicolas Gueudeville, was saved from *libertinage*, as he recalled, only by the intervention of a devout Calvinist (21). You did not necessarily have to devote your life to such a God; in some cases it was sufficient just to know, as did Gueudeville, that he and his followers maintained an orderly existence.

With this God in your mind you could indulge your scepticism as did Bayle in his *Dictionnaire* (1697), or you could give assistance to younger, less pious, refugees. These young men's coffee-house flirtations with Spinozism - if Bayle knew about them - could not

obscure their Protestantism and they, in turn, long after they had begun trafficking in the forbidden wares of atheism and clandestine manuscripts, would honor Bayle as their patriarch. And the possession of such a heady theism, when reconciled to Cartesianism, made a Calvinist minister like Bekker despise his fellow clerics who continued to use their God to obfuscate the power of reason. It is not accidental that he dedicated all his treatises either to the *burgermeesters* or *raden* of Amsterdam, or to professors of mathematics, lawyers, and doctors. Their common sense and learning, he believed, distinguished them from the masses and the clergy who court the lower orders out of a compatible and comparable ignorance. Bekker compiled a massive, documented assault on the paganism of the masses, at home and abroad. Using the evidence of religious practices from the travel literature, he denounced *tovery en spokery* - witchery and spookery. Bekker's purpose, as he put it in *De Betoverde Weereld* (*The World Bewitched*, 1691) was 'to banish the devil from the world and to bind him in hell so that the king Jesus may rule more freely on earth' (22).

Such a ferocious monotheism was the only creed capable of destroying Catholicism, both its priests and its doctrines. Newton's anti-Catholicism permeated his life as well as his natural philosophy; among other factors it made possible his rejection of scholasticism. Bayle's made him into an anti-cleric with a particular dislike for the pretensions of his own credal overseers, and Bekker wrote against the intervention of devils because he knew that the papist church 'is the kingdom of the devil' (23). Incidentally that overt anti-Catholicism was carefully removed by Bekker from his French translation, *Le monde enchante* (1694). This may have led Hazard and subsequent commentators to overstate his rationalism at the expense of his extreme Calvinism. What is central to the Protestant crisis is the *melange*, the interplay, indeed the fusion, of these only apparently contradictory impulses.

p. 262

Among these Calvinist rationalists only Bayle escaped the historical logic of his position; he alone eschewed millenarianism. In so doing he illustrates the wisdom to be extracted from a direct personal experience of persecution at the hands of absolutists and theocrats alike. Predictably, the absence of overt millenarianism in Bayle is linked to his anti-clericalism. Bayle was a Calvinist who took human history seriously because he feared that clergymen and state bureaucracies were to be the sole beneficiaries of the wars that must precede the apocalypse. Unknown in Hazard's time, Newton's millenarianism, so carefully buried in voluminous manuscript treatises, was his birthright as a true English Protestant who hated the Laudian pretension of the high church just as much as he feared the heresies of the vulgar (24). Bekker's millenarianism was probably missed because it lay buried in a Dutch treatise on the prophecy of Daniel which he wrote in the spring of 1688 when the outfitting of the Dutch fleet (which was about to invade England) was plainly visible in the harbors. He knew at that moment that the French king would someday be smitten by the hand of God, just as he knew 'that natural science (*Natuurkunde*) permits us to know more the earth than the heaven ... while the prophets teach us about the Messiah' (25). Such a God permits his followers to know what they choose to know with an extraordinary certainty.

It is not wrong to emphasize the rationalism in these various intellectual postures provided we permit the fideism its rightful place. Just because Newton was an alchemist and a millenarian, Bekker also a millenarian, and Bayle, a fideist, does not justify our removing them from the early Enlightenment. Rather these facts - all the result of modern scholarship - require that we take the concept of *la crise* more seriously than ever; it also means that we must mold our

definitions of the Enlightenment to fit the participants as we now see them. In the eighteenth-century reforming aristocrats could be pantheists, freemasons could be empiricists while worshipping at their secret rituals, and radical democrats and scientists like Priestley ²⁶ could be millenarians because the categories in their minds had been inherited from the Protestant version of Christianity as transformed by the seventeenth-century revolutions, both political and intellectual, against absolutism.

