



Medieval and Modern Worlds

THE VIRTUES OF MEDIEVAL LIFE

Academic literature concerning, implicitly or explicitly, the “decline” of the Western world tends to contrast an idealized vision of pre-industrial life with an essentially negative conception of industrial and “postindustrial” modernity. Sociology itself may have emerged as a reaction to perceived undesirable or at least dangerous effects of modernization: “What the analyses of the sociological classics, from Marx to Durkheim and from Weber to Simmel or Tönnies, have in common is that they all proceed from the observation of massive *changes in the conditions of life*—leading to the classical juxtaposition of ‘archaic’ versus ‘modern’ societies described by all of the founding fathers of sociology—and that they all exhibit great concern for the consequences these changes may have for the human condition” (Rosa, 2015, p. 105; emphasis in original). This tendency is especially pronounced in the writing of Ferdinand Tönnies, whose highly influential 1887 work *Gemeinschaft und Gesellschaft* casts pre-industrial societies as intimate, “self-contained,” cohesive, and “homogeneous,” and modernizing societies as impersonal, open, atomized, and “heterogeneous” (Greenfield, 2009, p. 402)—a taxonomy that has continued to shape academic understanding of variation in human social life over historical time and across populations (Greenfield, 2009; Reynolds, 1997, pp. xi–lxvi). To simplify matters (although not much), certain sociologists

and historians have assumed that the pre-industrial (especially medieval¹) Western past was essentially idyllic, secure, and wholesome, with daily life similar to that found in contemporary Amish societies, and that the modern world is harsh, competitive, and insalubrious: “The Romantic nineteenth-century depiction of the simple peasant, envied for a bucolic existence far from modern society, still clings to our perception. From a distance, the feudal model suggests that medieval peasants lived in a snug, secure world, protected by their lord in return for services” (Hazell, 2008, p. 213).

But this view of the contrast between pre-industrial and modernized life is difficult to square with a number of facts. Considering Western Europe² in the Middle Ages (spanning roughly the middle of the fifth to the end of the fourteenth century AD), among the most striking observations relevant to quality of life are the high levels of intra-group violence (Eisner, 2001, 2003), inter-group violence (Clark, 2007, pp. 126–128), poverty (Cipolla, 1993; Clark, 2007), food scarcity (Jörg, 2008), and infant and child mortality (primarily from high burdens of infectious disease; Caldwell, Caldwell, Caldwell, McDonald, & Schindlmayr, 2006) that characterized this period generally (though with substantial variation over time and among regions). To gain some perspective, consider the (per 100,000) homicide rates for a few notable contemporary Western countries (data pertain to the years 2011–2012): 4.7 in the United States, 0.9 in the United Kingdom, 1.0 in France, 0.8 in Denmark, 0.9 in Italy, 1.6 in Belgium, 1.1 in Australia, and 0.9 in New Zealand (UNODC, n.d.). These are all far below the 20 to 40 per 100,000 rate of late medieval Western Europe³ (Frost & Harpending, 2015).

Studies of the skeletal remains of medieval persons offer further evidence to this effect, suggesting that these individuals had high levels of developmental stress and poor existential conditions, resulting in short stature and probable low average lifespans, lasting only to the mid-thirties (Sanderson, 1999; Wurm, 1984)—indeed, early medieval people may have had less optimal conditions for development than Mesolithic hunter-gatherers (Macintosh, Pinhasi, & Stock, 2016), despite the latter’s far less

¹“The Middle Ages” and “the Medieval Era,” “medieval times,” and so on, are used interchangeably.

²The use of “Europe” and cognates in this chapter should be taken to concern *Western Europe* unless otherwise indicated.

³Claims of high levels of violence in the medieval world have been strongly challenged (see Butler, 2018), a point to which we will return later in this chapter.

complex socioeconomic organization and cultural production. Some medieval graveyards offer evidence of remarkably high rates of early life mortality and astonishingly short lifespans not even reaching the twenties (Cohen, 1991). The poor outcomes that these groups experienced potentially indicate the long-term challenges that certain populations transitioning into agricultural ways of life faced, following millennia of largely nomadic hunting and gathering, a shift involving substantial selective pressure for adaptation to a highly evolutionarily novel subsistence paradigm for which very few were genetically suited (Hawks, Wang, Cochran, Harpending, & Moyzis, 2007; Woodley of Menie, Younuskunju, et al., 2017).

Further trouble for a “romantic” view of the medieval past comes from evidence of problematic social instability. For example, against assumptions to the contrary that long held sway among historians, there seems to be little doubt that medieval populations typically were highly geographically mobile, that is, the members of these populations were not settled in single villages, towns, or cities for their whole lives, and in fact moved quite regularly (Dyer, 2007; Hochstadt, 1983; Laslett, 2001). Laslett (2001, p. 113) discusses findings suggestive of high rates of marital dissolution and remarriage subsequent to spousal death in the Early Modern Era (spanning roughly the beginning of the sixteenth to the start of the nineteenth century AD)—it is reasonable to infer that the same problem applied to medieval life given that mortality rates changed little from the Medieval to Early Modern Eras (Rühli & Henneberg, 2013, p. 3). Additionally, and in spite of the contentions of sociologists such as Sombart (1916), it is not easily argued that the Medieval Era involved an essentially static division of European populations into social strata between which there was no mobility. Clark (2014), for example, finds little evidence of change in rates of social mobility from AD 1300–2000 in England. Nevertheless, some contemporary sociologists still write on Medieval Europe as if it were beyond dispute that its societies lacked social mobility. Greenfeld (2013), for example, maintains that “[n]o part of this rigid [medieval] world would change position vis-à-vis the others, nothing moved, and everyone was kept to one’s place: it was as stable as a human world can be—not, perhaps, as stable as a castle, but eminently stable in comparison to the world that came to replace it” (p. 311). But she offers no substantive historical evidence for this claim, which is very likely incorrect (see Carocci, 2011).

