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Pandemics: waves of disease, waves of hate from the Plague of Athens to A.I.D.S.*

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Abstract

This article briefly surveys the history of pandemics in the West, contesting long-held assumptions that epidemics sparked hatred and blame of the ‘Other’, and that it was worse when diseases were mysterious as to their causes and cures. The article finds that blame and hate were rarely connected with pandemics in history. In antiquity, epidemics more often brought societies together rather than dividing them as continued to happen with some diseases such as influenza in modernity. On the other hand, some diseases such as cholera were more regularly blamed than others and triggered violence even after their agents and mechanisms of transmission had become well known.

In 2009 the so-called Mexican swine flu fuelled widespread fear of contagion but, contrary to expectation, failed to spark hatred and violence. Given the climate of mounting Mexican drug wars and U.S. antipathies towards Mexicans crossing borders and competing for jobs in a recession, this absence may strike us as especially surprising. Perhaps had mortality rates soared, the spectre of racial, class and religious prejudice may have loomed large, as with certain pandemics in the past. Are a disease’s mortality rates, its fatality rates and rapidity of dissemination, or fear of a new and mysterious disease or a strain of it the critical factors that determine whether an epidemic will trigger hate and violence? Or does the pandemic-hate nexus depend less on the character of the disease and more on underlying social and political conditions already in existence at a particular time and place? Or do any of these explanations work? To what extent were scapegoating, violence against victims and the innocent, or ‘the hate of class in times of epidemics’, to cite René Baehrel, universal or near universal aspects of big epidemics?¹ More recent historians of mentalities and medicine have thought much the same as Baehrel: hate has been the normal consequence of pandemics. According to Carlo Ginzburg, “the prodigious trauma of great pestilences intensified the search for a scapegoat on which fears, hatreds and tension of all kind could be discharged”² By the reckoning of Dorothy Nelkin and Sander Gilman: ‘Blaming has always been a means to make mysterious and devastating diseases comprehensible and therefore possibly controllable’.³ Roy Porter concurred with Susan Sontag: ‘deadly diseases’ especially when ‘there is no cure to hand’ and the ‘aetiology ... is obscure ... spawn sinister

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connotations'.⁴ And most recently, from earthquake wrecked, cholera-hit Haiti, Paul Farmer has proclaimed: 'Blame was, after all, a calling card of all transnational epidemics'.⁵

Certainly, Europe's most deadly and devastating disease, the Black Death of 1347–51, unleashed mass violence: the murder of Catalans in Sicily, and clerics and beggars in Narbonne and other regions; and especially the pogroms against Jews, with over a thousand communities down the Rhineland, into Spain and France, and eastward across large swathes of Europe eradicated, their members locked in synagogues or rounded up on river islands and burnt to death – men, women and children. Far more than any earlier pogrom against Jews in the middle ages or during the early modern period, this craze fundamentally reshaped Jewish civilization. Coolly and cruelly, courts of justice convicted Jews collectively of poisoning wells and food supplies. And these images overwhelmingly have shaped our memory of the socio-psychological consequences of medieval plague.⁶ Yet, subsequent strikes of Black Death in late medieval and Renaissance Europe did not set off waves of hatred against Jews or any other minorities.⁷ Even when plague in the second half of the sixteenth and seventeenth centuries once again sparked rumours of malicious plague spreaders, neither Jews nor other ethnic minorities were the usual targets.⁸ Instead, a wide variety of insiders and outsiders from high-ranking officers and doctors to the lowest levels of health workers – plague cleaners, cartmen and gravediggers (the *monatti* of Manzoni's *I promessi sposi*) – were singled out, accused of perpetuating the disease for a variety of reasons including self-interested gain.⁹ Given the means of transmitting plague through items of clothing (at least as understood by contemporaries), Jews who specialized in the second-hand clothing trade could have been the ones accused and then persecuted.¹⁰ In fact, chroniclers and physicians traced plague to Jews who had violated quarantine by transporting their supposedly infected goods from one town to the next.¹¹ Yet, such findings did not ignite incidents of mass violence against Jews, even within the Counter Reformation's rekindled climate of religious prejudice.

Given the claims and expectations of recent historians, perhaps as surprising is the almost total absence of blame and persecution of the poor for plague, at least until the sixteenth century or later, despite the fact that by 1400, as can be reconstructed from burial records, plague in places such as Florence had clearly become a disease of the impoverished. With few exceptions, authorities did not act on these epidemiological grounds until the plague of 1575–8, when 'tricksters, gypsies, negroes, knaves, herbalists, street-singers, comedians, whores, and similar oddballs (*e simil sorti de genti stravaganti*)'¹² were prohibited from entering towns or expelled beyond city walls to fend for themselves. During this plague, the gate guards and health officials of Milan were instructed frequently to visit the city's Jews and the poor of St. Peter's to ensure that their houses were being kept clean.¹³ But unlike the beggars and oddballs, they were not expelled or whipped and executed if they refused to go. Moreover, poverty as such was not seen as a crime or reason for persecution. In the same plague, cities such as Palermo, Milan, Padua and Venice recognized the difficulties that quarantine and blockade imposed on commerce and the employment of artisans and labourers. More than ever before, regional and city governments sought new methods for feeding, entertaining and extending medical assistance to the poor. They solicited substantial contributions from the aristocracy and other elites, and unflinchingly the sums rolled in. In

the immediate aftermath of this plague, commentators in prose and verse boasted of the colossal amounts they had raised in their cities to support the poor and by which they had collectively triumphed over the plague.¹⁴ At the end of this plague, the physician and Protomedico of Sicily, Giovanni Filippo Ingrassia, proposed that only by building a new system of public welfare could governments eradicate poverty and thereby prevent future epidemics of plague.¹⁵ As Ingrassia's sentiments suggest, and city-wide festivities across Italian cities marked, this plague ultimately brought communities together rather than ripping them apart with accusations of blame and hate of the 'Other'.¹⁶

Perhaps, as a number of historians have claimed, the newness and 'mysteriousness' of a disease is the key that unlocks the extremes of insecurity and fear to ignite scapegoating and mass violence against minorities. William Eamon, for instance, has focused on syphilis, principally in Italy at the end of the fifteenth and early sixteenth century, proclaiming that 'new diseases bring out a culture's deepest phobias'.¹⁷ He reasons: 'outbreaks of new diseases, especially epidemics, are striking visual affirmations of something gone terribly wrong in the wider social sphere. Because new diseases place severe strains on a culture, testing its ability to assimilate novelty'.¹⁸ But, despite the 'bewilderment' of doctors, syphilis's gruesome signs, pain and stench, and the tortures of the mercury cure as recounted by Joseph Grunpeck, Ulrich von Hütten and others,¹⁹ Eamon can point to nothing worse than the various names given to the disease as evidence of the blaming and persecution of minorities: the Neapolitan disease outside Naples, the French disease outside France, the Polish disease in Germany, the German disease in Poland (and later in the eighteenth century, he could have added others such as 'the disease of the Portuguese' in Japan or that of the Turks in Persia).²⁰ Neither Eamon nor others, however, have been able to find pogroms against Jews or other minorities, accused directly or indirectly because of their religious differences, lifestyles or sins, and thereby scapegoated for syphilis's spread. Still more surprising, no one has pointed to the persecution of foreign communities in an afflicted city, to soldiers or prostitutes who were in fact identified as early as 1500 as the spreaders of the disease in early modern Europe.²¹ This absence of popular rioting or harsh and cruel governmental measures against foreigners at times of syphilis outbreaks is all the more perplexing given that the disease spread at the end of the fifteenth and sixteenth centuries – moments of heightened hatred, fear and insecurity, times of war with invading foreign armies, which commoners, physicians and bureaucrats rightly perceived as transmitting this new, mysterious, gruesome, and thought to be incurable, disease.²² Even the naming itself did not necessarily imply blaming, as von Hütten makes clear in the opening chapter to his 1519 *De Morbo Gallico*:

in this modest work I shall follow the usage which has prevailed generally, and call it the French sickness; this is most definitely not because I bear any grudge against a most renowned nation which is, perhaps, the most civilized and hospitable now in existence, but simply because I fear that the majority of my readers will not understand me if I call the malady by a different name.²³

The second half of the sixteenth century, as Eamon argues, was also the moment of the Counter Reformation's triumph in Italy, a factor which, he maintains, furthered syphilis's blaming game.²⁴ Yet, from the investigation of thousands of cases in the Venetian

inquisitional records, 1580–1650, the hunt to uncover expected accusations of spreading syphilis that involved witchcraft has delivered negative results. Only four accusations occur, and not a single one of the defendants in these cases was found guilty.²⁵ To what extent, if any, syphilis led to collective violence against prostitutes or women has yet to be shown for early modern Europe. Instead, in places such as Lucca, laws on prostitution were in fact liberalized in the fifteen-thirties, and a new appellate court was created to protect prostitutes from abusive violence.²⁶ In nineteenth- or early twentieth-century Europe and the United States, cases again reached epidemic proportions, with new industrialized environments, and especially during the First World War, rekindling middle-class fears and violating sexually repressed sensibilities. In the new heightened culture of sexual morality, harsh and prejudicial laws against prostitutes were promulgated particularly in England and the United States, with new vice squads, campaigns to cleanse red-light districts and barbed-wire quarantine.²⁷ Yet, waves of hatred, at least ones that culminated in riots or pogroms, failed to materialize.²⁸ Instead, as with tuberculosis, the middle classes by the end of the eighteenth-seventies could romanticize syphilis as a disease that sparked poetic and artistic genius, and with Claude Baudelaire poets began to elevate it within a new aesthetic of the ugly.²⁹ Even earlier, a positive spin could be put on syphilis's scars: Casanova saw them as 'battle wounds' won in pleasure, 'signs of virtue and sources of glory'.³⁰ Furthermore, fear of its contamination could have a silver lining, again bringing communities together with a new political resolve to promote novel regimes of social hygiene in cities such as Rouen at the end of the nineteenth century.³¹