p. 263

SCIENCE AND LA CRISE

The new element that coincided with those revolutions was science, in particular, the new mechanical philosophy. Hazard saw its importance yet even he understated the case. As we have found new ways of interpreting the language of science, of discerning its ideological content, we have now come to a richer understanding of its role, both in precipitating and resolving *la crise*. Indeed by the 1680s it could be said that the European elite had been badly served by the guardians of religious orthodoxy. In the sixteenth and early seventeenth-centuries both Catholic and Protestant theologians had based the metaphysical foundations of their doctrines, for example, the Trinity and transubstantiation, as well as consubstantiation, on scholasticism, that is, on the Aristotelianism of the schools and universities. But by the late 1630s after Galileo's confrontation with the Church, and the publication of Descartes' *Discourse on Method* (1637), it was clear that Aristotle and Ptolemy no longer adequately described the operations of the natural world, either celestial or terrestrial. The Scientific Revolution of the seventeenth-century was, in essence, a philosophical revolution that replaced Aristotle with the rival explanation of a mechanical universe verified by experiment and observation. In the 1680s one could still find Aristotelians in any school in almost any country, but in Western Europe they were now on the defensive. Yet no consensus had emerged to replace the old theology with a Christianity compatible with science. Of course Galileo had been a devout Catholic who had the misfortune to know more about the heavens than his clerical opponents, and Descartes had also been a devout Christian, and probably a Catholic. But neither had felt the need to offer solace to scholastic theologians desperately trying to maintain orthodoxy in the face of the destruction of Aristotelian natural philosophy. Neither could have imagined that eventually it would be necessary to construct a new Christian religiosity based in large measure upon mechanical assumptions. This was precisely the synthesis developed in the second half of the seventeenth-century by English Protestants forced under the impact of the English Revolution to rethink the relationship between the natural order, society and religion. Eventually all progressive Christians from Leibniz to *pere* Malebranche would be forced to restructure the philosophical foundations of Christianity to conform to one or another version of the new science.

English scientists of the mid seventeenth-century like Robert Boyle (1632--91) attacked Aristotelianism because they believed that the religion it was used to support went hand-in-hand with absolutism. They also believed that scholasticism leads people to believe there is an *anima*

p. 264

mundi which watches over the safety of the universe and that following from this they might believe that water, for example, has a tendency to move up in a hollow reed because such motion is natural to it. With ideas like that, Boyle believed, you could justify magic as well as

transubstantiation; both were a threat from the 1640s to the 1680s for Protestant reformers who feared royal absolutism (and hence Catholicism) as much as they feared political agitation among the populace. As Christopher Hill has shown, popular beliefs, including materialism and the power they gave to lay preachers (or to the spirit within each individual), had indeed threatened to undermine the entire system of social order in revolutionary England (27).

Out of the fears provoked by that experience Boyle and his friends in the Royal Society, coincidentally with Protestant theologians in Cambridge, worked out a synthesis between science and religion which was to have European-wide impact from the 1690s onward. It provided an alternative to the militant and purely Biblical Calvinism of the Puritan sectaries as well as to the doctrinal rigidity of Catholicism. Briefly stated, this new natural religion postulated a mechanical universe providentially controlled by God but operated according to laws, which were ordered, harmonious and comprehensible. In Restoration England, as well as in the republic of letters, this liberal Christianity was immensely appealing. Newton was taught it as a young Cambridge student. Locke and Furly embraced versions of it (it permitted Furly to retain certain of his mystical beliefs), the French refugee and important journalist of Amsterdam, Jean Le Clerc, used his journals in the 1690s to promote it, while in the 1720s a young French poet named Voltaire learned his first lessons in metaphysics from reading the liberal theologian, Samuel Clarke, who in his Boyle Lectures of 1704-5 offered a solution for the crisis which was based upon the science of Boyle and Newton.

What must be stressed about this liberal and Newtonian Christianity, whether it is found (in embryo) among the Cambridge Platonists of the 1670s, the Dutch Arminians of the 1690s, or liberal Italian Catholics of the 1720s is the *via media* it provided through a thicket of religious beliefs which had been of immense political significance throughout much of the seventeenth-century (28). It was seen to undermine scholasticism, hence to attack the ultramontane clergy (the Jesuits, for example),

p. 265

as well as to challenge absolutism. It repudiated popular religiosity with its radical associations; and it offered a moderate Protestant alternative to that radical Calvinism whose millenarianism and emphasis upon the separate power of the clergy had proved so divisive. And not least, it permitted, indeed encouraged, scientific observation and experimentation. Hence it fostered a revival of both the Baconian dream and the Cartesian proclamation that science would provide mastery over nature.