Phillips (1993) offers perhaps the most sustained attack against a positive view of life in the medieval West available, directed specifically at those who would take European societies of the Middle Ages to exemplify a communitarian spirit from which the Western world has since fallen away. Among Phillips' (1993) central claims about the Medieval Era (primarily the High Middle Ages, that is, from around the start of the eleventh century to the beginning of the fourteenth century AD) are: (1) geographical mobility was not only substantial but driven in large part by social abuses and exploitation (p. 106); (2) "shared values," "affective ties," and "social solidarity" were likely minimal given high levels of inequality, violence, and conflict (pp. 106–112, 115–121); (3) political participation was severely limited through the exclusion of low-status individuals (pp. 112–115).

In light of all of this, it must be asked whether there was *anything* praiseworthy about life in Medieval Europe. There is certainly little good to be said about the material standard of living. The sort of poverty and physical insecurity that was typical in the Middle Ages is difficult to find in any modernized society—other than the homeless, it is not clear if any subpopulation of the developed world could be reasonably compared to European medievals in terms of material deprivation. To appreciate the seriousness of poverty in the Middle Ages, consider that Western Europe's GDP per capita at the beginning of the sixteenth century (the close of the Medieval Era) was around 771 (1990) international dollars—in 2003, the figure stood at 19,921 (1990) international dollars, which constitutes about a 26-fold increase (Maddison, 2007, p. 70). Rindermann (2018) offers the more tangible example of glass windows—to modernized people, these feature in virtually all habitable buildings, but for centuries in the West, they were rare luxuries: "Glass windows needed 700 years from the Middle Ages to the nineteenth century to become common" (p. 402; see also p. 26).

But in spite of, and perhaps to a large extent *because of*, these deficits, medieval people arguably were enormously advantaged, relative to their modernized counterparts, in different ways. This is most clearly apparent in their intense devotion to Christianity and the societies built around it, providing a strong basis for existential purpose, and their strength of character that enabled them to handle adversity directly, with limited mediation by powerful institutions. Contrary to Phillips' (1993) arguments, a great deal of historical evidence suggests that medieval Europeans were profoundly group-oriented. Perhaps one reason that Phillips (1993) denies this fact is that he seems to believe, in some respects following

Tönnies, that a spirit of communitarianism, social solidarity, or groupishness requires egalitarianism, and medieval European societies were clearly inegalitarian. But there is no reason to suppose that that is true. Susan Reynolds, probably the most distinguished living historian of community in medieval life, makes this point explicit: “As in many human societies throughout history, hierarchy and inequality [in the Medieval Era] were not incompatible with solidarity: in some ways the acceptance of inequality, by inculcating submission, may make solidarity easier” (Reynolds, 2010, p. 116).

Indeed, the historical record offers abundant evidence of the collectivist psychology of Europeans in the Middle Ages (without indicating that their collectivism was entirely overriding or that within-group conflict did not exist or was not substantial). For instance, Kaeuper (2011) recounts an event that occurred during a civil war in the time of Henry III of England, in which villagers attacked “royalist troops, who, remarkably, brought them [the villagers] into court rather than destroying them or their homes” (p. 89). The reason for this attack, according to the villagers themselves, was that the troops threatened the welfare of the community and opposed the barons, that is, noble landowners—this indicates not only that the villagers supported a certain ideal of community that was promoted widely in their time (Kaeuper, 2011, p. 89), but also that they willingly risked their lives on behalf of the interests of social superiors (the barons). Evidence of the communitarian behavior of English medievals is also present in records pertaining to times of peace, during which this behavior broadly took the form of cooperative “self-government at the king’s command” (Kaeuper, 2011, p. 90), meaning the voluntary development of institutions, enforcement of laws, and fulfillment of duties consistent with the vision of the monarch. In Kaeuper’s (2011) judgment, this general feature of social life in these times could not be made sense of unless a rather encompassing ideal of community had the endorsement of both elites and those of lower standing: “This idea of a larger community was powerful and could have succeeded only with support from all those whose political weight counted ... [T]he idea of a community-wide realm did not simply flow top-down. Over time it may have reached, or grown from, surprisingly deep levels in the social pyramid” (Kaeuper, 2011, p. 89). None of this implies that English people of the Middle Ages lived free of intra-group conflict and friction (Kaeuper, 2011, p. 96)—indeed, one concrete example of groupish behavior provided above occurred in the context of such conflict. Still, even in periods of turmoil, such as the

Great Rising of 1381, “striking testimony to the strength of the basic ideals [including that of community]” is apparent—“[a]s revolts go, the Great Rising was almost orderly” (Kaeuper, 2011, p. 97). Reynolds (2010) offers a similar observation: “It is ... testimony to the givenness—the supposed naturalness—of kingdoms that very few rebellious nobles demanded formal secession so that they could form separate kingdoms. The assumption that kingdoms belonged to peoples that constituted natural units of custom, law, and government may explain how the Kingdom of France survived the eleventh century and the Kingdom of Germany (by then conflated with the empire) survived the fourteenth, fifteenth, and beyond” (pp. 123–124).

