

Oracles, Prophets and the Exoteric Circles of Science and Religion

JAUME NAVARRO

Universidad del País Vasco

jaume.navarro@ehu.es

Abstract. Drawing upon Karl Giberson and Mariano Artigas' joint book *The Oracles of Science*, I discuss the limits of an emphasis on so-called philosophical bridges in the relationship between science and religion. Epistemological and metaphysical analyses of the claims by scientists and religious people are indeed necessary to avoid illegitimate extrapolations; but a clear separation between scientific and religious statements is problematic. Following Ludwig Fleck's characterisation of the esoteric and the exoteric circles of science, I argue that popularization of science is always embedded in scientific cultures and ideological agendas and that one cannot expect a clear demarcation criterion between pure science and pure popularization. I also consider Lyda Walsh's rhetorical analysis of the scientists as prophets to understand the *oracles'* public portrayal of science in pseudo-religious terms.

Keywords: Popularization of science; Mariano Artigas; Ludwig Fleck; science and religion; demarcation criteria; conflict thesis.

In their joint volume *Oracles of Science. Celebrity Scientists versus God and Religion*, Mariano Artigas and Karl Giberson (2007) dealt with the public role of some star scientists as icons in the science-and-religion industry. The six authors they chose were well-respected scientists who, so the

authors claimed, abused their prestige as public figures in physics and in biology to make unwarranted extrapolations in the realms of philosophy, ontology and theology.¹ The *Oracles* is a nicely written book, accessible to a wide audience, with a clear thesis: many supposed controversies between science and religion come from illegitimate inferences and lack of solid philosophical analyses by a few, but very popular scientists.

Indeed, this is one of the main arguments in the thought of Artigas, one that is deeply rooted in the tradition of Thomism, loosely understood. From his point of view, conflicts between modern science and the Catholic faith (or, at times, with religion at large) dissolve when proper philosophical and metaphysical examination of the scope, presuppositions and methods of the sciences take place. The so-called dialogue between science and religion is either mediated by the bridge of a realist philosophy or it becomes a dialogue of the deaf, so he argued. Of course, the problem here lies in what he considered to be a valid philosophy for analysis: one that accepts that both science and faith are in the business of truth and that there is no such thing as ‘double truth’, which distanced him from the extremes of both scientism and religious fundamentalism.

However commendable the *Oracles* is, my interest in this paper is not so much on what it says, but on what it does not say. Specifically, I want to argue that beyond the stance on the intrinsic epistemic limitations and scope of science, religion and theology, as well as the potential philosophical bridges or chasms between them, this book hints at a topic that Artigas seldom addressed, and then only in the last years of his career; namely, that the science-and-religion disputes are public disputes that transcend the close limits of what he thought to be legitimate science and legitimate religion. Indeed, when Giberson and Artigas (2007, 4) complain that the *oracles* “have impeccable scientific pedigrees, but it is their unusual gift for communication that has given them a platform for speaking to millions outside the academic community, rather than the tiny audiences of specialists to whom their colleagues speak,” they implicitly establish a neat distinction

¹ The celebrity scientists in the book were Richard Dawkins, Stephen Jay Gould, Stephen Hawking, Carl Sagan, Steven Weinberg and Edward O. Wilson.

between science and non-science, following the demarcationist tradition of neo-positivism. Distinguishing between 'provinces of knowledge', disciplines, methods and illegitimate inferences is one of the main tasks of the philosopher, and indeed a much-needed one; but historians and sociologists of science have shown that attempts to clarify the boundaries between science and religion, science and politics, science and power, or even the classical dichotomy between science and technology, are bound to failure. Therefore, a surgical distinction between what the *oracles* legitimately say and do in their areas of expertise and what they do in the public sphere is only one way, necessary but limited, to censure the abuses of celebrity scientists.

