In March 2019, *Nature* published a research letter on how MHGs (moralizing high gods) followed and not preceded the emergence of complex societies (Whitehouse et al 2019a). In a popular interpretation of their study in *Conversation*, the authors also suggested that although MHGs were not necessary to create complex societies, their presence facilitated further cooperation, posing the question whether the functions of moralizing gods could simply be replaced by other forms of surveillance in an increasingly secular society (Whitehouse et al 2019b). While the idea that an advanced system of surveillance could in fact supersede traditional – religious and moral – forms of social control had been present since at least Foucault’s interpretation of Bentham’s *Panopticon* (Foucault 1995 [1975]), it gained further impetus with the emergence of more and more advanced forms of artificial intelligence in the 2010s. As I argue in this paper, however, (1) the developments in AI are themselves not without religious and moral aspects; and (2) at the same time, the most effective new “moralizing high gods” come not from the side of AI, but from other, more openly political secular religions.

In what follows, I will therefore first expound what the “complex societies precede moralizing gods” thesis contains and what it does not; explaining why the research of Whitehouse leaves open the possibility to interpret it in different ways. It will also be necessary to explicate why the definitions of “god”, “religion”, and “morality” are problematic, not to mention the complex relationship between them, before taking a brief look at the idea of panopticism (which I am tempted to call the “panopticist misunderstanding”) and the religious aspects of some AI ideologies in the works of Ray Kurzweil, Nick Bostrom, and Yuval Noah Harari.
supernatural agents through the performance of rituals, yet in one-third of the regions there was no evidence for “moralizing gods” before their introduction under colonial powers; (2) average rates of increase of social complexity were over five time greater before, and not after, the appearance of moralizing gods; and (3) most societies that exceeded a certain social complexity threshold developed a conception of moralizing gods.

The term “moralizing gods” – or more precisely, “moralizing high gods” (MHGs) – is worthy of deeper reflection, though. “High God” is a concept borrowed from George P. Murdock’s Ethnographic Atlas, which defines it as a “spiritual being who is believed to have created all reality and/or to be its ultimate governor, even though his sole act was to create other spirits who, in turn, created or control the natural world” (Murdock 1967, 52). In this larger group (divided into three categories) category C signifies “a high god present, active, and specifically supportive of human morality”, and it is the latter that is named MHG by Whitehouse et al. Although the word “spiritual” is not given a definition, the authors seem to suggest that it is something similar to “supernatural”, and that is why MHG and BSP may be treated as synonymous. BSP (“broad supernatural punishment”) is “the concept of a supernatural agent or process that reliably monitors and punishes selfish actions, and this concept must (i) be widely advocated within the community, (ii) involve punishment of a broad range of selfish behaviours and (iii) apply to a wide range of community members” (Watts et al. 2015).

The addition “or process” is an obvious attempt to extend the range of religions to non-theistic traditions like Buddhism, but the term “supernatural” remains problematic all the same. As Tim Crane puts it: “the appeal to the idea of the supernatural relies on a conception of nature according to which nature, an autonomous, law-governed whole, is opposed to God and the divine. This conception of nature is a product of the scientific revolution of the seventeenth century, and it would surely not have been acknowledged before that time” (Crane 2017, 10). Now the truth is that the word “supernatural” emerged even earlier (see Blaise 1975, 890), as already medieval Christian theologians like Thomas Aquinas and John Duns Scotus distinguished between God as a primary cause and natural causes as secondary ones, but the core statement that not every religion has a concept of the supernatural remains valid. Crane’s proposal to substitute “transcendent” for “supernatural” (“something that is beyond this world: beyond the ordinary, the everyday, the world of experience,” Crane 2017, 9) solves nothing, however, for being “beyond the world of experience” is just as dubious as being beyond the world of “autonomous nature.” As Karl Kerényi often emphasized: “For the ancients […] the sacred was not so much to be believed in; it was simply there as a matter of unquestioned reality. Unquestioned because it was supported by two undeniable sources: our experience of surrounding nature and the daily observation of our own and other people’s psychic motives” (cited by Molnar 1988, 26). The controversy cannot be decided here, but at least so much can be suspected that words like “god”, “spiritual”, and “supernatural” are used with some laxity when treating religions in general for the sake of comparison.

But the difficulties of definition would lead too far at this point; we may return to them when the problem of secular religions will be assessed. So far it suffices to say that the theories of MHGs or BSPs postulate an agent or process of moral control, which is not – or not evidently – the same as the personalized political power that governs a community. The main statement of Whitehouse et
al. can thus be reformulated as “no such thing is necessary to create a complex society”, but there are several secondary statements:

(1) “Not necessary” means that such agents or processes do not always precede complex societies, but sometimes they do, even if in the minority of cases;

(2) Rituals, however, do “generally” (in most cases) precede complex societies;

(3) Complex societies in turn tend to develop moralizing gods;

(4) But this tendency does not mean generality (see above: in many regions, no moralizing gods were introduced until the arrival of colonizing powers);

(5) Moralizing gods nevertheless facilitate the evolution of complex societies, since on average, social complexity should increase more rapidly following the appearance of moralizing gods.