In a similar vein, Dyer (1994) presents a number of considerations indicating that Phillips’ (1993) pessimistic view is potentially overstated. Whereas Phillips (1993) portrays medieval villages as involving great socioeconomic inequality (p. 107), Dyer (1994) contends that the differences in status among villagers were in fact quite small—the gaps between peasants and lords were notable, but disparities were sufficiently limited among peasants so as not to present much of a challenge to social cohesion (p. 419). Further, as with Reynolds (2010, p. 116), Dyer (1994) asserts that inequality and difference did not necessarily constitute obstacles to social cohesion in the first place, and may have facilitated it: “Such social variety warns up against emphasizing the egalitarianism of medieval rural society but need not detract from regarding villages as cohesive. Differences between people could be a source of strength, leading to mutual dependence for labor and goods” (p. 419). Contradicting Phillips’ (1993) case to the effect that medieval societies were riven by the opposing values of their members, Dyer (1994) stresses the common “values and ideas” of villagers and the many collective activities through which they could be expressed, especially those of a religious nature (p. 419). To be sure, Dyer (1994), as with so many other scholars of the medieval world, does not idealize the focus of his inquiry, stating that “villages were never, within our period of detailed documentation, very harmonious places” (p. 424). This fact seems in large part attributable to the unpleasant material circumstances of the era, but also to the competing interests among individuals and subpopulations (Dyer, 1994, pp. 421–424) that, needless to say, cannot be fully avoided in any large human social group. But this does not seem to have prevented substantial functional cohesion and unity in medieval villages, particularly when they were faced with serious threats to their survival (Dyer, 1994, pp. 419, 429). This echoes

another point from Reynolds (2010) who, while placing great emphasis on the “assumptions of collectivity, collective interests, and collective activities” that defined medieval life, does not take such phenomena to imply that “medieval people submerged their individual interests in their communities” (p. 123). The point here is simply that medieval collectivism was not absolute, in that it was undermined by the inter-personal and inter-subgroup conflicts that are ubiquitous features of human existence, and which the miserable material circumstances of the time surely worsened.

Even if Western Europeans in the Middle Ages exhibited significant in-group social cohesion and maintained basically collectivist/communitarian ideals, it is not yet clear how general this groupishness was, or how significant its real-world effects were. To clarify this matter, it is essential to consider the role of religion. Lynch and Adamo (2014) argue that Christianity, through the (Western) Catholic Church, served to unify medieval Western Europeans against out-groups, particularly Muslims and Jews, and gave them a basic commitment to the maintenance of Western Christendom (pp. 177–184), that is, Christian peoples as well as the lands that they controlled and their common religious culture in the West.⁴ In fact, the unifying influence of Christianity was so intense that it became “more important, more real, than the other social groupings, such as regions or kingdoms, in which people lived” (Lynch & Adamo, 2014, p. 177). Inter-group conflict within Medieval Europe was far from absent, and it cannot be said that Western Christendom, let alone Christians of Western and Eastern Europe, ever achieved political unity (Lynch & Adamo, 2014, pp. 178–179). Despite these divisions, the sheer zeal that common High Medieval Europeans expressed in response to the Islamic threat to Christendom, culminating in the crusades, is remarkable—Lynch and Adamo’s (2014) account is worth quoting at length:

The response to [Pope Urban II’s] call [to aid in the defense of Christendom against Muslim encroachment] was much greater and more emotional than he could have anticipated. A movement verging on mass hysteria swept the crowd of knights listening to his sermon. They cried out ‘God wills it’ and tore up cloth to sew crosses on their clothing, symbolising their resolve to rescue the Holy Land. In subsequent months, knights and ordinary people in much of France and the Rhineland were roused to a feverish activity by the call to arms against the foes of Christendom ... the history of the church

⁴Lynch and Adamo (2014) offer the more limited definition of Christendom as “[t]he collective name for those territories inhabited primarily by Christians” (p. xvi).

in the central Middle Ages is incomprehensible unless one realises how the papacy tapped into a growing sense of loyalty to Christendom, of which the crusades were a concrete embodiment ... The elaborate administrative structures of the church in the central Middle Ages would not have been possible without the willingness of millions of people to accept and pay for them. (p. 180)

This suggests that medieval Western Europeans, at least of the High Middle Ages, accomplished a far-reaching ideal of Christian unity that succeeded in motivating acts of heroism and self-sacrifice on an impressively wide scale and across social strata (despite the various imperfections this ideal surely had in its manifestations).⁵ This achievement is all the more extraordinary in that it was realized without the dense bureaucratic infrastructure on which modern states rely to initiate and manage military activities. In a study of France under the reign of St. Louis IX, Jones (2017) argues that medieval societies were able to coordinate in sophisticated ways through organic networks of *consilium et auxilium* (counsel and aid), or voluntary pacts to serve the interests of others. This sort of social organization may not have been possible without high levels of in-group altruism,⁶ and the latter may have only emerged as a consequence of the high frequency of inter-group conflict in pre-industrial Western Europe selectively favoring cooperative and prosocial in-group behaviors.

MacDonald (1995a, 1995b, 2019), drawing on extensive evidence of a collectivist mentality among Europeans of the Middle Ages, argues that competition with out-groups may have triggered evolved psychobehavioral adaptations that facilitate population survival. These adaptations would have had the effect of promoting in-group cohesion and altruism alongside hostility and aggression toward out-group members. Indeed, Lynch and Adamo (2014) stress that the “other side” of strong in-group orientations is often hatred and violence directed at outsiders and certain

⁵Lynch and Adamo (2014) qualify their observation somewhat in noting that “there was lively debate about the details and the costs” of the Church; nonetheless, they go on to note that “from Greenland to Jerusalem most western Christians accepted the spiritual authority of the papacy because they were convinced that it was a legitimate embodiment of Christendom in visible institutions” (p. 180).