In this paper I want to draw attention to alternative ways in which one can understand and decry the excesses of celebrity scientists, drawing from the tradition of what is vaguely known as Science Studies. Specifically, I would like to challenge the notion that one can naturalise the demarcation between science (or the sciences) and religion(s), faith(s) or theology(ies). An essentialist view of any of these notions can be problematic and so are, thus, the boundaries between them, both historically and sociologically. In the first section I shall point at some aspects of the history of the evolution of what 'true' science was, or was perceived to be, both in Christian and secular contexts. With this, the demarcation between science and religion will prove to be complex enough so as to help us understand one of the reasons why the phenomenon of the *oracles* is not so strange as one might think.

In section two I shall delve into the question of science popularization. The *oracles* act as popularisers, and very ideologically biased ones for that matter. However, the received view of a strict separation between true science and popular science on which Artigas and Giberson base their argument is historically and sociologically problematic. The boundaries between esoteric and exoteric circles of science are blurred, and thus one cannot criticise the *oracles* only because they offer a highly prejudiced view of science. Rather, I want to argue that it is precisely in the fact that they present themselves as 'priests of Nature' where one can find another Achilles heel of theirs. In other words, one might want to accept that the *oracles* have opinions and present them in the name of science, whatever that means; but not

that they put them forward as the only valid interpretation of science. As we shall see, their dogmatic approach goes against the democratic turn in science that has taken place among many Science Studies scholars.

Finally, in the third section I recall the prophetic ethos of science in all times. Why is it that the New Atheism uses science as one of their main allies? I shall argue that oracular rhetorical strategies are not so alien to science as one might think. Promises, predictions and confidence are part and parcel of the way modern science has developed and is still developing. Just think, for instance, in the increasingly large sections devoted to outcome, social impact and outreach in any grant application nowadays. As we shall see, institutional science is oracular, and not only its popular side.

1. On 'true' science and the boundaries between science and religion

In 1901, the Spanish Jesuit province started a new generalist periodical, *Razón y Fe* (Reason and Faith), designed to give the Catholic, educated audiences arguments to defend their faith and to take part in the increasingly secularised debates in the public sphere (Sanz de Diego 1998). The first issue contains a programmatic editorial with a rather belligerent tone, common at the time, against the misuse of writing: "In other times the arts and literature turned the fierce soldier into a discrete gentleman; nowadays, they turn the kind gentleman into an enraged revolutionary. Then science helped to teach the ignorant, now it misleads the intelligent" (*Razón y Fe* 1901, 1, 1). The editorial went on saying that one of the main goals of the periodical was to combat the "clamouring from false science, delusive philosophy and corrupting literature" against the Catholic faith, and even against natural truths (2–3).

Although the journal was meant to have a broad coverage, with theological, social, legal and ethical topics, the first article after the editorial in the first issue was devoted to "Free Science and Revelation". The essay started praising the "vast intellectual work amassed by the scientific activity of the last one-hundred years" only to continue with a complaint about the

misuse of scientific productions to combat Revelation, and a defence that “good science” should include God and Revelation. After criticising the Enlightenment’s “philosophism” and 19th-century “rationalism”, the article complained that “the elimination of God from the field of human science is the fundamental axiom of modern philosophy, separating itself radically from the Christian and Scholastic duality” (Murillo 1901, 8–9).

The author of this article, the Jesuit scholar in Scripture Lino Murillo (1901, 22), claimed that the “main consequence of the irreligious movements in Spain has been to form, not men of science, but practical sceptics, [...] and political revolutionaries”. This attitude is significant in the context of Spanish early-twentieth-century *regenerationism*. Implicit in this statement we perceive the underlying war between tradition and revolution in which “science” was a weapon used on both sides of the fence. If liberals, socialists and anti-clericals were blaming the Church for the Spanish scientific and technological backwardness, many Catholic intellectuals thought of themselves as science-promoters. The battle was not between pro- and anti-science but about what science was and who was doing the most for it. In other words, the battle was not strictly scientific but rhetorical, since the very nature, scope and methods of science were under scrutiny and all sides wanted to present themselves as “scientific”.