After 1689 liberal Christianity became associated in the minds of Europeans with two extraordinary developments. The first was a successful and bloodless English revolution which removed an absolutist king, established parliamentary sovereignty, forced the Dutch stadholder, William of Orange, to accept the Bill of Rights as the condition for his kingship, and established a limited religious toleration for all English Protestants, although not for Catholics or anti-Trinitarians. The second innovation was Newtonian science. In the early 1690s liberal Anglican clergymen championed both the political settlement of 1689 and the Newtonian synthesis, and related one to the other. Suddenly a new consensus had been forged in England: a viable national church remained amid limited religious toleration, clergymen offered justifications for revolution and constitutional government, and experimental science had uncovered previously unknown and universal laws. The Newtonian system of the world could be championed as the model for the stable, harmonious, moderately Christian polity

ruled by law, not by an arbitrary and capricious will. This was a scientific and political synthesis that repudiated the materialism of Hobbes, ignored the republicanism of Harrington, and labelled radical sectaries, Levellers, Diggers, Quakers, etc., as disorderly magicians. It justified political revolution without social upheaval. That new natural religion permitted Locke to argue for the reasonableness of Christianity against the deism of Toland, and it also permitted this guardian of respectable contract theory to lobby among his parliamentary friends for the abolition of the censorship laws. Partly as a result of Locke's efforts parliament permitted the Licensing Act to lapse in 1695, and the printing press in England acquired a freedom only rivalled by the French language press in the Dutch Republic.

With liberal, Newtonian Christianity as its centerpiece the English model of society and government captured the imagination of thousands of educated, largely urban, Europeans who frequently heard about it in the first instance from French language journals - or translations of English texts - undertaken by Huguenot refugees or Dutch scientists such as s'Gravesande. By the second decade of the eighteenth-century a new form of social gathering had been invented to celebrate this God of Newtonian science, the Grand Architect as he was called, to extend

p. 266

informally the limits of toleration, and to celebrate English empiricism with its passion to classify and collect. In a formal sense Freemasonry began in London in 1717 and it was led by Newtonians and Whigs, but its roots stretch back to the 1690s, rather predictably to freethinking circles found within the Whig party. As early as 1710 Huguenot refugees in The Hague with the assistance of Toland had discovered a version of the masonic gathering; the earliest Continental lodge was probably in Rotterdam in 1720 (29). By the 1730s Freemasonry could be found in Paris, much to the distress of the authorities. Its official appearance in The Netherlands was not until 1734, and by then masons formed the core of the Anglo-Dutch lobby. Italian aristocrats in Naples set up lodges in the 1740s, and despite persecution in Catholic countries, Freemasonry flourished well into the age of democratic revolutions. Indeed in a social sense it became one of the most important links between the liberal and enlightened solution to *la crise* and the Continental breeding ground for the visionaries and the disillusioned of the later period (30).

Yet just as the science of Newton wedded to liberal Protestantism - a new natural religion - offered one resolution of *la crise*, the new mechanical philosophy of the early seventeenth century had been one of its causes. The great intellectual revolutionary of that century had been Rene Descartes (d. 1650). In the *Discourse on Method* he argued that all enquiry begins within the mind of the individual and not in the prescriptions or dogmas offered by the clergy, so easily subjected as they had been to the mockery of the sceptics. According to Descartes science sprang from the individual's assumption that God would not deceive and systematically distort our perception of nature. The goal of science became the mathematical expression of mechanical laws that genuinely conform to physical reality. Descartes constructed a cosmic picture of the mechanical universe based upon logical formulations and hypotheses, and with that achievement he left problematic the exact role of continuing experimentation. Cartesianism offered no solace to the scholastics, and it separated matter from spirit so drastically as to render irrelevant that *anima mundi* also attacked by Boyle. Indeed this separation was the great danger in Cartesianism; it never adequately explained how to reunite matter and spirit in such a way as to guarantee the dominance of spirit over matter, of

God over nature, of Christianity over pagan naturalism. Many European Protestants in both England and The Netherlands during the 1640s and well beyond thought, however, that first and foremost Cartesianism refuted the scholastics while permitting a

p. 267

Christian science to flourish. Indeed on the Continent that Protestant Cartesianism, of which Bekker is one of the most elegant representatives, flourished among the laity and their clerical allies in the universities. Biblicist Protestants like the Calvinist minister of Utrecht, Voet, attacked Cartesianism as atheism and enthusiasm, and tried to rally the populace against the lay magistrates who supported the teaching of Descartes within the university. Voet warned the people that their elders would desert their obligations to the Reformation in a world governed solely by impersonal mechanical laws (31).