⁶An intriguing possibility is that extensive bureaucracy has become necessary in part to compensate for waning in-group altruism over the past two centuries. In the absence of sufficient prosociality, however, bureaucracies may become subverted and produce largely malign effects (Charlton, 2010).

non-conformists (pp. 180–184). Relatedly, Rushton (2005) elaborates his genetic similarity theory—derived from W. D. Hamilton’s inclusive fitness theory (discussed in Chap. 2)—to argue that individuals’ tendency to altruistically invest in those with whom they share a relatively high proportion of genes, thereby enhancing those genes’ replicative success, often serves as the formative basis of exclusive human groups, the “dark side” of which may be seen in “ethnic nationalism, xenophobia and genocide” (p. 503).

In conditions of severe resource scarcity, such as in the Middle Ages, violent competition among genetically distinct groups is a typical outcome of each group’s efforts to secure its own survival (Woodley of Menie, Figueredo, et al., 2017). As is obvious, such circumstances do not make for pleasant living, but they likely genetically and culturally select for the deep, even fanatical, commitment to transcendent ideals (e.g. Christendom) that enable profoundly altruistic behaviors. Rubin (2015) describes the morality of the High Middle Ages as consisting of “higher” aims, encouraging behavior that complied with Christian rules and existing social hierarchies. At the experiential level, these “higher” ideals may imbue life with a sense of supra-individual purpose, such as to override the ordinary tendency to highly prioritize personal interests, and instead enable voluntary suffering of tremendous costs for the good of a group to which one belongs. This would explain a longstanding current of human thought that links individualism, peace, and comfort to nihilistic sentiment, and conversely communitarianism, war, and hardship to existential purposiveness. For example, Watson (2014) documents the alacrity with which many German intellectuals met the prospect of a Great War (World War I), insofar as they expected such an event to rid their people of life-sapping individualism and spiritual emptiness:

Henri Bergson thought that the war “would bring about the moral regeneration of Europe,” and accused the Germans of being “mechanical men without soul.” The French poet Charles Péguy, too, believed in 1913 that a war would be of value “because it brings regeneration.” The Futurists in their manifesto released as early as 1909 had argued that war would be “the only hygiene of the world”; and elsewhere: “There is no beauty except in strife” ... The German theologian Ernst Troeltsch was convinced the war increased the feeling of *Deutschtum*—Germanness—among his fellow countrymen, which was “equivalent to belief in God’s divine power.” “It is the tremendous significance of August,” he added, “that under the impact

of danger [the war] pressed the whole people together in an inner unity, such as never before had existed.” (pp. 189, 192)

It is of note here that the leaders of the three great totalitarianisms of the twentieth century—Communism, Fascism, and National Socialism—successfully instilled in the populations they controlled historically rare levels of zealous devotion to what were, in effect, political religions, the power of which seems to have emanated precisely from their collectivist and religious character: “Totalitarians offer an interpretation of life and history, its existential meaning and goal—all put to the service of national competitive survival, economic development, and historic accomplishment. Theirs is a political religion. In retrospect, it is impossible to distinguish the faith that inspired the enterprise from the enterprise itself. What engages attention is the fact that, granted the appalling costs involved, totalitarian systems, nonetheless, managed to garner, organize, and employ a measure of voluntary human energy rarely, if ever, equaled in the history of humankind ... the least murderous of these systems has transported countless young people to fight and die for a cause the leadership deemed redemptive” (Gregor, 2012, pp. 282–283; see also Gentile, 2006). The fact that even the staunchly atheistic Communists could not do without the ideals of a religious or transcendent character in generating support for their movement indicates that the totalitarianisms’ efficacy lay in their ability to give meaning to the lives of unremarkable people: “Stalin frequently made allusions to the New Testament in characterizing his ‘disciples.’ On one occasion in 1933, he explained to Mikhail Sholokhov that he had no choice in the matter. ‘The people need a god’” (Gregor, 2012, p. 227, n. 2). Certain historians, such as Griffin (2012),⁷ have implicated the human need for existential meaning in the rise of totalitarianism, a point that is returned to in the next chapter. MacDonald (1998) notes parallels (and also distinctions) between medieval Christendom and National Socialism, highlighting in particular the common basis of their collectivist nature in inter-population conflict and the anti-individualist, transcendent (p. 162) belief systems both effectively employed to inspire mass self-sacrifice in

⁷“What resulted in the early twentieth century was an ‘explosive combination of nihilist leanings’ with ‘a craving for totalitarianism’ which ‘became the ideal of philosophers, cultural critics, political theorists, engineers, architects and aesthetes long before it materialized in flesh and blood, not only in technology, but also in Fascism, Nazism, Bolshevism and radical European political movements’” (Griffin, 2012, p. 61).

their populations for the sake of group interests. These observations generally evidence the reality of a nexus among inter-group conflict, “higher” moral ideals (especially as communicated and enforced through religions and analogous systems), existential purpose, and extreme altruistic behaviors (e.g. heroism and self-sacrifice), which was clearly apparent in the High Medieval West and may have its ultimate evolutionary origin in group-level selective pressures imposed by warfare between populations. Compelling but partial (insofar as it does not bear on the matter of existential purpose) empirical evidence for this possibility is in the work of Woodley of Menie, Figueredo, et al. (2017), which, to reiterate, found that in Britannic populations from AD 1600–1999, the usage frequencies of altruistic words were positively predicted by rates of warfare deaths, which were in turn predicted by poor environmental conditions (cold and variable climate; see also the Google Ngram analysis in Chap. 2 above). As will be indicated in the following section, and more thoroughly argued in the next chapter, while industrial modernity has massively enhanced Western peoples’ material quality of life, it may have severely diminished these sources of meaning in life.