On mysterious, unconquered diseases, we can turn to our own times, H.I.V.-A.I.D.S., and the fear and hatred it engendered against the four or five 'H's – homosexuals, heroin addicts, Haitians, haemophiliacs and hookers – as well as against the underclass in general during the nineteen-eighties.³² In fact, A.I.D.S. has been the launching pad for historians' recent search for connecting disease and hate in the more distant past, especially with sixteenth-century syphilis and cholera in the nineteenth century, the latter unleashing class fear and hatred with organized attacks against physicians, hospital workers and government officials across eastern and western Europe and the Americas. But before the laboratory revolution of the second half of the nineteenth century all diseases were more or less mysterious, as many have continued to be afterwards, such as yellow fever until the early twentieth century, the Great Influenza of 1918, Ebola and other haemorrhaging fevers in the nineteen-seventies, S.A.R.S. initially in 2002 to at least March 2003, and new strains of E. coli in 2011. But have they all had the same social consequences as cholera with its repeat waves of collective violence? Other new and mysterious diseases have left no traces of blame or collective violence to suspected minorities, for example the so-called English Sweats, for which we still have no certain clues as to what it may have been, and which spread with invading armies of the late fifteenth and sixteenth century, resulting in death within forty-eight hours and high case fatalities.³³ The same can be said of another disease that made its debut in the late fifteenth century in Italy called 'Il tifo petecchiale'³⁴ and which modern historians have assumed was typhus. It became Europe's second most lethal disease after plague, until the recrudescence of smallpox in a more virulent strain in the late sixteenth century,³⁵ yet, neither typhus nor smallpox sparked waves of violence or hate against health officials or minorities in early modern Europe.³⁶

Does the character of a disease, then, largely determine whether a pandemic of hatred might ensue? During the late nineteenth and early twentieth century in India, bubonic plague (*Yersinia pestis*) from 1896 to 1900 ignited more social and political violence than any other disease in the subcontinent, including cholera, with major riots in Calcutta, Bombay, Puna and Kampur against British governors and health workers, even though at least nine other diseases killed in greater numbers in India during the same period. These riots, however, signal that violence provoked by pandemics should not necessarily be considered as erupting purely from irrational hatred. In these cases, the British army and medical corps blindly followed their cultural doctrines based on Western experience with plague from the Black Death to the eighteenth century, imposed strict quarantine and burnt Indians' worldly possessions, even their homes.³⁷ As the British would shortly realize, and as Indian villagers and their traditional doctors (hakims and vaidis) had learnt over centuries of exposure to this rodent disease, it did not exhibit the rapid contagion of the Black Death and generally was not spread person to person or by goods other than cargoes of grain. As one hospital after another would observe by 1900, 'the safest place to be in plague time was the plague ward' with relatives and friends freely allowed to visit, intermingle and physically comfort the afflicted.³⁸ French governors and physicians in Senegal appear never to have learnt these lessons and imposed strict quarantine that included the burning of natives' belongings and homes throughout this colony's twentieth-century plague experience, even to its last major plague attack in 1944.³⁹

Extrapolating from the perspective of the Black Death, some historians have hypothesized that big killers with rapid and efficient person-to-person contagion are the ones most likely to provoke mass violence. Pandemics of influenza from the middle ages to the present confound this explanation, even with the Great one of 1918–19, which felled more in India alone in a few months than *Yersinia pestis* has achieved globally from 1894 to the present.⁴⁰ In absolute numbers this worldwide flu struck down more than any single pandemic in world history; estimated mortalities continue to climb, from 20 to 50 to 100 million.⁴¹ That it provoked no major riots or religious and sectarian hatred is more remarkable still, given that this strain of flu bewildered the medical profession: it behaved as a new disease and was conceived as such. Mysteriously, it decimated those in good health and in early adulthood, failing to conform to flu's usual 'U' curve of death that killed predominantly infants and the elderly. Instead, in 1918–19 it triggered pneumonia much more often than with any pandemic of flu before or since and inflicted much higher fatality and mortality rates, attaining mortalities as high as 40 per cent in places such as Western Samoa and other Polynesian islands.⁴² In many regions, it was not the usual late autumn, winter, early spring disease but spread during summer months, and its onset and course were much more rapid than with any previous or subsequent flu. Like plague or cholera this pandemic rapidly transmogrified the human body in the space of a day or two.⁴³

In addition, the pandemic exploded in the midst of war frenzy and heightened nationalistic hatreds. In the United States the great influx of immigrant workers, who had fled Europe immediately before and during the war, and the upsurge of racial and class tension added further to the socio-economic toxic mix. In 1917 one of the worst race riots in U.S. history erupted in East St. Louis and lasted to 1919.⁴⁴ In February that year, a general strike was

called in Seattle, and in the autumn the famous Boston police strike sparked class hatred and collective violence, with Harvard athletes and Brahmin businessmen forming the ranks of strike breakers.⁴⁵ In 1921 whites destroyed an entire black town adjacent to Tulsa (Greenwood), burning nearly 4,000 houses and killing as many as 400 blacks, women and children included – a horrific event of U.S. history that until recently remained hidden from official histories.⁴⁶ From 1918 to 1920 terrorist bombings, cries against Bolsheviks, and a hysterical red scare spread across America. Yet, this general milieu of hate failed to influence influenza. Despite its rapid contagion, high mortalities and unusual lethality, this pandemic, as Alfred Crosby has shown for San Francisco and Philadelphia, brought communities together. With public services in Philadelphia near collapse and unburied bodies of flu victims left in heaps, elite volunteers entered the city's ghettos and opened kitchens to feed the poor; cab drivers mobilized 2,000 cars to serve as hospital ambulances; organizations cut across accustomed denominational boundaries, with Catholic nuns working in Jewish hospitals; and 'people of all kinds poured into Emergency Aid Headquarters' to volunteer as nurses, 'thrusting themselves into the presence of lethal disease'.⁴⁷ This self-sacrificing volunteerism materialized, moreover, in the absence of institutional structures and despite deep schisms then splintering this and other wartime societies at home.⁴⁸

This view of flu's engendering of 'mutual love and respect' does not emerge because scholars have pruned the evidence for a Panglossian picture. In fact, it has been the opposite: historians such as Crosby were confounded by these social and moral findings and made little of them. Similarly, after an in-depth discussion of the names of diseases, their metaphors and representations, their 'Othering', blame and guilt, Niall Johnson concurred with Susan Sontag, David Farmer, Nelkin, Gilman and others: the image of disease as essentially 'foreignness' is 'quite natural'; 'What is wrong or unnatural cannot be of us, but must be of the "other"'; and thus 'One of the most obvious expressions of such externalising of blame is when a geographical name becomes attached to a disease. The name suggests both disease and blame'.⁴⁹ Yet, when he turns to his evidence for Britain and its 'Spanish flu' of 1918–19, he is forced to contradict his theoretical authorities (though without admitting it) and conclude that this disease's naming neither blamed Spaniards in Britain nor led to any abusive action against them.⁵⁰ Instead, its name connoted only the supposed geographic origin of the disease. He then speculates that such a connection between disease naming and blaming, the persecution of the foreigner, must have been 'especially true' with sexually transmitted diseases, most notably syphilis.⁵¹ But neither Johnson nor any other historian has systematically pursued this connection beyond the assumption that such naming in and of itself was the persecution and abuse of the 'Other'.⁵²

Others have gone further, more vigorously forcing the flu evidence to fulfil the expectation that great epidemics, and especially ones of such contagion and mortality, *should* produce suspicion, hatred and social violence. In a recent account of the Great Influenza of 1918, John Barry cites a contemporary American Red Cross report and concurs: 'fear and panic of influenza, [was] akin to the terror of the Middle Ages regarding the Black Plague'. But the closest he can come to the Black Death's social horrors are photographs of crowds wearing

masks and fears that dogs carried influenza. As a result, in some towns police began shooting dogs.⁵³

Was influenza the exception? Were the underlying social, political or economic conditions otherwise more often than the character of the disease the overriding factors that determined whether a pandemic would spread into collective hatred? A recent book on cholera has argued that the political upheavals of the July Revolution of 1830 were responsible for the political violence associated with cholera in Paris two years later. Perhaps, but how do we then explain the wide arc of cholera riots that stretched from Moscow to New York, where no July Revolutions took place, and across regimes and political histories as dissimilar as those of St. Petersburg or Warsaw, on the one hand, and Edinburgh or New York, on the other?⁵⁴ In addition, an epidemic closer to the July Revolt, a severe one of influenza, swept through Paris in 1831, but it did not lead to any recorded social violence, blaming or hatred.⁵⁵

A comparison of the nineteenth-century experience of cholera and yellow fever in the United States, as with influenza, suggests that these underlying political, social and economic conditions may not have been sufficient or even pivotal. In Europe and America, cholera set off waves of social violence against doctors, hospital workers and government officials in 1831–2, despite sharp differences in social, economic and political contexts. But unlike the Black Death, cholera's dance with social loathing and rioting did not suddenly fade after its first appearance; instead, subsequent waves in the eighteen-fifties to its sixth wave in 1910–11 could continue to provoke hate and collective violence, after John Snow had mapped its mode of transmission in 1854 and even after Robert Koch cultured the bacillus in 1884.⁵⁶ Major cholera riots persisted in New York City as late as 1858, with assaults on quarantine buildings on Staten Island.⁵⁷ Threats, riots, and accusations against doctors and surgeons of spreading cholera erupted in Le Var, the region of Toulon, Arles and Auriol in southern France in 1884.⁵⁸ Riots at Puerta del Sol in Madrid endured to June 1885, when angry crowds captured the queen; similar riots spread to Catalan towns across Valencia to Murcia,⁵⁹ and major revolts occurred in Naples, towns in Puglia, and as far north as Pontedera in Tuscany in 1910 and 1911.⁶⁰ In September 1911, at Massafra, north of Taranto in Puglia, for instance, 3,000 men and women armed with spades, sticks and other farm implements attacked the Lazzaretto, liberated the cholera patients, burnt the building to the ground, and wounded a prominent government official and several doctors.⁶¹

Even the seventh wave of cholera that reached Peru in 1991 shows in muted shades the old class tensions of earlier outbreaks, although case fatalities were now well below 1 per cent.⁶² First, government ministries attacked the poor, their official propaganda labelling them 'pigs' and accusing them of spreading the disease by filthy 'pig-like' habits (*los sucios*). Then, the poor retaliated with mass demonstrations against state officials.⁶³ A year later (1992–3) cholera reached the poor and indigenous peoples of the Delta Amacuro in eastern Venezuela, killing around 500: accusations, blame and visions of intentional genocide were widespread. First, the government blamed the disease's spread on the dirty and uncivilized habits of the poor Warao, especially their diet of crabs. In turn, these indigenous populations accused the government, wealthy *Criollos*, corporations such as British Petroleum, and even the U.S. government with its bombing during the Iraq war of poisoning their water supplies and contaminating their food (especially crabs) to kill off the

poor.⁶⁴ Finally, as late as 2010, cholera has sparked conspiracies, rock-throwing crowds, and attacks against U.N. peacekeepers.⁶⁵ Since 1832, details of the cholera narrative may have changed but the deep structure of class hatred, fears of poisoning, and notions of genocide have continued to resurface.