The correlation is therefore statistical: all we can say with certainty is that the more complex a society becomes, the more likely it is to develop a “moralizing god” type of social control, and in turn this system facilitates further complexity. What was not tested and consequently cannot be decided is whether today’s megasocieties (with populations of more than one million people) can function without belief in such morally concerned high gods or any of their supernatural equivalents. The original paper of Whitehouse et al. did not touch on such timely political issues, but their article in Conservation did:

If the original function of moralising gods in world history was to hold together fragile, ethnically diverse coalitions, what might declining belief in such deities mean for the future of societies today? Could modern secularisation, for example, contribute to the unravelling of efforts to cooperate regionally – such as the European Union? If beliefs in big gods decline, what will that mean for cooperation across ethnic groups in the face of migration, warfare, or the spread of xenophobia? Can the functions of moralising gods simply be replaced by other forms of surveillance (Whitehouse et al. 2019b)?

The Panopticist Misunderstanding

Although the topic of surveillance – not to mention that of the European Union, migration, or xenophobia – has not been brought up in the original paper, one cannot help being reminded of those eighteenth- and nineteenth-century attempts whose professed aim was to substitute a system of surveillance for the religious or religiously based moral foundations of society. The first and best known of these attempts is still Jeremy Bentham’s Panopticon, which has been analyzed and criticized in detail since its first version was drafted in 1787 (see Himmelfarb 1965, Deleuze 1992, Semple 1993, Schofield 2009, Brunon-Ernst 2012, and many more). Because of this, and because the idea itself is well known, it suffices to refer to its primary feature: that of a central inspector who sees all inmates of the prison while they cannot see either him or each other (as they are isolated in separate cells around the inspector’s tower), and, as a consequence, the mere possibility
of being watched is enough to maintain discipline, for the invisible inspector may also be missing (Bentham 1838-43, 4: 40-44).

As Bentham himself asserts, this idea of inspection is applicable to many other institutions: manufactories, mad-houses, hospitals, schools, or, as he himself puts it, to practically “any institution it may be thought proper to apply it to” (Bentham 1838-43, 4: 60-66). As the solemn coda of the work asserts:

What would you say, if by the gradual adoption and diversified application of this single principle, you should see a new scene of things spread itself over the face of civilized society? – morals reformed, health preserved, industry invigorated, instruction diffused, public burthens lightened, economy seated as it were upon a rock, the gordian knot of the poor-laws not cut, but untied – all by a simple idea in architecture (Bentham 1833-43, 4: 66)?

It seems therefore no exaggeration on Foucault’s part to view Bentham’s idea as one of social control and not just of penal reform. Bentham himself uses the metaphor of the “engine” (Bentham 1833-43, 4: 39), and this is what Foucault repeatedly refers to as a purely technical or mechanical way of exercising power that makes both physical coercion and moral indoctrination superfluous. It is “automatic”, a “machine” or “machinery”, a “mechanism of power” (Foucault 1995, 201-205). Some remarks may even be understood as a prophecy of today’s virtual space, which may in turn function as a real force in the physical world: “A real subjection is born mechanically from a fictitious relation” (Foucault 1995, 202). It is no wonder that with the arrival of CCTV, the spread of computer technology, and the birth of the internet, panopticism has become a popular – perhaps over-popular – metaphor for every sort of advance in visual communication (Zuboff 1988; Poster 1990; Gandy 1993; Lyon 1994; Bain-Taylor 2000; Jensen–Draffan 2004; Head 2014).

What is, however, more interesting for the present discussion is that Foucault makes some vague remarks about the politico-theological effects of the system as well, although mostly in the negative: “The ceremonies, the rituals, the marks by which the sovereign’s surplus power was manifested are useless” (Foucault 1995, 202). Since the rituals of sovereign power (the word “sovereign” itself being derived from theological antecedents, see e.g. Quaritsch 1986) are the exact counterparts of religious rituals (Bossy 1985, 154-155; Cavanaugh 2014), doing away with the latter – or the very concept of personal sovereignty – marks a rupture with political theology in general (see Rosanvallon 2006, 203 and 226). The issue to be investigated is whether such bold declarations are in fact true to reality, or hidden theological elements always remain there despite all efforts to eliminate them.