Nonetheless, since this account of collectivist psychology in Medieval Europe depends heavily on claims about the crusades, it is important to consider alternative perspectives on the motivations of crusaders. The most salient among these posits that crusaders were not acting for altruistic reasons, but instead only fought for Christendom in search of personal benefits that could be obtained by looting Muslim settlements and the like. Evidence for this view is weak, however, and inconsistent with a number of historical facts. For example, European crusaders faced a very high probability of dying in battle (up to 75%), a fact of which they were aware, in that most of them “left expecting not to return” (Crawford, 2011, p. 17). Available personal accounts of crusaders suggest that some even planned “to die for God” (Crawford, 2011, p. 18), attesting to a sense of transcendent purpose behind their actions; more generally, it appears that crusading was driven not only by interests in serving God and attaining personal salvation, but also desires to perform acts of “charity” for fellow Christians (Crawford, 2011). These findings tell against cynical perspectives on the crusades, and are also consistent with theoretical expectations and empirical evidence that inter-group conflict should favor the genetic and epigenetic selection of altruistic traits (see Bowles, 2009; MacDonald, 1995a, 1995b; Woodley of Menie, Figueredo, et al., 2017).

As a final point on the medieval Western world, it should be stressed that in attacking “romantic” caricatures of life in the Middle Ages, historians are often guilty of denying or understating the important truths that these distorted portrayals contain. For example, although it would be incorrect to argue that medieval villages were typically fully “self-contained” (i.e. experienced no or very little migration, were entirely economically self-sufficient, etc.), it is worth noting that some apparently came quite close to this ideal, such as Cumbrian village communities in England⁸ (Whyte, 2007). Similarly, Brown (2007) maintains that the cultural distinctiveness and political autonomy of English villages were eroded through industrialization, consistent with the impression that modernized societies are more “open” than their non-modernized counterparts. Medieval societies, while more violent than contemporary Western ones, should not be imagined as having been relentlessly violent and chaotic (Butler, 2018⁹). And to some extent, the greater violence of the medieval world could be understood as a price paid for the autonomy that individuals had in managing their affairs directly, without the coercive influence and mediation of police forces and standing militaries (Simpson, 2015). Indeed, that medievals could handle their affairs in this way, resorting to violence when necessary, arguably signals a level of fortitude difficult to find in modernized societies, where people are more apt to demand that powerful institutions act against their enemies, rather than act themselves (see Campbell & Manning, 2018). This autonomy had the additional benefit of allowing distinctive local cultures and ways of life to flourish under the broader unification of Christendom, as opposed to the “leveling” or “flattening” effects of the homogenizing institutions and bureaucracies of modernity that were to come: “In the Feudal realm there was

⁸Whyte’s (2007) investigation pertains to a period around AD 1750–1850. Nonetheless, he attributes the “self-contained” quality of Cumbrian villages in this post-medieval time in part to their having retained an essentially medieval societal organization.

⁹Butler goes further than this, offering several challenges to evidence, such as that of Eisner (2001, 2003), that the medieval world was more violent than the modern; but given that even in the contemporary world, economic development has a robust negative association with rates of violent crime, likely because slow life history speed contributes to economic development (see Peñaherrera-Aguirre et al., 2019), which reduces inter-personal competitive pressure, and because environmental mildness associated with high standards of living selectively favors slower life history speeds (Woodley of Menie, Figueredo, et al., 2017), which favor cooperative over competitive inter-personal behaviors, it is hard to believe that the impoverished societies of medieval times were not substantially more violent than far wealthier modern ones.

never the drab sameness which modern folk too often conceive as ‘order’. The ‘Family Law’ in a Tribal Monarchy was capable of infinite variation, and healthy adaptability” (Innes of Learney, 1945, p. 117). This diversity of local folkways was especially pronounced in the Holy Roman Empire,¹⁰ the decline of which at the hands of modernization and its antecedents some academic historians have discussed.¹¹ That these more appealing elements of medieval life have been overlooked or denied may be related to the politicized interests of certain historians, who wish to prevent the European Middle Ages from serving as a source of inspiration to political movements thought to be objectionable (see, e.g. Devega, 2017).

In examining the medieval West, the picture we are left with is of a world that was brutal but deeply enriched with collective existential purpose—rather, where the former likely generated the latter. Clearly, medieval people enjoyed little in the way of material comforts and probably suffered from considerable physical pain often, given, *inter alia*, their lack of effective analgesics, medical care, and so on, and their serious poverty.

¹⁰“The [Holy Roman] Empire never demanded the absolute, exclusive loyalty expected by later nationalists. This reduced its capacity to mobilize resources and command active support, but it also allowed heterogeneous communities to coexist, each identifying its own distinctiveness as safeguarded by belonging to a common home” (Wilson, 2016, p. 7). Note that this is not incompatible with the willingness of large numbers of individuals from various communities to die for common *religious* reasons, as suggested above.

¹¹“Two world wars and the technological and industrial revolution have accelerated a development which began with Napoleon’s liquidation of the Holy Roman Empire. Deliberately uprooted, the colourful diversity of life in Europe has gradually withered away. The great drive to make countries, political institutions and men uniform and conformist, the drive so successfully promoted by Richelieu, Mazarin, Louis XIV and the great revolution, in the nineteenth century also made its impact on the German central core of Old Europe. Englishmen and continental Europeans assisted alike in the forward march of this process through which Europe developed its technical, economic and military potential and made for itself new and freely expanding labour markets, spheres of influence and battle-grounds” (Heer, 1968, quoted in Simpson, 2015, p. 35).