When cholera hysteria first arose in the eighteen-thirties in places such as New York City, it did so not under clouds of heightening religious, class or racial hatred but against the backdrop of Jacksonian rationality, when class tensions and distinctions were on the wane there.⁶⁶ By contrast, yellow fever struck cities such as New Orleans in 1853 when sectionalism and racism were on the rise, leading less than a decade later to the American Civil War. Yet, this disease, still mysterious as to its causes, cures and transmission, did not suddenly pitch one group against another – citizens against immigrants, whites against blacks. Instead, like the Great Influenza, it brought communities together, encouraging charity from northern cities to the south and prompting tolerance across class and race. The absence of social loathing and violence is all the more surprising given yellow fever's patterns of immunity. Overwhelmingly, its victims were recent immigrants and the poor, as much as with cholera or any other disease of nineteenth-century America or Europe, and consequently cholera was known in the U.S. as the 'Strangers' Disease'.⁶⁷ In 1853, 7,000 of the 8–11,000 victims at New Orleans were recent immigrants, in the main the poor Irish.⁶⁸ Moreover, because of resistance gained from centuries of exposure to yellow fever in West Africa, many blacks possessed greater immunity to it – a fact that could have stirred suspicion and fuelled mounting racism and hatred, as had happened to Jews in 1348 (first alleged to have escaped plague), gravediggers and plague cleaners in the sixteenth and seventeenth centuries (who had probably built up stronger resistance to plague because of their greater exposure to it), or the unafflicted rich in Naples during its last plague of 1656.⁶⁹ Instead, because of their immunity, blacks in New Orleans and other southern cities, such as at Memphis during its devastating pandemic of 1878, were solicited to provide basic services for the mostly white yellow-fever afflicted. Blacks volunteered; racial tensions eased.⁷⁰

The yellow fever-cholera comparison dispels other single-factor solutions to discovering why some diseases provoke blame and violence, while others can bring communities together. Some historians have pointed to the sudden onslaught of diseases such as cholera, with its gruesome symptoms and course of death. On these scores little distinguishes cholera from yellow fever. Both are characterized by mysterious and seemingly random attacks, with high rates of mortality and fatality that rapidly transform the human body, even if yellow fever's course differed from cholera's. With yellow fever, chills, high fever and jaundice rapidly set in, then on the third or fourth day, after seeming recovery, all hell breaks loose: haemorrhaging through the nose, gums and stomach lining, 'digested' black blood, horrific stench, 'blazing red eyes with vividly inflamed conjunctivae' and the black vomiting⁷¹ that gives the disease its Spanish name, 'el vomito negro'.⁷² As the disturbing pages of Ernest Weiss's novel of 1931 on yellow fever's discovery portray, the hope of day three's false recovery made the sudden relapse, followed by the more horrific signs of haemorrhaging and black vomit, all the more terrifying. Even with influenza, at least in 1918–19, the transformation of the human body could be quick and horrible. Unlike other flu pandemics, this flu's course raced from backaches and sniffles to pneumonic

complication with death in a day or so: blood oozed from noses, even ears, and a cholera-like characteristic of oxygen depletion called cyanosis turned victims' faces blue.⁷³

Finally, historians have argued that the levels and intensity of violence against scapegoats have diminished with modernity – the decline of magic in Europe of the sixteenth century and the corresponding spread of naturalistic explanations.⁷⁴ Certainly, the cholera riots of the nineteenth century cannot compare with the extermination of Jews from 1348 to 1351, but perhaps no other pandemic in world history sparked by itself such widespread mass murder.⁷⁵ Does the historical record of epidemics before the sixteenth century or the Enlightenment justify the conclusion that widespread disease normally provoked social and ethical tensions, blaming and violence across pre-modern periods and then declined more or less progressively?

Perhaps the most famous of ancient plagues, one of the earliest reported with historical detail and which focuses on the social and psychological consequences of mass mortality, the Plague of Athens in 430 B.C., might suggest such a supposed pre-modern proclivity for blame. From origins in Ethiopia, it spread quickly through Egypt and Libya 'and suddenly fell upon the city of Athens', first attacking the lower city of Peiraeus. Here, Thucydides claims that the inhabitants 'even said that the Peloponnesians had put poison in their cisterns'.⁷⁶ However, no more is heard of these accusations when the plague reached the upper city of Athens, when in fact 'the mortality became much greater', levelling a third of its population.⁷⁷ This is where Thucydides begins his detailed account, first of the characteristics and symptoms of the disease, then of its social and psychological consequences – the lawlessness of the city, the inhabitants' resolve to satisfy bodily and material lust, while they could. Seeing their days numbered, Athenians lost fear of gods and law; 'their piety and impiety came to the same thing'.⁷⁸ The failure of this blaming of a foreign and belligerent 'Other' to take hold as mortalities mounted is more surprising given that the disease devastated Athens 'but did not enter the Peloponnesus to any extent'.⁷⁹

A few years later, the plague attacked the Athenians again, first their fleet, which was still at war with the Peloponnesians, and then at home. Again, the disease contributed to the Peloponnesians' military success, and blame from Athenians resurfaced. This time, however, there were no hints of Peloponnesians poisoning wells or blame aimed against any 'Other'; rather the responsibility was now placed firmly on the shoulders of Athens's own, its leader, Pericles, because of his decision to continue the devastating war with Peloponnesia and reluctance to sanction his countrymen's desires to negotiate with the Lacedaemonians.⁸⁰

Despite the fragmented survival of early registers and written sources, epidemics fill the annals of antiquity and the middle ages. R. P. Duncan-Jones calculates that from 490 B.C. to 292 B.C. Livy alone records an epidemic every eight years and from 212 to 165 B.C., the rate doubles.⁸¹ Unfortunately, Duncan-Jones gives few details of these epidemics: what they may have been (even in the vaguest terms, as with those which were confined to armies or that spread to cities and the countryside), when and where they occurred, and for our purposes how frequently they resulted in the blaming or persecuting of opposing social classes, foreigners or outcasts. Yet Duncan-Jones leaves the impression that blaming was the

usual outcome of ancient plagues: ‘Societies with no effective medical explanation for plague’, he argues, ‘could easily blame it on human agency’ (and by this he means poisoning).⁸² He mentions, however, less than a handful of such cases, and when one turns to the texts, these appear problematic.

His first case is the best: Thucydides’ report of the inhabitants of Peiraeus claiming that the Plague of Athens stemmed from biological warfare, the poisoning of their cisterns. But, as we have seen, this did not result in blaming Peloponnesians or any others once the plague gained momentum and entered upper Athens.⁸³ A second case comes from Livy: deaths among the Roman ruling class in 329 B.C. were ultimately pinned on wealthy Roman matrons, who were eventually accused, tried and convicted of poisoning. But Livy remains sceptical about any connection between the possible poisoning and these deaths: ‘I would gladly believe – and the authorities are not unanimous on the point – that it is a false story which states that those whose deaths made the year notorious for pestilence were really carried off by poison’.⁸⁴ Moreover, no matter what story is believed, this was not an epidemic that appears to have spread beyond a limited number among Rome’s ruling class; nor was it an incident spurred on by ethnic or class hatred.⁸⁵ As Livy comments, even those who considered the mortalities the result of the matrons’ poisons ‘thought [them] to be an act of madness rather than deliberate wickedness’. A third case comes from Livy in 184 B.C.,⁸⁶ when Roman rulers (principally Quintus Naevius) attempted to crush conspiracies by shepherds around Rome, accusing them of mass poisoning. But in two references to these accusations (39.41 and 40.43), Livy never uses the words disease, plague, pestilence, epidemic or the like, or hints that any epidemic disease accompanied these claims and convictions against the rebellious shepherds. Finally, Duncan-Jones cites two references from Dio Cassius’s *Roman History*, arguing that ‘plagues’ in Rome under emperors Domitian (81–96 A.D.) and Commodus (180–192) were understood by contemporaries as having been instigated by criminals using poisoned needles.⁸⁷ However, the first of these incidents, around 90 A.D., does not refer to any plague at all, rather simply that ‘some persons made a business of smearing needles with poison and then pricking with them whomsoever they would’.⁸⁸ Many of the culprits were later rounded up and punished. The second incident, nearly 100 years later, refers back to the crimes of c.90 A.D., alleging that the malevolent practices had not completely disappeared; however, now in 189 A.D. they ran parallel with a pestilence, ‘the greatest of any’ the author had known, with as many as 2,000 dying ‘in Rome in a single day’. Yet, despite these parallel developments of the same year, Dio Cassius never suggests or leads us to believe that any Romans were pinning the terrible pestilence’s origin or its spread on the criminals’ poisonous prickings.⁸⁹