Some decades earlier, in Britain, Christian theology had been the instrument used to educate the general public into the principles and developments of the emerging modern sciences. *The Bridgewater Treatises on the Power, Wisdom and Goodness of God as Manifested in the Creation* (1833–1836), written by well-respected men of science and members of the Anglican and Scottish churches, are often recalled as one of the major episodes in the specifically British brand of natural theology. In his study of their reception and usage, however, Jonathan Topham (1992, 398) explained the success of the *Treatises* on the grounds that “they presented the pious middle classes with a largely non-technical and religiously conservative compendium of contemporary science”, and that they became an “important part of the pedagogic apparatus of those engaged in popular education” due to the lack of alternative books. As a matter of fact, from a theological point

of view, the *Treatises* were hardly innovative; it was their science, presented in a religiously acceptable context, which enhanced their popularity among educators. In other words, the *Treatises* did not prove religious truths with the help of science but the other way around: religion granted legitimacy to the emerging sciences.

The taken-for-granted religious foundations of science, as well as the support to established religion from science, were soon challenged by, among others, the group of men known as the X-Club, led by Thomas H. Huxley. This dining club was formally established as a group of men united in their “devotion to science, pure and free, untrammelled by religious dogmas” (quoted in Barton 1998, 411). In his recent book, *Huxley’s Church and Maxwell’s Demon*, Matthew Stanley (2015) describes the social and political background that shaped Huxley’s contempt for the role of Anglicanism in British scientific institutions. Coming from a middle class background, he struggled to find a paid job in science and he always felt rejected in the English academic establishment. In Stanley’s words, “Huxley and his friends’ difficulties in finding work became one of their defining characteristics. Even further, their decision about who was responsible for their difficulties helped shape their identities for the rest of their lives: the Church of England” (Stanley (2015 24). This point is important because much of the belligerent rhetoric of Huxley and others was not aimed against religion *per se* but against the monopoly of the traditional academic elite, which happened to be mainly members of the Church of England. Rather than anti-religious, their attacks were largely anti-clerical.

This professional dimension of the science-religion disputes in Victorian Britain, famously described first by the late Frank Turner (1974, 1978), is worth remembering. The configuration of modern science as we know it today is now commonly regarded as a process happening throughout the nineteenth century and well into the twentieth, a process that is not only intellectual or philosophical but also institutional, cultural and professional (Cunningham and Williams, 1993). The two examples from Spain and Britain show that there was no agreed essentialist view of what science was or had to be, nor who were the natural practitioners of science. And as Peter Harrison (2006, 2015) has argued, the boundaries between science and religion only

emerged as a consequence of this contingent process of transforming the notions and practices in both science and religion.

The same applies to the many trials in the US on whether Darwinism, creationism or Intelligent Design can or should be taught in State schools. To think that those disputes are mainly about the content of science is to miss the point. The debate was and is one of legitimacies in the public sphere, State control over education and the private lives of the citizens, the role of tradition and morality in public life and many other such issues. Moreover, as Giberson and Artigas point out, one outcome of the antireligious campaigns of the New Atheism is a visceral reaction against science: “the Oracles do indeed make a great many negative comments about religion and belief in God”. For instance, “ID polemicists gather these comments and fashion them into a compelling argument that science is hostile to religion. Since most Americans are more loyal to their faith than to science, this argument works effectively to turn them away from science and make them open to ID” (Giberson and Artigas 2007, 15).

Huxley and his fellow X-Club members disregarded the Anglican Church because they saw it as the enemy in their attempts to professionalize science and to gain access to the traditional academic institutions. ID supporters disregard contemporary science because they fear the attacks on their religious beliefs and practices by the excesses of naturalism. Neo-Thomists in the early twentieth century despised some modern science because it was not “true” science and it was used as a rhetorical weapon in the secularizing process of political structures. In all cases one of the main elements under scrutiny was the very nature of what science had to be, and who was legitimized to speak for it. From this point of view, thus, the *oracles* of science are only adding to this long tradition of battles for the appropriation and supremacy in *this thing we call science*.