At this point, one could suspect that we contradict ourselves in that, in Chap. 1, we note a *homogenizing* tendency of pre-industrial societies, such that they generally limited genetic and behavioral diversity. But this fact is not inconsistent with a greater diversity along some axes of cultural variation having obtained in those societies, occurring within the context of particular constraints (such as the moral demands of Christianity). In the absence of the sort of centralization, standardization, and bureaucratization that are at the heart of modern societal organization, the people of pre-industrial societies had greater freedom to develop and maintain idiosyncratic folkways and traditions suited to their particular locales and histories. In the modern world, the need for this sort of variation has been largely eliminated through leveling out of the basic tasks and challenges of life with which people are faced.

An observation that is of special importance for later chapters of this book is that Western medieval societies, at least in certain periods of the Middle Ages, were very hostile to persons who deviated from particular norms of behavior, functionality, and appearance. Muslims and Jews and heretical Christians were targeted for violence (Lynch & Adamo, 2014, pp. 180–184), but even those guilty of what moderns would consider mild crimes or even non-criminal acts, such as adultery, were severely physically punished (Phillips, 1993, p. 110). Laslett (2001) notes that something as innocent as “sexual frailty” elicited “public humiliation” until around the mid-eighteenth century in England (p. 180). For all the moral evils such aspects of life involved or constituted, one suspects they favored the genetic selection for those traits enabling robustness against hardship, perhaps including the ability to perceive and act on existential purpose in opposition to adversity, as in the case of crusaders dying for the “higher purpose” (Rubin, 2015) of Christendom. As we shall also see, the extreme physical and reputational punishments meted out to criminals and others behaving in “deviant” ways in Medieval Europe may have involved selection for slower life history speeds, which, together with other evolutionary factors, may have provided the ultimate basis for industrialization and its consequences.

THE BIO CULTURAL ROOTS OF THE MODERN WORLD

The origin of industrial modernity is a major topic in the social sciences and humanities. (Historians would generally understand the medieval world as having come to an end prior to industrialization, but in our view the most dramatic and complete break with ways of life resembling those characteristic of the medieval world occurred through industrialization, which we take to be what truly defines modernity, and hence we write of a transition between the medieval and modern worlds.) Oesterdiekhoff (2011, 2014) suggests that it is *the* most important issue to which the social sciences are addressed, and discusses other scholars who have reached the same conclusion or similar conclusions (e.g. Ferguson, 2011). The key problem associated with this topic lies in understanding why only the West achieved endogenous industrialization,¹² first apparent in the late-eighteenth century in Britain, with other parts of the world industrial-

¹²Nielsen (2017) takes industrialization to be defined by “increase in the use of machines powered by inanimate forms of energy (waterfalls, coal, oil, or electricity)” (p. 1).

izing primarily through the diffusion of Western technology and ideas. Since industrialization appears to be a necessary condition for sustained population growth and high material standards of living,¹³ the uniqueness of this accomplishment to the West is of obvious interest. In just the past two decades or so, many academics, some very prominent, have devoted book-length analyses to unraveling this “riddle of the modern world” (e.g. Diamond, 1997; Landes, 1998; MacFarlane, 2000; McCloskey, 2006, 2010, 2016; Mokyr, 2016; Morris, 2010; Pellicani, 2001; Rindermann, 2018; see also Pinker, 2018). The theories offered in the great majority of these works suffer from the same problem—they either ignore, or outright deny (see especially McCloskey, 2010; Morris, 2010; and Pinker, 2018), certain potential roles of genetic factors in the rise of the industrial West, focusing exclusively on sociological, cultural, economic, and/or geographical factors instead.¹⁴ A role for such differences in the variable timing of modernization is suggested by the fact that even today, enormous global inequality in socioeconomic development is apparent, despite intense efforts on the part of developed nations to achieve a more or less uniform level of modernization around the world. Avent (2016) notes that “historically, rich countries tend to stay rich while poor countries tend to stay poor. ‘Rich’ and ‘poor’ are stable equilibria. Rich countries become rich by growing at modest rates over very long periods of time. Poor countries enjoy short bursts of growth which tend to end in sharp reversals; very rarely do poor countries sustain rates of growth fast enough for long enough to push them from poor status to rich status”; further, he remarks that “social scientists lack a satisfying explanation” for how rich nations achieve high wealth and, by implication, why poor nations fail to do so (p. 167). Social scientists have potentially failed on this front because of their general refusal to consider biocultural theories of socioeconomic disparities.

Clark (2007) and Rindermann (2018), however, offer exceptions to the reigning environmentalist paradigm. In the case of the first, the British Industrial Revolution (the earliest instance of industrialization) is explained as a consequence of the centuries-long fitness advantage of wealthier compared to poorer individuals, a phenomenon of which ample evidence is

¹³At least for large societies, high standards of living do not appear to be possible until a population passes through a phase of industrial development (Inglehart & Welzel, 2005).

¹⁴Attempts have also been made to trivialize this accomplishment of Western peoples. See Duchesne (2011) for an extremely thorough critical response to such efforts.

provided. This may have had the effect of promoting higher levels of personality traits associated with economic success, such as diligence and future orientation, insofar as the genetic variants underlying these traits were under positive directional selection. Further, Clark (2007) argues that the progeny of elites were downwardly socially mobile, in that competition for limited numbers of desirable economic niches forced some individuals down the social scale, where they replaced the lower-status persons who were not effectively reproducing themselves. Economically valuable traits may have thus become more frequent at all levels of British society, boosting aggregate productivity to a degree that enabled industrialization. A serious limitation of Clark's (2007) thesis is that it denies the role of selection for intelligence in this process of social evolution, despite the profound importance of intelligence to the economic development of nations (Christainsen, 2013; Rindermann, 2018).