The controversies that erupted over the implications of Cartesianism from the 1650s onwards foreshadow *la crise*. These were particularly intense in the Dutch cities, but there by the late 1660s at the University of Leiden and elsewhere, Cartesianism had become accepted. Calvinist rationalists saw it as a more than adequate explanation for the laws that govern the material order, and the necessity for constant experimentation in a world made comfortable by the fruits of merchant capitalism seemed hardly a priority. When Leiden established a laboratory it was used solely to illustrate the laws of Cartesian science.

Only in England during the 1650s did the linkage between Cartesianism and atheism seem clearly apparent. The English flirtation with Descartes, led in the first instance by the Cambridge Platonists, turned sour for reasons that were local and unique to their experience of social revolution. When the English scientists and philosophers turned against Descartes they did so within the context of the materialist and mortalist heresies thrown up by Hobbes and the radical sectaries. Nowhere else in Protestant Europe at this time did such a complete repudiation occur within scientific circles. One of its not-incidental by-products came in the ease with which a young Cambridge undergraduate, like Newton, could turn his back on Descartes precisely in the late 1660s because as he put it, 'his philosophy leads directly to atheism' (32). Newton was no more or less a devout Christian than Bekker or the natural philosophers at Leiden, but his social universe had been far less stable than the one governed by the *burgermeesters* and *regenten* of the Dutch Republic.

Above all else, the Cartesian material order is rigidly stable; indeed its God possesses many absolutist qualities, and the laws of nature hang largely upon his perceived honesty. Not surprisingly, Cartesianism made slow but steady inroads within the bastion of anti-Christ, the

p. 268

kingdom of Louis XIV. While the schools and universities of France continued relentlessly to teach Aristotle, by the 1670s Parisian theorists brought Cartesianism to the society of the salons; it became both aristocratic and bourgeois, as well as polite. Cartesianism provided arguments for absolutism as well as for the domination over society by those same groups capable of mastering the new science. In *La Pluralite des Mondes* (1686) Fontenelle, an academician and Cartesian, presented his natural philosophy as the cosmic justification for the *status quo*; for absolutism and the rigid social system it supported (33). The book went through dozens of French editions, as well as foreign translations. While Cartesianism may have shaken the foundations of scholasticism and hence provoked secular vs. clerical tensions within French intellectual life, in the first instance it offered an escape from doubt to its

believers that rendered their crisis a mild affair by comparison to that experienced in the 1680s by French Huguenots, Dutch republicans, or English Whigs. But while Cartesianism was being used by the French scientific community to support absolutism, not surprisingly a French Protestant, Denis Vairasse, was one of the first to attack the solace offered by these new scientific mandarins to the pretensions of monarchy (in *Histoire des Sevarambes*, 1677-8) (34).

Yet there was a dark side to Cartesianism that continued to disturb even its most enthusiastic and absolutist supporters. Were there not difficulties in reconciling spirit with matter when material vortices whirled through space in constant collision only with other material bodies?³⁵ The danger in the new mechanical philosophy had always been its potential for turning into materialism. In the first half of the century Hobbes had demonstrated the danger much to the horror of all his Christian opponents. By the 1680s it was clear that the greatest philosopher of the preceding generation had begun by reading Descartes and ended up with a new and extraordinary form of materialism. Benedictus Spinoza (1632-77) cut the gordian knot of the spirit-matter dichotomy by arguing that there is only one substance and it is both material and spiritual.