It is quite remarkable, for instance, that Bentham himself has not completely removed religious education from the Panopticon. Although it may have been little more than a concession to the contemporary consensus that no moral instruction was possible without some religious grounding (let us not forget that Bentham proposed his ideas for actual implementation by the British government), it is still notable how he included a chapel in the prison (Bentham 1838-43, 4: 43), further elaborating on the idea in the postscript (Bentham 1838-43, 4: 78-79). The chapel is nevertheless not an integral part of Bentham’s prison, and his technicism (“a simple idea of architecture”) seems also to preclude the necessity of recourse to religious belief or practice. Yet
the invisibility and apparent *omnipresence* of the inspector – as Bentham himself acknowledges – lends the scheme an unmistakably theological flavor, as the remark “if divines will allow me the expression” (Bentham 1838-43: 45) aptly shows. Regarding that belief in the “real presence” of the inspector is also essential to Bentham’s scheme, the theological analogy becomes even more evident. And although religious rituals in the strict sense have no vital role in regulating the inmates’ behavior, other ritually repeated practices remain indispensable to maintain belief in this real presence.

It should also be added that apart from Bentham’s plan, there were many others in Europe or America at the time which explicitly denied that a merely technical idea of surveillance would be sufficient. It would lead too far to cite either such philosophical examples as Pierre-Simon Ballanche’s *Le Ville des expiations* in France, or the actual prison reforms in Great Britain or the United States in the nineteenth century, but all these included the means of moral education as well, and not just the technical facilities of surveillance (which, as could be seen, was also not lacking the features of a “secular theology”). In other words, I suggest that the narrative of panopticism is both historically false and theoretically vague, since “post-theological” or “post-religious” usually denote nothing else than certain types of secular theologies or religions with their never absent moralizing background. This is why I am inclined to speak of panopticism as a misunderstanding of both Bentham and his heirs in the nineteenth century.

The religion of artificial intelligence

The question hereafter is not whether we have new candidates for the religious foundations of morality in the twenty-first century, but rather which one is the most likely candidate. In an age obsessed with technical progress (especially in biology, nanotechnology, and information technology) it comes as no surprise that traditional ideologies behind surveillance seem to be superseded by more up-to-date technologist or scientist ones, especially in the form of trans- and posthumanism or singularity.

Everyone vaguely familiar with such works as Ray Kurzweil’s *The Singularity is Near* or Yuval Noah Harari’s *Homo Deus* will at once notice how their mystical ramblings are also full of moral philosophizing or rather theologizing. The metaphysical dogma that human beings are but bundles of information or advanced algorithms also implies the moral obligation to join other, sometimes better vehicles of information to transcend their biological capacities and individual limitations. The forms of this self-transcending process are many and varied: you can either join with other human beings to form an “ocean of consciousness” (Harari 2015, 409), merge your biological thinking with non-biological intelligence (Kurzweil 2005, 25, 34, 114, 224, etc.), or detach yourself altogether from your own biological hardware to transplant your personality to any other, arbitrarily chosen carrier (if not your own, then that of your father, as Kurzweil plans to do, see Berman 2011).

Since all these imply that those who follow the trend and are ready to obey a higher intelligence or a more advanced algorithm will literally gain “eternal life,” it is no exaggeration to say that we have a scheme very similar to the idea of “moralizing high gods” and “broad supernatural punishment.” True, in this case the emphasis is more on supernatural or transcendent reward and not on punishment, but this is the other side of the same coin: those who fail to participate will
presumably be left behind in our present biological valley of sin and woe. Words like “transcendent” and “spiritual” to describe this process are indeed regularly used by Kurzweil’s texts, also having a social or even civilizational dimension:

Our civilization will then expand outward, turning all the dumb matter and energy we encounter into sublimely intelligent – transcendent – matter and energy. So in a sense, we can say that the Singularity will ultimately infuse the universe with spirit. Evolution moves toward greater complexity, greater elegance, greater knowledge, greater intelligence, greater beauty, greater creativity, and greater levels of subtle attributes such as love. In every monotheistic tradition God is likewise described as all of these qualities, only without any limitation: infinite knowledge, infinite intelligence, infinite beauty, infinite creativity, infinite love, and so on. Of course, even the accelerating growth of evolution never achieves an infinite level, but as it explodes exponentially it certainly moves rapidly in that direction. So evolution moves inexorably toward this conception of God, although never quite reaching this ideal. We can regard, therefore, the freeing of our thinking from the severe limitations of its biological form to be an essentially spiritual undertaking (Kurzweil 2005, 284).