As reviewed in the introduction to this book, Woodley of Menie, Figueredo, et al. (2017) develop a novel theory that builds on Clark's (2007). It posits that the Little Ice Age of the Early Modern Era imposed high levels of intrinsic (controllable) morbidity and mortality and evolutionary novelty, the former positively selecting for slow life history speed and the latter for general intelligence (g). Further, social selection against adulterers and violent criminals in the Medieval Era, in the form of executions and severe corporal punishments, may also have favored slowing life history speed (Frost & Harpending, 2015). Moreover, high rates of inter-group conflict as a function of severe resource scarcity have been hypothesized to select for high levels of g (Woodley & Figueredo, 2013). Slower life history speeds potentially contribute to economic growth insofar as they involve cooperativeness, future orientation, and cognitive and behavioral specialization, traits which naturally promote division of labor and industriousness (see Figueredo et al., 2017; Woodley, 2012). More importantly, rising g accounts for phenomena that Clark's (2007) theory seemingly cannot explain, namely the increasing global rates of major innovations in science and technology and of eminent (genius) individuals observed across the Early Modern Era and into the Late Modern Era, both of which subsequently declined around the end of the British Industrial Revolution (Woodley & Figueredo, 2013; Woodley of Menie, Figueredo, et al., 2017). Major innovations and intellectual eminence seem to have been overwhelmingly European phenomena (Murray, 2003), and the temporal correlations of the global major innovation and eminence rates with the estimated level of g of Britannic populations is

nearly perfect (Woodley & Figueredo, 2013). Additionally, g and the major innovation and eminence rates peak around the end of the British Industrial Revolution (Woodley & Figueredo, 2013; Woodley of Menie, Figueredo, et al., 2017). These findings strongly evidence the possibility that increasing g over the course of the Early Modern Era, but potentially extending back to medieval times, enhanced the frequency of scientific genius in Britain, enabling high rates of major innovations that gave rise to industrialization.¹⁵ The slowing life history speed and rising g of the general population facilitated the use of these innovations to generate large stores of wealth, in that these traits increased the economic productivity of laborers, merchants, and so on. Selective pressures favoring g have since reversed, likely ultimately due to the breakdown of group selection consequent to the enormous wealth generated through industrialization¹⁶ (Woodley of Menie, Figueredo, et al., 2017). But selection for slower life history speed appears to be ongoing in some Western populations (Woodley of Menie, Cabeza de Baca, et al., 2017), with the possible effect of increasing support for economic growth through the cultivation of specialized cognitive abilities¹⁷ (Figueredo et al., 2017; Woodley of Menie, Figueredo, et al., 2017).

¹⁵Recent work has provided further evidence for the possibility of recent evolutionary changes leading to higher levels of intelligence in humans. Most notably, Woodley of Menie, Younuskunju, Balan, and Piffer (2017) found that frequencies of genetic variants associated with cognitive ability likely increased over much of the Holocene epoch, consistent with earlier predictions (Cochran & Harpending, 2009).

¹⁶Insofar as life history speed slowing is favored in environments that are low in extrinsic (uncontrollable) morbidity and mortality and are stable or at least predictably unstable, it is important to note that higher levels of g may have the effect of extending individuals' control over their environments, such as to reduce the amount of morbidity and mortality that is uncontrollable. g may therefore have a role in making environments highly controllable, such that profound life history speed slowing becomes possible. But if environments become too mild and stable, one expects that they will no longer selectively favor g because they will lack the evolutionarily novel adaptive challenges that give those with high levels of g fitness advantages over those with lower g . This fits with observations of declining g and patterns of selection disfavoring g following industrialization in the Western world (Reeve, Heeney, & Woodley of Menie, 2018; Woodley of Menie, Figueredo, et al., 2017). A further possibility is that as g declines, the ability to maintain highly controllable environments will eventually also decline, leading to a reversal of selection for slower life history speed.

¹⁷This growth in specialized cognitive abilities seems to be reversing in certain populations, however (Pietschnig & Voracek, 2015; Woodley of Menie, Peñaherrera-Aguirre, Fernandes, & Figueredo, 2018).

Life history speed slowing resulting from both genetic and epigenetic¹⁸ processes may have pacifying effects, leading humans to become progressively more peaceful and cooperative.¹⁹ It may therefore be the ultimate substratum of the developmental dynamic that sociologists Ronald Inglehart and Christian Welzel have detailed several times (e.g. Inglehart & Welzel, 2005; see also Figueredo et al., 2017), whereby the wealth generated through industrialization shifts the existential priorities and values of populations, from a focus merely on survival and reproduction in pre-industrial conditions to interests in self-expression, freedom, fulfillment, and enjoyment in modernized conditions. Inglehart (2018) argues that these modernized values are the basis of the encompassing democratization, social tolerance, and inter-group peace (low frequency of war) characteristic not only of the post-1960s West, but increasingly the rest of the world as well.

A serious weakness in this sociological theory is that it lacks a compelling causal account of *why* values shift in this way—it appears to assume that all people are inclined to live in a basically modernized fashion, but that this is not practicable in trying material circumstances. This is not obviously true given the considerable heterogeneity in moral and social values and life history speeds apparent within modernized populations alone, the cultures of which aggressively promote modernized lifestyles, and especially the recalcitrance of some groups to the adoption of Western cultural norms in developed societies (Rindermann, 2018). Biocultural theories of spatial and temporal variation in life history speed seem to better explain patterns of variability in egalitarian values, inter- and intra-group peace, socioeconomic development, and so on, than their purely sociological/environmentalist alternatives—the latter cannot easily accom-

¹⁸Although substantially heritable, and therefore very likely less malleable (see Sesardic, 2005 and Chap. 2), at high levels of psychometric aggregation, lower-level life history factors may be quite developmentally plastic (Garcia et al., 2016), that is, responsive to environmental cues of morbidity and mortality and in/stability that alter patterns of gene expression (an epigenetic effect) such as to produce more adaptive fits between organisms and their environments (Figueredo et al., 2006). Modernized environments that are mild (low in morbidity and mortality) and stable may epigenetically bias human development toward slow life history speeds.