To gain an idea of how often epidemics were blamed on malicious human agency, how normal it was to attack the ‘Other’ for allegedly inflicting such suffering on a population in antiquity, I have searched for plagues and epidemics to the first century A.D. using the Perseus Digital Library (Tufts University).⁹⁰ Here, I have uncovered seventy-five epidemics from the seventh century B.C. to the first century A.D.⁹¹ They do not mount in number over time, as might have been expected with the availability of greater numbers of historical sources; instead, the narrative historical evidence coincides largely with results from osteoarchaeology in antiquity (although mainly for Greece, found long ago by John Angel):

the seventh and sixth centuries B.C. appear healthy, but with increased migration, population and ‘civilization’, the fifth century became more disease-ridden and saw lowered levels of human longevity.⁹² From my initial sampling, the fifth century also records the highest frequency of epidemics. Overwhelmingly, Titus Livy’s *History of Rome (Ab Urbe Condita)* is the source of information about these diseases, containing over two-thirds of them (fifty-two of seventy-five). As a consequence, the epidemics cluster in the City of Rome or within its surrounding countryside (thirty-nine of sixty-nine that can be identified by place). Others, however, are found in Spain, Gaul, Sicily, Greece, and as far east as Armenia.⁹³ Rarely, do the authors give hints about the epidemiology, symptoms, signs or course of the disease; far less, in fact, than seen with medieval sources, especially after the Black Death. Thucydides’ detailed description of the Plague of Athens is an exception.⁹⁴

More, however, is said about the palliative, non-medical measures that populations and authorities employed to confront these plagues. Such means are described in at least twenty-five, or a third, of the cases. Yet, despite this attention to the non-medical means for ending plagues, not a single case that I have thus far found (other than the suspicion that the Plague of Athens began from the Peloponnesians’ poison) points to a population or government blaming or attacking any group in society for instigating or wilfully spreading an epidemic by poisoning or other means. Instead, these ancient populations and governments saw the cause in the heavens and sought ways to placate the gods: they consulted the Sibylline books and other sacred texts, asked advice of soothsayers, devised rituals (which, on occasion, the ancient authors called superstitious),⁹⁵ and made vows to Apollo and other gods to stage games,⁹⁶ build chapels,⁹⁷ declare work-free holy and festive days,⁹⁸ and say prayers on street corners⁹⁹ or mass prayers at all the shrines of Rome, with matrons sweeping temple floors with their hair.¹⁰⁰ In several incidences, the Romans offered sacrifices to the gods, and on two occasions these specified the inclusion of humans as well as animals.¹⁰¹ But in no case did our authors, ancient governments or their populations attribute blame to these victims or to the social or ethnic groups they may have represented.

Unlike pestilence, famine could provoke accusations, incite class hatred and lead to sedition, as Plutarch recounts in his *Life of Caius [Gnaeus] Marcius Coriolanus* at the conclusion of a war between the Volscians and Romans in the late fifth century B.C. With a scarcity of market supplies and ‘the people’ without money to buy them, leaders of the plebs ‘assailed the rich with slanderous accusations of purposely arraying the famine against them, in a spirit of revenge’. Pestilence in this case had the opposite effect: a serious pestilence in neighbouring Velitra, which left allegedly only a tenth of the population alive, was the stimulus for the Romans to end these social antagonisms. Hot-headed citizens from the populace were elected as consuls and ordered forth as colonists to the crippled Velitrae, while others were enlisted in a campaign against the Volscians, ‘contriving thus that there should be no leisure for intestine tumults, and believing that when rich and poor alike, plebeians as well as patricians, were once more united in military service and in common struggles for the public good, they would be more gently and pleasantly disposed towards one another’.¹⁰² Plague, instead of instigating class violence, came to Rome’s rescue, healing its class antagonisms. Three further fifth-century plagues again show the influence of epidemics in mitigating rather than sparking class conflict. In 435–6, pestilence caused

'fears and ravages in the City and country', which led plebs and patricians to abandon 'any thought of waging war'. According to Livy, a tribune of the plebs, Spurius Maelius, 'tried to stir up disturbances against the patricians', but failed: 'The people paid less attention to these accusations', since they now 'were much more concerned about the increasing virulence of the epidemic and the terrifying portents'.¹⁰³ Two years later class strife between plebs and patricians flared again: through persistent opposition the tribunes of the plebs prevented the consular elections from taking place. But another epidemic 'afforded a respite from these and other troubles', with temporary unity achieved by vows to Apollo to build a temple for the people's health and organized efforts to import corn from Sicily and other regions of Italy to avert the famine that otherwise would have ensued because of high plague mortalities in the surrounding countryside. Moreover, when plague and fears of famine had lifted (according to Livy), the plebs once again began to scheme in secret against the elites.¹⁰⁴ Finally, in 403 Romans were dumbfounded by a plague for which their doctors knew neither the causes nor any cures. The mysteriousness of this epidemic, however, did not lead to blaming or persecuting the 'Other', as supposedly 'always' happens 'to make mysterious and devastating diseases comprehensible and therefore possibly controllable'.¹⁰⁵ For the Romans, it did the opposite. Consulting the Sibylline books, the priests encouraged citizens to celebrate lavish festivities for eight days to propitiate the gods and

throughout the City the front gates of the houses were thrown open and all sorts of things placed for general use in the open courts, all comers, whether acquaintances or strangers, being brought in to share the hospitality. Men who had been enemies held friendly and sociable conversations with each other and abstained from all litigation, the manacles even were removed from prisoners during this period, and afterwards it seemed an act of impiety that men to whom the gods had brought such relief should be put in chains again.¹⁰⁶

For late antiquity, historians have asserted that the Pestilence of Cyprian, 252–66 A.D., coincided with tense relations between the Roman emperor and the emerging Christian community and that the epidemic sparked their persecution.¹⁰⁷ But the sources show little evidence for this. Cyprian may have been threatened with being fed to the lions for a variety of reasons, but his abundant surviving letters do not relate persecution of Christians as due to the plague named after him.¹⁰⁸ Instead the 'Great Persecution' of Christians by the Roman emperors came half a century later, after a long period of toleration that in fact began during the plague in 253 with the rule of the emperor Valerian and then his son Gallienus. By contrast, the bloody decade, beginning with an edict against Christians in 303, had no epidemic as its trigger or even in the background.¹⁰⁹

In addition, hundreds of epidemics can also be deduced from the sources of the early and central middle ages. For the period 541–767, Jean-Noël Biraben has found sixty-one episodes of plague alone in Europe and the Mediterranean, and more recently Dionysios Stathakopoulos has increased this number to 124.¹¹⁰ Yet, none of these records incidents of mass ethnic violence in this ethnically mixed world or class hatred as the consequence of plague or any other epidemic. In fact, before the Black Death, few examples of disease provoking blame or violence come to mind. Perhaps worst was the wave of mass violence and scapegoating in 1319–21, first of lepers, principally in southern France, then of clerics

and Jews – but despite the brutal mass murder of lepers, this rage depended on no new epidemic in these years.

On the other hand, despite scientific breakthroughs and the rise of naturalistic explanations for the dissemination of diseases, early modernity – the sixteenth and seventeenth centuries – saw increased blaming and violence following in the wake of late sixteenth-century plagues, with accusations and brutal execution of plague *engraisseurs*, or *untori*, at Toulouse in 1530, Geneva in 1545, Lyon in the fifteen-seventies, Rouen in 1629, and most famously at Milan in 1630. Nor did such violence with epidemic end with the nineteenth century or after the laboratory revolution, and cholera was not its only culprit. To take U.S. history alone: the Milwaukee smallpox epidemic of 1894–5 mobilized entire districts of the city to arm themselves and patrol streets against health inspectors' attempts to remove patients to hospitals. 'Mobs of Pomeranian and Polish women' – 3,000 of them, according to the local newspaper the *Milwaukee Sentinel* – were on the front lines, 'armed with baseball bats, potato mashers, clubs, bed slats, salt and pepper, and butcher knives in wait all day for the isolation hospital van'.¹¹¹ Similar uprisings had occurred at Montreal during a smallpox epidemic of 1885.¹¹² For Honolulu and San Francisco the disease that caused ethnic tensions and social violence was not cholera (which was late to arrive west of the Rockies) but plague in 1899 and 1900, even though the aetiology of the disease was by then known.¹¹³ In the late nineteenth and early twentieth century, recent Italian and Jewish immigrants were the targets of purges against filth to combat the threat of infectious diseases, especially in New York City: tuberculosis was branded the 'Jewish disease', despite the fact that because of Jews' previous exposure to it in overcrowded cities of eastern Europe, they were less susceptible to it and proportionately less afflicted by it than those born in the U.S. or in comparison with most other recent immigrants.¹¹⁴ More ironic still, because of accusations of being filthy, given their living conditions in some of New York City's worst slums, Italians were blamed for the polio epidemics of 1907 and 1916 (a disease of cleanliness).¹¹⁵

These incidents of violence, however, pale by comparison with that provoked by one disease and the vilification of its supposed carriers in twentieth-century Europe: typhus. Not since the Black Death in 1348 had any disease roused such victimization, sparking mass murder. As in 1348–51, from the late nineteenth century to the Holocaust, Jews were the targeted victims, but again as in 1348, they were not the only ones blamed and killed for spreading disease. To quell fears of lice-borne pathogens killing German colonists in the East, and ultimately of destroying Germany and Western civilization, German governments from the late nineteenth century to the Nazis isolated, quarantined and attacked the poor, especially Jews from Russia and eastern Europe. They did this first with the development of new chemicals and gases to cleanse bodies and defend borders, and then with the Nazis to exterminate the supposed human carriers along with the rodents and lice: notions of public hygiene cross-fertilized with residual hatred of Jews.¹¹⁶ Nazis were not, however, the first to justify genocide by tying it to typhus and hygienic control. Instead, it was the twentieth-century's first genocide, the Armenian massacre of 1915–19, that led the Ottoman state, with Turkish physicians in the vanguard, to plan and execute the mass murder of typhus's supposed human carriers.¹¹⁷ In at least one respect, the cold clinical justification for

exterminating the typhus-carrying Jew – ‘not a question of ideology’ but ‘a matter of cleanliness’ in Himmler’s words¹¹⁸ – was more irrational than the pogroms of 1348–51. In the latter case, a mysterious pandemic of unprecedented proportions had sparked the action, while for the former, the aetiology of the disease had been discovered on the eve of the Armenian genocide, and by the time of the Nazi intensification of isolation and chemical and gas programmes for disinfection, followed by the genocide of the *Judenfieber* carrier, typhus had been long in decline in Germany. By the nineteen-thirties incidences of epidemic outbreak had become the creation of the Nazis themselves, confined principally to local occurrences within Jewish ghettos that the Nazis had starved and reduced to horrific insanitation.¹¹⁹ Curiously, historians’ search for pandemics and blame over the long term has left these Turkish and German histories of typhus completely out of the hate equation.