Out of the Jewish community in Amsterdam with its Cabalistic traditions of learning, Spinoza worked his way into metaphysical definitions that he himself labelled political (*Tractatus Theologico-Politicus*,

p. 269

1670). If our spirit and body are one, then necessity rules our fate, and to live out one's destiny requires freedom, not only to trade but also to believe and read, to participate in civic institutions, to worship as one pleases provided political tranquility is maintained. Contemporaries labelled this philosophy of freedom, atheism; Spinozism or pantheism were less pejorative contemporary descriptions, the latter term invented by John Toland in 1705 (36). Spinozism is central to *la crise*. It was what you might embrace after you had left scholasticism (if you had ever belonged), dabbled in the new scientific literature, discovered Descartes and found him compelling for a time, but then become disillusioned with the absolutist tendencies of the French Cartesians. You might have been prepared for it by Hobbes' materialism, although not by his politics, and you were probably a doctor, or a lawyer, or a journalist - a layman of professional status and some university training - who did not much like clergymen telling you what to think. Spinozism appealed to freethinkers, or created them, within every segment of the literate classes, first in The Netherlands, then in England and finally in France. By the 1680s Spinoza's ideas had been translated out of Latin into English or been made available in various clandestine manuscripts written in simple French in the Dutch Republic. We still have an imperfect understanding of the sources of this early Spinozism, of its actual believers and transmitters, but we now know it to have been widespread.

By the 1720s pantheism was everywhere, ³⁷ its growth an unintended by-product of the new science. Without Descartes there would have been no Spinoza; without Spinoza, no pantheism; however many other intellectual traditions, including the writings of Giordano Bruno, we can legitimately point to as sources for this most virulent heresy of the early Enlightenment.

The new science in all its forms pried open minds that might otherwise have been content to explain nature by reference to its inherent properties, to what one sees on a daily basis. It also provided an alternative to seventeenth-century scepticism which was itself one civilized response to the endemic religious wars of the early modern period. Science also elevated God's work to the status of his word, and in the process made a literal reading of the Bible less necessary if not also, when it came to heliocentricity, simply impossible. To that extent it

p. 270

downgraded Biblical language and muted the message of sectarian groups with their special readings of the Bible.

The new science was the single most important source of arguments against witches, miracles, and special illuminations. One of the most visible symptoms of *la crise* in the 1680s was the European-wide assault on what contemporaries called enthusiasm. This was mysticism in one's religious piety; the appeal to the inner light in the hands of sectaries. When the French prophets, a group of Huguenots from the Savoy, rose in rebellion against Louis XIV during the early years of the War of Spanish Succession (1702-13), English and Dutch Protestants praised their heroism and the most millenarian among them took the uprising as a sign that the end of the world was near. When the prophets actually turned up on the streets of London assisted by Isaac Newton's close friend, Fatio de Duillier, the authorities arrested them, the doctors denounced them as mad, and the freethinkers labelled them as deluded by superstition. Liberal Anglicans argued that the new science provided the foundation for natural religion, for a social cement which rendered the disciplined public experience of divinity infinitely preferable to the private illuminations of the saint. The exiled French prophets took to wandering England, Scotland and finally, The Netherlands and Germany in a lonely search for converts. When Benjamin Furly saw them preach in Rotterdam he was appalled by their enthusiasm (38).

It should be emphasized that the use of science to repudiate magic was frequently not the work of the scientists themselves. Both Boyle and Newton accepted some sort of apocalypse; Boyle believed in magical cures while denouncing the pretensions of the alchemists; Newton secretly practiced alchemy all his life. In Germany Leibniz dabbled in astrology. Their clerical friends worried that if one stopped prosecuting witches in the courts, religion might suffer. Yet by the late seventeenth century English magistrates did stop prosecuting witches while in The Netherlands by the early 1730s the Calvinist clergy engaged in violent persecution of libertines and homosexuals, witches having all but disappeared from their list of concerns (39).

It was the new science as interpreted by the educated laity of the late seventeenth and early eighteenth-centuries that forever banished the superstitions (as they saw them) of the people from polite discourse. It was what individuals made of the natural philosophies of Descartes, Spinoza, Boyle and Newton that provoked *la crise*; what resolved it was the creation of an elite and enlightened culture, one that might still in

p. 271

many cases be Christian but that recoiled from any form of personal illumination or magical power. In their place came liberal Christianity wedded to the new science. Excluded from that most cerebral form of religiosity were the vast majority of Europeans.

Throughout the eighteenth-century the religiosity of the European masses as well as of non-Westerners would continue to frighten both the godly and the enlightened. For those secularists such as Voltaire, who contrasted pagan societies with even the most enlightened European regimes, there was, however, an increasingly strong temptation to portray the former as utopias, to create Eldorado. Beneath the confidence bred by the new science there nevertheless lay powerful reservations about the virtue of the powerful and the entrenched within every Western society.