¹⁹The discerning reader may wonder if slowing life history speed through modernization contradicts claims of falling altruism in the West over the past two centuries made earlier. We do not think that it does, primarily because the prosociality associated with slow life history speed does not clearly involve the kind of altruism that encourages sacrifice in war. It may only promote social mutualism that has no tendency to reduce persons' *relative* intra-group fitness.

modate the uneven distribution of adherence to modern norms in highly developed nations, where inter-individual differences in relevant environmental factors are quite small (see Figueredo et al., 2017; Rindermann, 2018; Woodley of Menie, Figueredo, et al., 2017). (But as we will make clear later in this book [see Chap. 7], life history theory is not sufficient to explain modernization either.) Moreover, biocultural theories are fully compatible with recent work that persuasively argues that human capital, as opposed to any number of environmental variables, is the decisive factor determining the socioeconomic standing of nations (Rindermann, 2018)—because of its association with industriousness, life history speed is reasonably considered a human capital factor and since it is highly heritable (Figueredo et al., 2006), substantial slowing of life history speed may not be possible without genetic change.²⁰ Importantly, Welzel, in a forthcoming book (Welzel, Alexander, & Klasen, *in preparation*), acknowledges the relevance of life history theory to the question of modernization, but unfortunately sets himself the task of devising an implausible (largely) environmentalist alternative.

* * *

Even if the “riddle of the modern world” can be answered with reference to the biocultural theories outlined above, we are left with an even greater mystery: Why has the modernized world, if it has indeed enormously augmented humanity’s wealth, comfort, self-expressivity, autonomy (political, social, etc.), and the like, been met with such intense hostility, even hatred, from so many both within and outside its boundaries? The phenomenon of anti-modernism has been documented or discussed in countless academic works (e.g. Herf, 1984; Pellicani, 1998, 2003, 2012, 2014; Pinker, 2011, 2018; Stern, 1961; Versluis, 2006; Watson, 2014), and anti-modernist inclinations are apparent in the writings of a number of prominent philosophers/intellectuals of the past ~200 years, such as Fyodor Dostoevsky, Martin Heidegger, Friedrich Nietzsche, Carl Schmitt, Richard Wagner,

²⁰Note that massive increases in seemingly highly heritable phenotypes over time, such as height and IQ, most likely occur as a result of the concentration of those changes on the minimally heritable components of those phenotypes (Woodley of Menie, Figueredo, et al., 2017). The Flynn effect, the three-point-per-decade increase in IQ test performance, seems to be isolated to minimally heritable specialized abilities, the increase in which may primarily depend on the genetic slowing of life history speed (Woodley of Menie et al., 2016; Woodley of Menie, Figueredo, et al., 2017). Chapter 8 provides more information about temporal trends in intelligence.

and Max Weber. The Russian intellectual sphere of the late nineteenth and early twentieth centuries appears to have been a special hotbed of this sort of output, having spawned the revolutionary ideologies of Bolshevism and, more limitedly via the contribution of Alfred Rosenberg (whose major ideas were established during his time as a student in Russia; Gregor, 2012, p. 202), National Socialism, which have been interpreted as violent rejections of typical modernization (see, e.g. Pellicani, 2012). Poletaev and Punin's (1918) *Protiv tsivilizatsii* (*Against Civilization*) is a particularly striking example of Russian anti-modernist thought, which vigorously opposes egalitarianism, humanism, individualism, and pacified life, calling instead for a collectivist, hierarchical, and militaristic social order aggressively in service to the economic and cultural excellence of a population in its violent competition for survival and dominance with enemy groups. At a finer level of analysis, with the advance of modernization, various thinkers started to identify a new type of human, which Nietzsche named the *Letzter Mensch* ("last man") and Weber the *Berufsmensch* ("job man" or "career man," but intended to mean something more akin to "wageslave"), and which many other intellectuals, such as Wagner and Johann Wolfgang von Goethe, described in their writing. The common quality imputed to this new anthropological kind is an orientation to life that is fundamentally sublunary, that is, lacking a transcendent or spiritual aspect, or anything that might allow life to be treated with seriousness of purpose. These "last men" were taken to live only for the routinized pursuit of mere contentment, which they do in a rationalized and joyless way—without any passion or intensity whatsoever. Their desire only for bland comforts leaves them shrinking from any possibility of conflict or struggle, and eagerly willing to capitulate and compromise for the sake of peace.²¹ They have no allegiance with grand moral or existential systems that might bind whole communities in an intimately shared culture, in that these are so often cause for strife—thus "the ultimate and most sublime values have withdrawn from public life": "today it is only in the smallest groups, between individual human beings, pianissimo, that you find the pulsing beat that in bygone days heralded the prophetic spirit that swept through great communities like a firestorm and welded them together" (Weber, 2004, p. 30).

What we see in all of this is a conflict between the pacified, atomized people that predominate in modernized societies—the products of the joint action of slowing life history speed and individual-level selection—

²¹ This can be understood as perhaps the key individual-level correlate of liberalism.

and those who embodied (and in some rare cases, still embody) the groupish psychology characteristic of the Medieval Era. The remainder of this book is devoted to exploring how the contrasting natures of these two human “types” is central to the discontent surrounding modernization, and, more so, what the triumph of “modern man” indicates about the future of the West.

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