After the defeat of Nazi Germany, I have thus far found few examples of epidemics sparking the spread of mass hatred, at least with collective violence, riots and pogroms. More global research is needed. The violence spurred even by A.I.D.S., at least in comparison with that sparked by smallpox, cholera, plague and especially typhus during the nineteenth and early twentieth century, was largely limited to fiery, abusive speech, denial of entry to schools or the workplace, and cases of individual assault,¹²⁰ rather than riots and collective acts of physical violence.¹²¹ That epidemic disease throughout most of the twentieth century (with the exception of Nazi Germany and its policies towards the East and particularly the *Ostjuden*) did not act as a fuse to ignite mass hate is enigmatic. It cannot easily be explained by any new rationalism or naturalistic understanding of the world, as the exponential increase of mass religious hatred, violence to minorities, ethnic cleansing and genocide all too sadly reveals.¹²²

To date, studies on social violence, hate and disease have focused on less than a handful of pandemics – drawing parallels at times between the Black Death and cholera, in other places between syphilis and A.I.D.S., and on occasion two or three other diseases. No one has gone beyond these few pandemics to chart comparatively the patterns of disease and hate. No one has compared the levels of violence or intensity of hate with different pandemics in different places and periods; instead, epidemics’ potential for hate has been levelled, so that blaming, perhaps but not necessarily implicit in popular names given to diseases, is placed on the same plane as the genocide of Jews across vast regions of Europe during the Black Death and again of Eastern Jews with twentieth-century typhus. Furthermore, no one has factored to what extent certain characteristics of diseases – rates of mortality, rates of fatality, quickness of death, newness of a disease, mysterious causes, degrees of contagion, gruesomeness and horror of signs and symptoms – determine whether a wave of collective hate and violence is likely to ensue. Instead, both in the popular imagination and the scholarly literature, violent hatred and even pogroms are held to have been pandemics’ normal course, supposedly engrained in timeless mental structures – to use René Baehrel’s words again, ‘certaines structures mentales, certaines constantes psychologiques’.¹²³ Further examples of such scholarly opinion can easily be provided,¹²⁴ but were these the constant consequences of epidemics? According to my survey thus far, they were not: the Black Death, typhus in late nineteenth- and twentieth-century eastern Europe, plague in the sixteenth and seventeenth centuries (although only in some areas), cholera in places in the

eighteen-thirties, in Italy as late as 1911, in Peru and Venezuela to the nineteen-nineties, in Haiti to today, sometimes smallpox, sometimes *Yersina pestis*, and perhaps to some extent A.I.D.S. in our own time were exceptions but hardly the rule. No matter how contentious the underlying social and political circumstances, how high the body counts, how gruesome the signs and symptoms, how fast or slow the spread or course of a disease, pandemics did not inevitably give rise to violence and hatred. In striking cases they in fact did the opposite, as witnessed with epidemics of unknown causes in antiquity, the Great Influenza of 1918–19 and yellow fever across numerous cities and regions in America and Europe. These epidemic crises unified communities, healing wounds cut deep by previous social, political, religious, racial and ethnic tensions and anxieties. On occasion, it is true, pandemics did split societies with accusations and violence. Historians, doctors and psychologists have yet to map when and where they happened, to measure their intensities, or to examine the complex interaction of factors to explain why some diseases were more or less persistently the exceptions. They have yet to raise the questions within a comparative framework of world epidemics.¹²⁵ It is now time to construct the databases of disease and hate.

References

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2. Ginzburg, C. Deciphering the sabbath. In: Ankarloo, B.; Henningsen, G., editors. *Early Modern European Witchcraft: Centres and Peripheries*. Oxford: 1990. p. 121–38. p. 124
3. Nelkin D, Gilman SL. Placing blame for devastating disease. *Social Research*. 1988; 1v:362–78. repr. in Mack, A., editor. *In Time of Plague: the History and Social Consequences of Lethal Epidemic Disease*. New York: 1991. This article has had an authoritative impact on others investigating scapegoating and the social-psychological consequences of epidemics (see, for instance, Craddock, S. *City of Plagues: Disease, Poverty, and Deviance in San Francisco*. Minneapolis, Minn.: 2000. p. 101 Echenberg, M. *Black Death, White Medicine: Bubonic Plague and the Politics of Public Health in Colonial Senegal, 1914–45*. Portsmouth, N.H.: 2002. p. 130 Eamon W. *Cannibalism and contagion: framing syphilis in Counter-Reformation Italy*. *Early Science and Medicine*. 1998; iii:1–31. 21. [PubMed: 11620327]
4. Porter, R. The case of consumption. In: Bourriau, J., editor. *Understanding Catastrophe*. Cambridge: 1992. p. 179–203. p. 179
5. Farmer, P.; Mukherjee, JS. Haiti after the Earthquake. New York: 2011. p. 191 Similar remarks can easily be gathered; for instance, Irwin, Julia. 'Throughout history, societies have created scapegoats ... the innocent ... to rationalize and explain the origins and course of disease outbreaks' ('Scapegoats and epidemic disease'. In: Byrne, JP., editor. *Encyclopedia of Pestilence, Pandemics, and Plagues*. Vol. ii. Westport, Conn.: 2008. p. 618–20. p. 6182 vols.
6. On these massacres and their demographic ramifications, see Cohn SK. *The Black Death and the burning of Jews*. *Past & Present*. 2007; cxvii:3–36.
7. An exception occurred for parts of Poland around Kraków and Miechów in 1360 during the second wave of plague. However, these were areas that had escaped plague in 1348–51. In effect, 1360 was these regions' 1348 (see Cohn, SK. *The Black Death Transformed: Disease and Culture in Early Renaissance Europe*. Oxford: 2002. p. 232
8. After 1349, the only incidents of anti-Semitism sparked by plague in Italy that Preto, Paolo. *Peste e società a Venezia nel 1576*. Vicenza: 1978. p. 52–3. was able to uncover were in Udine in 1511, when Jews were chased from town after the cessation of plague, and in 1556 when Jews were accused of bringing the plague to Padua. In contrast, he cites the example of the Jewish physician,

David de Pomis, whose publications during the Venetian plague of 1576 received acclaim from the Venetian state and the public alike.

9. For this recrudescence of terror, suspicion and persecution associated with plague, see Naphy, WG. *Plagues, Poisons and Potions: Plague-Spreading Conspiracies in the Western Alps c.1530–1640*. Manchester: 2002. who finds that the first signs of scapegoating during plague at Geneva were sparked only in 1545 (p. 57); Bercé, Y.-M. *Les semeurs de peste*. In: Bardet, J.-O.; Foisil, M., editors. *La vie, la mort, la foi, le temps: mélanges offerts à Pierre Chaunu*. Paris: 1993. p. 85-94. and de La Roche-Flavin, B., editor. *Arrests notables du Parlement de Tolose donnés et prononcés sur diverses matières civiles, criminelles*. Toulouse: 1617. p. 200-12. For Italy, see Preto, P. *Venezia e la peste 1348/1797*. Venice: 1979. *Le grandi pesti dell'età moderna 1575–7 e 1630–1*; p. 125-6. Preto. *Peste e società a Venezia*. ch. 2 and especially, Preto, P. *Epidemia, paura e politica nell'Italia moderna*. Bari: 1987. Pastore, A. *Crimine e giustizia in tempo di Peste nell'Europa moderna*. Bari: 1991. Farinelli, G.; Paccagnini, E., editors. *Processo agli untori*. Milan: 1988. According to Preto, *Epidemia, paura e politica*, 'the obsession with finding the causes and spread of plague by poisoning or other diabolic and artificial means was wholly absent from the fifteenth and most of the sixteenth century, not only in Italy but across Europe' (p. 10). See also Slack, P. *The Impact of Plague in Tudor and Stuart England*. 2nd edn.. Oxford: 1990. p. 293-4. and Slack, P.; Mack. *Responses to plague in early modern Europe: the implications of public health*. p. 117 who finds such scapegoating rare in England. For Italy, moreover, the plagues of the late Cinquecento amounted only to anticipations of what would become much more widespread during Italy's last early modern plagues of the 1630s and 1656–7. On these late 16th-century anticipations, see Cohn, SK. *Cultures of Plague: Medical Thinking at the End of the Renaissance*. Oxford: 2010. p. 3p. 101p. 119p. 271-2. p. 277
10. For accusations of Jews spreading the plague through their trade in second-hand goods during the Italian plague of 1575–7, see Centorio, Asciano; Ortensi, Degli. *I Cinque Libri degli Avvertimenti ordini, gride, et editi*. Venice: 1579. Besozzi, L. *Le magistrature cittadine milanesi e la peste del 1576–7*. Biblioteca dell'Archivio Storico Lombardo, ii; Bologna: 1988. p. 23 and Cohn. *Cultures of Plague*. p. 110 There is, however, no evidence that Centorio Degli Ortensi's accusations led to any pogroms against the Jews in Milan or Mantua, where he claimed they had sold their contaminated goods. Moreover, the only suggestion of any threat to the Jews during this plague comes from Padua, where its podestà made a proclamation on 30 July 1576 against any who might molest Jews Preto. *Peste e società*. p. 53
11. For another example, see Cohn. *Cultures of Plague*. p. 254
12. In addition to Centori Degli Ortensi, p. 21, see Ingrassia. *Avvertimenti contra la peste raccolti dalli scritti di Gio. Filippo Ingarsia [sic], Protomedico di Sicilia*. Genoa: 1579. fo. IV Alessandri, Francesco. *Trattato della peste et feбри pestilenti, tradotto di latino in volgare*. Turin: 1586. fo. 3 Irighio, Alexandro. *Historia contagiosi morbi, qui Florentiam populatus fuit anno 1630*. Florence: 1633. fo. 24r *Gride diverse della sanità per la peste del 1576–1577*. Vol. ix. Biblioteca Nazionale Braidense; Milan: 1576. AO.I.14 [Duchy of Milan]; p. 11 doc. no. 95 Somenzi, Tommaso. *De morbis, qui per finitimos populus adhuc grassantur*. Cremona: 1576. fo. 46r
13. Centori Degli Ortensi, p. 21
14. For this discussion of plague and the poor, see Cohn. *Cultures of Plague*. ch. 7
15. See Ingrassi. *Parte quinta di Giouan Filippo Ingrassia del pestifero, & contagiosomorbo Palermo: 1577*. 's second, rarer, and little discussed tract on the 1576 plague in Sicily. a significant portion of which concerned the prevention of future plagues. See also the discussion of this work in Cohn. *Cultures of Plague*. p. 236-7.
16. On these ceremonies of unity, conciliation, praise of God, and officers of the state, see Hopkins, A. *Santa Maria della Salute: Architecture and Ceremony in Baroque Venice*. Cambridge: 2000. Fenlon, I. *The Ceremonial City: History, Memory and Myth in Renaissance Venice*. New Haven, Conn.: 2007. Bamji, A. *Religion and disease in Venice, c.1620–1700*. 2007. unpublished University of Cambridge Ph.D. thesis and Cohn. *Cultures of Plague*. ch. 9
17. Eamon, p. 1.
18. Eamon, p. 2.
19. Hütten, Ulrich Von. *De guaiacimedicina et morbogallico liber unus*. Maintz: 1519. Quétel, C. *History of Syphilis*. Braddock, J.; Pike, B., translators. Cambridge: 1900. ch. 1, 'A terrifying