In the period from roughly 1680 to 1720 educated Europeans struggled through the Continental wars provoked by French absolutism, repudiated religious fanaticism and enthusiasm, discovered science and deism as respectable alternatives, and created a secular culture largely immune to the condemnations coming from orthodox clergy, both Protestant and Catholic. Yet by the middle of the eighteenth-century it was clear to liberal and secular thinkers that aspects of the *ancien regime* in every Continental country firmly resisted all efforts at enlightened reforms. At first the philosophes believed that a viable alternative lay across the Channel, in the social and political order created by the Revolution Settlement of 1689. That, at least, was what Voltaire preached, and the French language and Anglophile press in the Dutch Republic continued a massive propaganda effort to recommend the English system as the antithesis of tyranny and injustice. Given what we now know about the central role played by English science and revolutionary political theory in the origins of the European Enlightenment, the persistence of that idealization of the English system should hardly surprise us. What continued to surprise the Enlightenment was the intractability of the old order, the persistence of princes and priests long after the liberal reformers had mentally exorcized them.

Bibliographical footnotes

[1] H. G. Koenigsberger, 'Republics and Courts in Italian and European Culture in the Sixteenth and Seventeenth Centuries', *Past and Present*, No. 83 (May 1979), pp. 32-56.

[2] For a general discussion of this phenomenon see Peter Burke, *Popular Culture in Early Modern Europe* (New York; Harper and Row, 1978), pp. 245-81, and Natalie Davis, *Society and Culture in Early Modern France* (Stanford; University of California Press, 1975), pp. 189-267.

[3] Paul Hazard, *La crise de la conscience européenne, 1680-1715* (Paris; Boivin, 1935), preface.

[4] On this question of the English Enlightenment see J. G. A. Pocock, 'Post-Puritan England and the Problem of the Enlightenment' in Perez Zagorin, *Politics and Culture in Early Modern Europe* (Berkeley; University of California Press, 1983), pp. 91-112. See also Roy Porter, 'The Enlightenment in England' in R. Porter and M. Teich, *The Enlightenment in National Context* (Cambridge; Cambridge University Press, 1981).

[5] See Margaret C. Jacob, *The Radical Enlightenment: Pantheists, Freemasons and Republicans* (London and Boston; George Allen and Unwin, 1981); for a good survey of the literature on republicanism see J. G. A. Pocock, 'English Historical Thought in the Age of Harrington and Locke', *Topoi*, v. 2, 1983, pp. 149-62.

- [6] On that transmission see Christopher Hill, 'Radical Pirates' in James R. Jacob and Margaret C. Jacob, *The Origins of Anglo-American Radicalism* (London and Boston; George Allen and Unwin, 1984), pp. 17-32.
- [7] Margaret C. Jacob, *The Radical Enlightenment*, p. 161.
- [8] Philip Jenkins, *The Making of a Ruling Class. The Glamorgan Gentry, 1640-1790* (Cambridge; Cambridge University Press, 1983), p. 18.
- [9] Aubrey Rosenberg, *Nicholas Gueudeville and his Work (1652-172?)* (The Hague; Nijhoff, 1982), pp. 102, 275.
- [10] See Peter Laslett, ed., *Two Treatises of Government by John Locke* (Cambridge; Cambridge University Press, 1960); and for a sense of the way Locke was ignored by English apologists see J. P. Kenyon, *Revolution Principles: The Politics of Party, 1689-1720* (Cambridge; Cambridge University Press, 1977).
- [11] Richard L. Ashcraft, 'The Two Treatises and the Exclusion Crisis: The Problem of Lockean Political Theory as Bourgeois Ideology' in J. G. A. Pocock and Richard L. Ashcraft, *John Locke* (Los Angeles; University of California Press, Clark Library series, 1980).
- [12] Julian H. Franklin, *John Locke and the Theory of Sovereignty* (Cambridge; Cambridge University Press, 1979).
- [13] Christopher Hill, *The World Turned Upside Down* (London, Temple Smith, 1972).
- [14] Margaret C. Jacob, 'In the Aftermath of Revolution: Rousset de Missy, Freemasonry, and Locke's Two Treatises of Government' in *L'Età dei Lumi. Studi storici sul settecento Europeo in onore di Franco Venturi* (Naples; Jovene, 1985), vol. 1, pp. 487-521.
- [15] Margaret C. Jacob, *The Radical Enlightenment*, p. 53.
- [16] On that older, liberal tradition see Rosalie Colie, *Light and Enlightenment. A Study of the Cambridge Platonists and the Dutch Arminians* (Cambridge; Cambridge University Press, 1957).
- [17] On Furly see William Hull, *Benjamin Furly and Quakerism in Rotterdam* (Philadelphia; Swarthmore College Monographs, 1941).
- [18] Margaret C. Jacob, *The Radical Enlightenment*, pp. 218-27.
- [19] Ibid., pp. 88-9. See also William Montague, *The Delights of Holland* (London, 1696), pp. 162-4 on the republicanism of merchants as heard in the coffee houses. And J. J. V. M. de Vet, *Pieter Rabus (1660-1702). Een Wegbereider van de Noordnederlandse Verlichting. With Summary in English* (Amsterdam; Holland University Press, 1980). See also for the career of Jacob Campo Weyerman, *De Rotterdamsche Hermes*, ed. by A. Neuweboer (Amsterdam, 1980).
- [20] Balthasar Bekker, *De Betoverde Weereld* (Leeuwarden, 1691), preface. On Newton's conception of universal gravity as the divine will see W. G. Hiscock, ed., *David Gregory, Isaac Newton and Their Circle* (Oxford, privately printed, 1937), p. 30.
- [21] Aubrey Rosenberg, *Nicolas Gueudeville*, p. 29.
- [22] B. Bekker, *De Betoverde Weereld*, 1691, preface.
- [23] Ibid., p. 656.