It cannot escape attention, however, that this transcendence or spirituality stands closer to the traditional idea of pantheism than to the likewise traditional idea of monotheism. Its popularity again comes as no surprise: as Alexis de Tocqueville predicted already in the nineteenth century, “among the different systems by the aid of which philosophy seeks to explain the world, pantheism seems to me the one most likely to seduce the human mind in democratic centuries” (Tocqueville 2010, 758). Democracy, of course, is understood here not as a form of government, but as the ideology of social equality, the “equality of conditions” which nevertheless has its political implications (e.g. universal suffrage and the “one person, one vote” principle). Pantheism is nothing more than the extension of this social and political equality to the totality of things. As Tocqueville put it, “it readily tries to enlarge and to simplify its thought by containing God and the universe in a single whole,” where “the things material and immaterial, visible and invisible that the world contains are no longer considered except as the various parts of an immense being” (Tocqueville 2010, 758). Prophecies about the coming Singularity, the Ocean of Consciousness, or the merger of natural and artificial intelligence are therefore more ancient in origin than the language of information technology wants us to believe.

Analogies with traditional religious ideas – especially with apocalyptic visions of the end or the periodization of history in Christian millenarianism – could be cited endlessly. (The fact that Kurzweil describes six epochs, and not three or seven as most Christian theologians is hardly significant. What counts is the feeling that the last epoch is imminent, and it will be essentially different from anything we have known so far. See e.g. Joachim of Fiore in the Middle Ages, who prophesized about the last age of the Spirit which is both imminent and inevitable, a higher level of existence that supersedes everything humanity has so far experienced, Löwith1949 [1953], 145-159.) To be sure, like all apocalypticism, the religion of artificial intelligence has also its negative varieties and doomsday scenarios (both in Harari’s Homo Deus and in Nick Bostrom’s Superintelligence), but it only proves that superhuman punishment is a just as integral part of such narratives as of those concerning traditional MHG’s and BSP’s.
Political religions

The question of Whitehouse and his colleagues in *Conversation* therefore seems to be wrongly put. Since technological progress does not only provide us with more sophisticated means of surveillance, but also with more sophisticated ways of constructing new ideologies to be imposed on society, the question is whether any of those will suffice to maintain social cohesion and facilitate cooperation in future megasocieties. If one accepts the negative, post-humanist scenarios represented mainly by Bostrom (but also by Harari, although he is as ambiguous on this issue as on any other), there is no question at all: humanity as we know it will shortly disappear anyway, leaving us with no human societies to regulate. The more “positive” scenario, on the other hand, presupposes powerful and efficient measures to regulate both human activities and the operation of artificial intelligence in order to avoid harmful consequences. The decision on such regulative measures, however, will remain in the hands of political governments (however flawed and limited these might be), and that is why the issue of political ideologies seems more relevant than that of the mystical theories of artificial intelligence. As I mentioned in the beginning, the line between the “religious” and the “secular” is impossible to draw with any degree of precision, and this holds not only for the philosophy of AI, but also for all comprehensive moral and political views. The discussion of political theologies (Schmitt 1922), political religions (Voegelin 1939), or secular religions (Aron 1944) is out of the scope of this paper, but – without further argument – at least so much seems obvious that the modern age is not lacking in, but is full of, ideologies that refer to a higher moral entity which is otherwise “unnecessary for a complete physical explanation of the world,” to cite just one of the many attempts to define what religion is (Borbély 2018, 80).

The State is the most obvious of all, where the analogy of the religious and the secular is most easily recognizable (see e.g. Cavanaugh 2011 or Luoma-aho 2012). But apart from the State, also the People, the Nation, the Market, Money, Nature, or Human Rights have been suspected of being such invisible entities, and the list is not even complete (see Deneen 2005, Hayes 1960, Cox 2016, Goodchild 2009, Nelson 2010, MacIntyre 1981 respectively). None of these have ever been seen, touched, or smelt by anyone, yet their omnipresence and omnipotence are usually presupposed without further proof. The problem is not that the world is secular, but that there are too many competing candidates to become the ultimate regulating force. The chance that a sort of digital mysticism will win the race is rather slim; what seems more likely is that one or some of the traditional political, social, or economic “religions” will control the advance of technology as well. After all, as John Gray says in his *Seven Types of Atheism*, even trans- and posthumanism are merely projections of what human beings think of themselves in their present condition:

Humans may well use science to turn themselves into something like gods as they have imagined them to be. But no Supreme Being will appear on the scene. Instead there will be many different gods, each of them a parody of human beings that once existed (Gray 2018, 70).

This is exactly why a more exclusive and more politically oriented system of thought has more potential to replace traditional MHGs or BSPs in our supposedly “secular” societies. This is no prophecy; only a recognition of the fact that the original question, whether complex societies may exist without moralizing gods is impossible to answer, for there are no such societies today, nor
there have ever been. Political ideologues have always implicitly acknowledged that, and, as it seems, not even the prophets of artificial intelligence predict something else for the future.

Bibliography

Aron, Raymond (1944): L’avenir des religions séculières. La France Libre, VIII, 1944/45, 210-217 and 269-277.