- affliction (1495–1519) Arrizabalaga, J.; Henderson, J.; French, R. *The Great Pox: the French Disease in Renaissance Europe*. New Haven, Conn.: 1997. p. 25-7.
20. Nelkin; Gilman. Placing blame for devastating disease. p. 43
 21. Quétel, p. 66.
 22. The early hospitals to treat the syphilitic were called hospitals of the ‘incurabili’. On these see, Arrizabalaga, Henderson and French, ch. 7.
 23. Von Hütten, fo. 4r–v, and translated in Quétel, p. 27 Moreover, Eamon fails to note that the disease also carried many other names at the end of the 15th and during the 16th and 17th centuries that were not associated with other nations and without any suggestion of blame, most prominently the ‘Great Pox’, ‘les grosses pocques’, ‘la grandegorre’, ‘la pancquedenarre’, ‘les fiebvres Saint–Job’. Also, in France, it was named after towns heavily afflicted by the disease but did not present overtones of blame: ‘peste de Bordeaux’, ‘mal de Niort’, ‘mal du Carrefour de Poitiers’, ‘gorre de Rouen’ (see Quétel, pp. 10, 13).
 24. Eamon, p. 25.
 25. McGough LJ. Demons, nature, or God? Witchcraft accusations and the French disease in early modern Venice. *Bull. Hist. Medicine*. 2006; lxxx:219–46.
 26. Corradi A. Nuovi documenti per la storia delle malattie veneree in Italia dalla fine del quattrocento alla metà del cinquecento. *Annali Universali di Medicina e Chirurgia*. 1884; cclxix:289–386. and Hewlett, M. The French connection: syphilis and sodomy in late-Renaissance Lucca. In: Siena, K., editor. *Sins of the Flesh: Responding to Sexual Disease in Early Modern Europe*. Toronto: 2005. p. 239-60.
 27. On the school of Lombroso and the medical and scientific prejudice against prostitutes and the spread of syphilis, see Corbin, A. La grande peur de la syphilis. In: Bardot, J-P., editor. *Peurs et terreurs face à la contagion: choléra, tuberculose, syphilis. XIXe–XXe siècles*. Paris: 1988. p. 328-48. p. 345-7. others for the connection between prostitution and syphilis made in 19th-century morality plays, see Hays, JN. *The Burdens of Disease: Epidemics and Human Response in Western History*. New Brunswick, N.J.: 1998. p. 65 according to Brandt, A.; Mack. Aids and metaphor: toward the social meaning of epidemic disease. p. 91-110. p. 98-103. calls were made to restrict the immigration of the lower classes to the U.S. at the end of the 19th century because of the fear of venereal diseases, despite the absence of any statistics showing higher rates among these social groups of immigrants, and in the early 20th century, campaigns to close red-light districts and ‘the crackdown on prostitutes constituted the most concerted attack on civil liberties in the name of public health in American history’ (p. 102). See also his *No Magic Bullet: a Social History of Venereal Disease in the United States since 1880*. New York: 1985. Baldwin, P. *Disease and Democracy: the Industrialized World Faces AIDS*. Berkeley, Calif.: 2005. p. 2 and Quétel, ch. 9.
 28. In France, syphilitic contamination was never made a crime, even under the Vichy regime (Quétel, p. 210).
 29. King M. Inspiration und Infektion. Zur literarischen und medizinischen Wissensgeschichte von “auszeichnender Krankheit” um 1900. *Internationales Archiv für Sozialgeschichte der deutschen Literatur*. 2010; xxxv:61–97. and an extended and revised version, *Literature and Medicine*. On Tuberculosis, syphilis and creativity myths in literature and medicine around 1900; p. 16-19. forthcoming in See also, Quétel, pp. 170–5.
 30. Cited in Quétel, p. 96 Casanova’s afflictions probably were gonorrhoea and not syphilis (which were seen as the same until the end of the 18th century).
 31. Corbin, p. 334 Similarly, towns in the 16th century, beginning with Strasbourg, took collective responsibility for pox victims, establishing hospitals to treat them with the new and expensive procedures using guaiac, all at the city’s expense (Quétel, p. 65). Also, see Arrizabalaga, Henderson and French, ch. 8, for the immense sums papal Rome spent on treatment, care and new hospitals for the syphilitic poor. Such silver linings for health reform and public works were certainly not always the case, even with diseases known to spread through contaminated water, squalid housing and poor sanitation, as with cholera. Despite initial protests to clean up the lower east side of New York and reform public health following the typhus and cholera epidemics in the city in 1892, the movement quickly lost its momentum ‘and the pre-existing conditions of squalor

- and filth there prevailed' Markel, H. Quarantine! East European Jewish Immigrants and the New York City Epidemics of 1892. Baltimore, Md.: 1997. p. 128
32. On the stigmatized 'club des 4 H', see Grmek, MD. Histoire di sida: début et origine d'une pandémie actuelle. 2nd edn.. Paris: 1990. ch. 4. Despite the vast literature on A.I.D.S. and social prejudices against homosexuals, heroin addicts, Haitians, hemophiliacs and hookers, I know of no published catalogue of mass acts of violence provoked by fear of A.I.D.S. against these groups. Beyond words, often only two incidents are recalled: the torching of the home of the hemophiliac Ray brothers in Arcadia, Florida, forcing their family to leave town in 1987, and the parents' protest and boycott of elementary schools in Queens, New York because of a court decision to allow an anonymous H.I.V.-seropositive child to attend school in Sept. and Oct. 1985. The second case, however, despite prejudices and lack of scientific awareness of the transmission of H.I.V., was in the main peaceful and fought in the courts: Samuel Granier vs. the board of education of the City of New York (see Nelkin, D.; Hilgartner, S. Disputed dimensions of risk: a public school controversy over AIDS. In: Bayer, R.; Fox, DM.; Willis, DP., editors. AIDS: the Public Context of an Epidemic. Milbank Quarterly. Vol. lxiv. Cambridge: 1986. p. 118-42.
 33. On the waves of 'English Sweats' in 1485, 1508, 1517, 1528 and 1551, and its possibility of being a strange and unique form of influenza, see Alchon, S. Austin A Pest in the Land: New World Epidemics in a Global Perspective. Albuquerque, N. Mex.: 2003. p. 25 on the 'Sweats' as probably a virus, see Burnet, M. Natural History of Infectious Disease. 3rd edn.. Cambridge: 1962. p. 248. Kiple, KF.; Ornelas, K. Coneé Sweating sickness: an English mystery. In: Kiple, KF., editor. Plague, Pox and Pestilence. 1997. p. 156-9. and Carmichael, A. Sweating sickness. In: Kiple, KF., editor. The Cambridge World History of Human Disease. Cambridge: 1993. p. 1023-5.
 34. Pedicino, V.; Morricone, A. 'Il tratto sui vaiolo e i morbili' e 'L'espistola sul tifo pettecchiale' di Iacopo Tronconi. Rome: 1961. p. 39 and the Milanese Libri dei Morti for 1477 and 1478 in Milan, Archivio di Stato, Fondo popolazione, parte antica, no. 75. For analysis of these records – comparisons in age-structure of victims, symptoms, seasonality and course of disease, see Alfani G, Cohn SK. Nonantola 1630. Anatomia di una pestilenza e meccanismi del contagio (con riflessioni a partire dalle epidemie milanesi della prima Età Moderna). Popolazione e Storia. 2007; ii:99–138.
 35. According to Carmichael AG, Silverstein AM. Evidence for epidemics of smallpox apart from plague is exceedingly rare in the centuries just before 1600' ('Smallpox in Europe before the 17th century: virulent killer or benign disease?'. Jour. Hist. Medicine and Allied Sciences. 1987; xlii: 147–168. 156.
 36. Thus far I have not found incidences of these diseases spurring social violence or stigmatization of victims until the 2nd half of the 19th century.
 37. See Chandavarkar, R.; Ranger; Slack. Plague panic and epidemic politics in India, 1896–1914. p. 203-40. Catananch, IJ. Plague and the tensions of empire: India 1896–1918. In: Arnold, D., editor. Imperial Medicine and Indigenous Societies. Manchester: 1988. p. 149-71. Klein I. Plague, policy and popular unrest in British India. Modern Asian Stud. 1988; xxii:723–55. and Cohn. The Black Death Transformed. p. 25p. 38 for other references
 38. Bannerman WB. The spread of plague in India. Jour. Hygiene. 1906; vi:179–211. 180. [PubMed: 20474259] and hospital reports in Gatacre, WF. Report on the Bubonic Plague in Bombay, 1896–7. Vol. i. Bombay: 1897. p. 51p. 942 vols
 39. Echenberg. Black Death, White Medicine. p. 242
 40. For the rapid spread of diseases with coughs and other flu symptoms in the early modern period to the 20th century, see Potter CW. A history of influenza. Jour. Applied Microbiology. 2001; xci: 572–9. Pyle, GF. The Diffusion of Influenza: Patterns and Paradigms. Totowa, N. J.: 1986. p. 23-2. Crosby, AW., Jr.; Kiple. Plague, Pox and Pestilence. Influenza: in the grip of the grippe; p. 148-53. Hirsch, A. *Handbook of Geographical and Historical Pathology*, i: *Acute Infective Diseases*. Creighton, C., translator. 1883. p. 36ff. Cohn SK, Alfani G. Households and plague in early modern Italy. Jour. Interdisciplinary History. 2007; xxxviii:177–205. 184–6. and Quinn, T. Flu: a Social History of Influenza. 2008. chs. 2–3
 41. Reeves C, Byrne. Influenza. i:304–13. and Quinn.
 42. Johnson, N. Britain and the 1918–19 Influenza Pandemic: a Dark Epilogue. 2006. p. 122