- [24] Walter Rex, *Pierre Bayle and Religious Controversy* (The Hague; Nijhoff, 1965), and Frank Manuel, *The Religion of Isaac Newton* (London; Oxford University Press, 1974).
- [25] B. Bekker, *Uitlegginge van den Propheet Daniel* (Amsterdam, 1688), p. 715.
- [26] Jack Fruchtman, *The Apocalyptic Politics of Richard Price and Joseph Priestley: A Study in Late 18th Century English Republican Millenarianism* (Philadelphia: American Philosophical Society, 1983).
- [27] For Boyle the classic study now is James R. Jacob, *Robert Boyle and the English Revolution* (New York; Burt Franklin, 1977); on this disorder see Christopher Hill, *The World Turned Upside Down* (London, 1972).
- [28] See Margaret C. Jacob, *The Newtonians and the English Revolution, 1688-1720* (Ithaca, New York; Cornell University Press, 1976); Vincenzo Ferrone, *Scienza, Natura, Religione: Mondo Newtoniano and Cultura Italiana nel Primo Settecento* (Naples; Jovene, 1982).
- [29] Margaret C. Jacob, 'The Knights of Jubilation: Masonic and Libertine', *Quaerendo*, XIV, 1 (1984), pp. 63-75.
- [30] Margaret C. Jacob, 'In the Aftermath of Revolution', pp. 519-21.
- [31] Thomas Arthur McGahagan, 'Cartesianism in The Netherlands, 1639-76: The New Science and the Calvinist Counter Reformation', Ph.D., University of Pennsylvania, 1976.
- [32] Margaret C. Jacob, *The Cultural Meaning of the Scientific Revolution* (New York; Alfred Knopf, 1987) (forthcoming), chapter three.
- [33] Geoffrey Vincent Sutton, 'A Science for a Polite Society: Cartesian Natural Philosophy in Paris during the Reign of Louis XIII and Louis XIV', Ph.D. dissertation, Princeton University, 1982.
- [34] Erica Harth, *Ideology and Culture in Seventeenth Century France* (Ithaca: Cornell University Press, 1983).
- [35] See Aram Vartanian, *Diderot and Descartes: A Study of Scientific Naturalism in the Enlightenment* (Princeton: Princeton University Press, 1953).
- [36] John Toland, *Socinianism Truly Stated: Being an example of fair dealing in all Theological Controversy. To which is prefixt Indifference in disputes. Recommended by a Pantheist to an Orthodox Friend* (London, 1705).
- [37] Paul Vernière, *Spinoza et la pensée française de la Révolution* (Paris: Presses universitaires de France, 1954).
- [38] Margaret C. Jacob, *The Newtonians*, chapter seven.
- [39] Theo van der Meer, *De wesentlijke sonde van Sodomie en andere vuyligheden. Sodomietenvervolging in Amsterdam 1730-1811* (Amsterdam, 1984), pp. 11-12.