43. Among other places, see Crosby, AW. *America's Forgotten Pandemic: the Influenza of 1918*. 2nd edn.. Cambridge: 2003. first published as *Epidemic and Peace: 1918*. Westport Conn.: 1976.
44. Crosby. *America's Forgotten Pandemic*. p. 65
45. Crosby. *America's Forgotten Pandemic*. p. 116
46. Simons B. As survivors dwindle, Tulsa confronts past. *New York Times*. Jun 19.2011
47. Crosby. *America's Forgotten Pandemic*. p. 82
48. Crosby. *America's Forgotten Pandemic*. chs. 4–7
49. Johnson, pp. 152–3.
50. Johnson, p. 159.
51. Johnson, p. 153.
52. For syphilis in the 16th century, see above.
53. Barry, JM. *The Great Influenza: the Story of the Deadliest Pandemic in History*. 2nd edn.. New York: 2005. p. 350
54. Kudlick, CJ. *Cholera in Post-Revolutionary Paris: a Cultural History*. Berkeley, Calif.: 1996. the literature on cholera and its stimulus for hate and violence is immense, probably larger than for any other disease. See, for instance, Baehrel, 'La haine de classe en temps d'épidémie'; Briggs A. Cholera and society in the 19th-century. *Past & Present*. 1961; xix:76–96. Rosenberg, CE. *The Cholera Years: the United States in 1832, 1849, and 1866*. Chicago, Ill.: 1962. McGrew, RE. *Russia and the Cholera 1823–32*. Madison, Wis.: 1965. Bourdelais, P.; Raulot, J-Y. *Une peur bleue: histoire du cholera en France 1832–54*. Paris: 1987. Morris, RJ. *Cholera 1832: the Social Response to an Epidemic*. New York: 1976. Durey, M. *The Return of the Plague: British Society and the Cholera, 1831–2*. Dublin: 1979. Bourdelais, P.; Bardot. *Peurs et terreurs face à la contagion. Le cholera: présentation*; p. 17-42. p. 37-9. Vincent, B.; Bardot. *Peurs et terreurs face à la contagion. Le cholera en Espagne au XIXe siècle*; p. 43-55. Oris, M.; Bardot. *Peurs et terreurs face à la contagion. Choléra et hygiène publique en Belgique. Les réactions d'un système social face à une maladie sociale*; p. 83-125. Evans, RJ.; Ranger; Slack. *Epidemics and revolutions: cholera in 19th-century Europe*. p. 149-73. Snowden, F. *Naples in the Time of Cholera 1884–1911*. Cambridge: 1995. Assael, BM. *Il favolo soinnesto: storia sociale della vaccinazione*. Bari: 1995. p. 115-16. Simonetti, N.; Sangiorgi, M. *Il colera in Puglia dal 1831 ai giorni nostri*. Fasano: 2003. Baldwin, P. *Contagion and the State in Europe, 1830–1930*. Cambridge: 1999. p. 62-5. for cholera riots in eastern Europe and Russia; and McLean, D. *Public Health and Politics in the Age of Reform: Cholera, the State and the Royal Navy in Victorian Britain*. 2006.
55. Quinn, pp. 104–5.
56. See above, n. 50.
57. Rosenberg. *The Cholera Years*. p. 203. Serious threat of violence persisted to the last wave of cholera in New York City in 1892, when the quarantined passengers aboard the *Normannia* tried to disembark on Fire Island. At the docks 'an enraged mob of several hundred residents from Islip armed with muskets, guns, rifles' defied the health office of the port of New York. The safe passage of the quarantined could only take place after the arrival of two regiments of both the national guard and the naval reserve. Russell, CE. *These Shifting Scenes*. New York: 1914. p. 254 and Markel, pp. 116–18).
58. Baehrel. *Epidémie et terreur*. p. 114-15. p. 128
59. Vincent, pp. 54–5.
60. Snowden, pp. 154, 237–46.
61. Simonetti and Sangiorgi, p. 189; 2,000 by another account.
62. Cueto, M. Stigma and blame during an epidemic: cholera in Peru, 1991. In: Armus, D., editor. *Disease in the History of Modern Latin America: from Malaria to AIDS*. Durham, N.C.: 2003. p. 268-89. p. 269
63. Cueto, pp. 281–3.
64. Briggs CL. Theorizing modernity conspiratorially: science, scale, and the political economy of public discourse in explanations of a cholera epidemic. *American Ethnologist*. 2004; xxxi:164–87. 164–72.
65. Farmer, ch. 7.

66. Rosenberg. *The Cholera Years*. p. 65
67. On its patterns of immunity and effects on immigrant populations, see Pierce, JR.; Writer, J. *Yellow Jack: how Yellow Fever Ravaged America and Walter Reed Discovered its Deadly Secrets*. Hoboken, N.J.: 2005. p. 15p. 38p. 47
68. Duffy, J. *Sword of Pestilence: the New Orleans Yellow Fever Epidemic of 1853*. Baton Rouge, La.: 1966. 'Even at the peak of the outbreak the newspapers maintained an incredibly calm and objective approach to local news ... they refrained from excessive criticism (p. 93) ... In view of the almost universal assumption by the middle and upper classes that the poor brought on disease by their dissolute, immoral, and intemperate lives, one can only assume that the yellow fever had had a sobering effect upon the poor or else had made the upper classes more tolerant!' (p. 95).
69. Pullan, B.; Ranger; Slack. *Plague and perceptions of the poor in early modern Italy*. p. 101-23.p. 117
70. For New Orleans, 1853, see Pierce and Writer, p. 38; and for Memphis in the epidemic of 1878, see Humphreys, M. *Yellow Fever and the South*. New Brunswick, N.J.: 1992. p. 7 Crosby, MC. *The American Plague: the Untold Story of Yellow Fever. The Epidemic that Shaped our History*. New York: 2006. p. 79 alleges that blacks' immunity 'had been fuel for racism for decades' but supplies no evidence for it.
71. Craddock, p. 66; Pierce and Writer, p. 7; see Weiss, Ernst. 's vivid description. In: Rotenberg, J., translator. *Georg Letham: Physician and Murderer*. Brooklyn, N.Y.: 2010. p. 278 and elsewhere
72. Pierce and Writer, p. 7
73. Quinn, pp. 131–3. According to contemporary doctors working at Fort Devens when this pandemic exploded in 1918, such signs had never been seen with influenza.
74. For instance, Snowden, p. 151, relying on Thomas, K. *Religion and the Decline of Magic: Studies in Popular Belief in 16th and 17th Century England*. 1971.
75. Cohn, 'The Black Death and the burning of Jews'.
76. Thucydides. *History of the Peloponnesian War*, i: *Books I and II*. Smith, C. Forster, translator. 1928. 2.48 (i. 343) and see Longrigg, J.; Ranger; Slack. *Epidemic, ideas and classical Athenian society*. p. 21-44.p. 21-2.
77. Thucydides, 2.48 (i. 343).
78. Thucydides, 2.53 (i. 353).
79. Thucydides, 2.53 (i. 355).
80. Thucydides, 2.57–59 (i. 359–61).
81. This would amount to about 36 epidemics mentioned by Livy. According to Duncan-Jones RP. 'Major epidemics are so frequent in Roman annalists that contemporaries must have found them relatively commonplace' ('The impact of the Antonine plague'. *Jour. Roman Archaeol.* 1996; ix: 108–36. 109. Actually, overwhelmingly, they come from one author alone, Titus Livy (59 B.C.- A.D. 17) and his massive *Ab Urbe Condita*, even with only 35 of 142 books now extant.
82. Duncan-Jones, p. 115.
83. Duncan-Jones, p. 115.
84. Livy, 8.18.
85. Duncan-Jones, p. 115.
86. Duncan-Jones, p. 115.
87. Duncan-Jones, p. 115 The passages are 67.11.6 and 72.14.3–4; the second one should be 73.14.3–4.
88. Translation from Carey E. *Dio's Roman History*. 1914–27; viii:343. 9 vols.
89. *Dio's Roman History*. ix:101.
90. [accessed 3 Aug. 2011] Perseus 4.0. last updated in 2007 at <<http://www.perseus.tufts.edu/hopper/>> The Perseus collection, however, is weak in the number of Greek and Roman texts it has thus far downloaded for late antiquity. For instance, it does not include the histories of Cassius Dio (c.155–c.229) or Paolo Orosius (ca. 383–ca. 420), which recorded several epidemics in the first centuries after Christ. I used keyword searches (epidemic, pandemic, plague, pestilence, pestilential, disease, poison and variants of these words). Individual deaths, metaphorical usage and legendary plagues that are difficult to pin down chronologically, such as ones in the Bible,

were discarded from my tallies. I have supplemented the Perseus searches with ones for Livy in the Brepols Library of Latin Texts (A), finding six further epidemics [accessed 26 Apr. 2012] <http://clt.brepols.net/llta/Default.aspx> and have added two from skimming through Paulus Orosius, *Seven Books of History Against the Pagans*.

91. Seventh century B.C. (2); 6th (0); 5th (19); 4th (14); 3rd (12); 2nd (16); 1st (2); 1st century A.D. (5); and five in which the date cannot be determined.
92. Grmek, MD. *Diseases in the Ancient World*. Muellner, M.; Muellner, L., translators. Baltimore, Md.: 1983. ch. 3
93. Nineteen of these epidemics are described as breaking out and being confined to military camps or within navies.
94. Another exception is Livy's description of an epidemic in 174–3 B.C. (41.22), which began with cattle and spread to humans, who 'seldom survived the seventh day', and those who did suffered 'a long and tedious illness, which generally took the form of a quartidian ague'. The victims were principally slaves, 'their unburied bodies lay scattered in all the streets'. According to Livy, dogs and vultures would not touch the contaminated corpses. In a few instances, Livy shows an awareness of certain diseases as having been highly contagious and even suggests some understanding of immunity as with an epidemic of 212 B.C. (25.26 and copied almost verbatim by Pliny the Elder, *The Natural History*, 9.73) that broke out in the Carthaginian and Roman camps while they were at war with one another in Sicily. He observes that those nursing the sick and others in contact with them became infected; the native Sicilians were the least affected by the epidemic, then came the Romans, who had been in Sicily and had acclimatized longer to its conditions than the Carthaginians, and lastly the Carthaginians. Also, on an elementary sense of immunity, see Ovid, *Metamorphoses*, 7.453; and Thucydides' famous description of the plague of Athens in *History of the Peloponnesian War*, 2.47 to 2.54 (i. 341–57). In addition to seeing the spread of the Athenian plague through those who nursed the ill, Thucydides most clearly notes the pattern of acquired immunity: 'But still it was more often those who had recovered who had pity for the dying and the sick, because they had learnt what it meant and were themselves by this time confident of immunity; for the disease never attacked the same man a second time, at least not with fatal results' (2.51, i. 351).
95. See Livy, 7.2 for a plague of 364 B.C. in which a new rite of 'scenic representations' was introduced to placate the wrath of the gods.
96. Livy, 4.25, 27.23, 27.4.
97. Livy, 4.30.
98. Livy, 1.31, 40.19, 41.21, 41, pos. 256.
99. Livy, 27.24.
100. See Livy, 3.7 (ii. 24–8). In 462 B.C. 'finding no help in man' to stop or cure the ravages of a disease, the state summoned the people of Rome with their wives and children to supplicate Heaven for forgiveness. They crowded the shrines, and 'everywhere were prostrate matrons, sweeping the floors of the temples with their hair'.
101. Diogenes Laertius, *Lives of Eminent Philosophers*, 1.10 (c.600 B.C.); and Livy, 40.19 (181 B.C.).
102. Perrin B. Plutarch's *Lives*. 1916; iv:144–7. 11 vols. Coriolanus, ch. 12.
103. Livy, 4.21.
104. Livy, 4.25.
105. See above, n. 3.
106. Livy, 5.3.
107. Stathakopoulos D, Byrne. *Plagues of the Roman empire*. ii:536.
108. His tract on the plague, *De mortalitate*, describes the signs and symptoms of the disease and claims that 'Many of us died from it', but says nothing about persecution that supposedly ensued from it *Corpus Scriptorum Ecclesiasticorum Latinorum*, iii: *S.Thasci Caecili Cypriani opera omnia*. Vindobonae: 1868. p. 297-314.pt. 1 Graeme Clarke, nonetheless, conjectures: 'One can imagine orders for a public expiation against the plague, at a ceremony in the circus from which the notable figure of the leader of the Christians – popularly blamed for the visitation of the plague through their failure to worship "Roman gods"' Clarke, G. Third-century Christianity. In: Bowman, AK.; Garnsey, P.; Cameron, A., editors. *Cambridge Ancient History*, xii: *the Crisis of*

- Empire, A.D. 193–337*. 2nd edn.. Cambridge: 2005. p. 589-671.p. 637 Clarke supplies no evidence that any such persecution followed on the heels of this epidemic or, if it did, that it was blamed on Christians.
109. Clarke, pp. 649–52. The later Christian chronicle of the 10 persecutions from the time of Nero to Constantine’s Edict in 313, does not allude to any persecution stemming from the eruption or spread of plague. Instead, the relationship was the other way around: the Romans paid for their persecutions by God’s vengeance, served on them in the form of plagues (see Fear, AT., translator. *Orosius: Seven Books of History against the Pagans*. Translated texts for historians, liv; Liverpool: 2010. p. 364-6.7.26
 110. Biraben, J-N. *Les hommes et la peste en France et dans les pays européens et méditerranéens*, ii: *les hommes face à la peste*. Vol. xxxvi. Civilisations et sociétés; Paris: 1976. p. i. 27-32.2 vols cited in Duncan-Jones, p. 110; and Stathakopoulos, D. *Famine and Pestilence in the Late Roman and Early Byzantine Empire: a Systematic Survey of Subsistence Crises and Epidemics*. Aldershot: 2004.
 111. Leavitt, JW. Politics and public health: smallpox in Milwaukee, 1894–5. In: Leavitt, JW.; Numbers, RL., editors. *Sickness and Health in America: Readings in the History of Medicine and Public Health*. Madison, Wis.: 1978. p. 403-13.p. 406 previously published in *Bull. History Medicine*. 1976; 1:553–68.
 112. Craddock, p. 108.
 113. Echenberg, M. *Plague Ports: the Global Urban Impact of Bubonic Plague, 1894–1901*. New York: 2007. p. 183-241. Mohr, JC. *Plague and Fire: Battling Black Death and the 1900 Burning of Honolulu’s Chinatown*. Oxford: 2005. Craddock, ch. 4.
 114. Kraut, AM. *Silent Travellers: Germs, Genes, and the ‘Immigrant Menace’*. New York: 1994. ch. 6
 115. Kraut, ch. 4 In New York these epidemics were called the ‘Italian disease’.
 116. Weindling, PJ. *Epidemics and Genocide in Eastern Europe 1890–1945*. Oxford: 2000. p. 70-1.
 117. See Weindling, pp. 106–7; Dadrian VN. The role of Turkish physicians in the World War I genocide of Ottoman Armenians. *Holocaust and Genocide Studies*. 1986; i:169–92. 178, 182. [PubMed: 11617154] Dadrian, VN. *The History of the Armenian Genocide*. Providence, R.I.: 1995. p. 219-300.
 118. Cited in Weindling, p. 296, from Cooper, RW. *The Nuremberg Trial*. Harmondsworth: 1947. p. 140
 119. On statistics for the decline of typhus in Germany, Poland, Russia and the Ukraine, see Weindling, app. i, pp. 428–36; on its exaggerated and localized epidemics and the Nazi policies and epidemic outbreak at Warsaw and other ghettos in the early 1940s, see pp. 10, 14, 87, 298, 393, 425, 426–7. It is not clear that typhus had such power to ignite hatred in other areas of Europe or the United States in the 19th and 20th centuries or earlier. With the typhus epidemic in New York City of 1892, blame was placed on the influx of Russian Jews, and certain journalists and politicians drew anti-Semitic conclusions, but despite unequal treatment, health board officials issued no official proclamations of anti-Semitism, and with the quick decline in typhus deaths, public opinion linking the disease to Russian immigration disappeared (Markel, pp. 50, 60, 76).
 120. For instance, the attack of the Strasbourg prostitute, Isa, the Swede, on transvestites she suspected of having A.I.D.S. and contaminating her clients (Quétel, p. 278).
 121. After my lecture at the Anglo-American conference on 30 June 2011, physicians, who had treated A.I.D.S. patients in London during the early 1980s, commented that their experiences were ones in which hospital staff and the public showed compassion for the victims rather than blaming homosexuals or other victims for the epidemic. In the U.S. and Europe, there has been far less monitoring of the high-risk groups for A.I.D.S. than in the past with syphilis and gonorrhoea for ‘fear of being accused of persecuting sexual minorities, and homosexuals in particular’ (Quétel, p. 278; and Baldwin. *Disease and Democracy*. ch. 7
 122. On the exponential increase in mass hate and genocide in the 20th century, see among other places, Kressel, NJ. *Mass Hate: the Global Rise of Genocide and Terror*. 2nd edn.. New York: 2002. Dutton, DG. *The Psychology of Genocide, Massacres, and Extreme Violence: Why “Normal” People Come to Commit Atrocities*. Westport, Conn.: 2007. and Morrock, R. The

Psychology of Genocide and Violent Oppression: a Study of Mass Cruelty from Nazi Germany to Rwanda. Jefferson, N.C.: 2010.

123. Baehrel. La haine de classe en temps d'épidémie. p. 360
124. In addition to the authors cited above (nn. 1–4), see various works by Delumeau, J. *La peur en occident (XIVe–XVIIIe siècles): une cité assiégée*. Paris: 1978. especially in which he asserts that the extraordinary consequence of hate in 1348–51 'est un epreuve de l'enracinement profond de telles réactions aux épidémies dans la mentalité collective de la société européenne'. See also Martin, AL. *Plague? Jesuit Accounts of Epidemic Disease in the 16th Century*. Kirksville, Mo.: 1996. 'Human response to epidemic disease exhibits basic similarities despite vast differences in historical, geographical, and cultural environments, as well as differences in the disease itself ... Another common feature is ... the tendency to seek scapegoats for the calamity by blaming others, usually outsiders such as Jews' (p. xi).
125. There have been few works to investigate comparatively differences in the social and psychological consequences of various diseases. One that embarked on such a comparison, Bardot, *Peurs et terreurs face à la contagion*, provided expert analyses of cholera, tuberculosis and syphilis in the 19th century. But neither the authors of the individual chapters nor those who wrote concluding remarks for each section based on one of the three diseases ventured to compare culturally, socially or psychologically the three diseases under consideration.