2. Popularization and the esoteric circles of science

The *Oracles of Science* deals with the contentious topic of what is normally known as popularization or vulgarization of science. The traditional diffusion

model states that the experts in any field are the ones in charge of making specialised knowledge available to the general, largely ignorant public. This paternalistic, top-down view on how to educate the masses has been highly criticised, and not just as a naïve reaction against all forms of authoritarianism. The diffusion model assumes that knowledge is produced in certain very esoteric circles that, like ivory towers isolated from the world, manage to remain unpolluted from external interferences that would contaminate the purity of science. Only after such pure knowledge is produced would the experts be allowed to transmit it to the general public in a digested way. Thus, we fall again in an essentialist view of science that allows for clear demarcations: the ivory tower would have well-defined methodological and institutional boundaries so as to police, like a Maxwell's demon, who should be part of the scientific elite.

The question often arises as to who appointed Dawkins, Hawking and other *oracles* as spokespersons for science, let alone religion, and why their views on science would be more legitimate than anyone else's. Because, as Giberson and Artigas (2007, 9) argued, "the scientific community, through the lenses of its six leading spokespersons, is hostile to religion, atheistic, and primarily engaged in the investigation of origins. None of these characterizations are true. Science is not hostile to religion, scientists are not consistently atheistic, and origins are not the primary focus of scientific investigation". The crux of the matter is that "science" is not a *something*. Science is neither *one* institution nor *one* set of doctrines or *one* specific behaviour. Science is, above all a human activity and, thus, a contingent and changing one. "The scientific community is a gigantic worldwide network of scholars trained in a broad cross section of disciplines, supported by a variety of funding entities, and assisted by a vast technical and publishing infrastructure" (7). That is why no single interpretation of *this thing we call science* can be regarded as uniquely valid.

"And therein lies the problem", argue Giberson and Artigas. "When a small handful of leaders step forward to speak for the whole, there arises the possibility that their portrayals of science may be skewed or even distorted and science might be misunderstood" (7). Unique, almost dogmatic interpretations of science and its contents, which is what the *oracles* often

do, clashes with many contemporary views on how science actually works. The problem is not only their all-encompassing scientism, but also that their scientism is based on a very particular, exclusive and highly problematic notion of science: one in which the general public is only the passive recipient of knowledge.

In his *Science in the Public Sphere*, historian of science Agustí Nieto-Galan (2011/2016) illustrates the many ways in which numerous publics become part and parcel of the scientific activity. Experts and lay people do certainly exist, but such categorisation is rather fluid and, thus, often problematic. Let us imagine for instance a Nobel Prize winner for her work in one branch of physics. Would that make her an authority in organic chemistry or evolutionary biology? Not really. Possibly a blind peer-review article of hers in *The Lancet* on how to treat diabetes would immediately be rejected. She is not an expert. But that does not mean her work can never be influential among medical doctors. Her public lectures, her methodological approaches, technological spin-offs from her discoveries or simply a donation from her prize to a research hospital may shape some further scientific development in areas other than her very specific field of expertise. But that is not true only in the case of very influential Nobel Prize recipients: every individual is actually present in one or more of the concentric circles around the most esoteric cores of science.

Many decades ago, Ludwig Fleck (1935/1979) suggested that a scientific fact was the outcome of a thought collective and thought styles. The former he defined as a “community of persons mutually exchanging ideas or maintaining intellectual interaction” (1979, 39) and the latter as “the readiness for directed perception, with corresponding mental and objective assimilation of what has been so perceived” (99). Contrary to Thomas Kuhn’s later notion of “scientific community”, one characteristic of which was the strict separation between those converted to one paradigm and those loyal to another, incommensurable one, Fleck’s thought collective has a more fluid structure, consisting “of both a small esoteric circle and a larger exoteric circle, each consisting of members belonging to the thought collective and forming around any work of the mind, such as a dogma of faith, a scientific idea, or an artistic musing”. Moreover, a thought collective “consists of many

such intersecting circles. Any individual may belong to several exoteric circles but probably only to a few, if any, esoteric circles” (105).

From this point of view both science and its popularization are activities more democratic than any form of positivism would ever imagine. Certainly, *democratic* does not mean here that scientific *truth* is totally relative and the random product of a process of elections and polls. But at least since the famous farewell address of President Eisenhower in 1961 pointing at the dangers of leaving science and technology in the inscrutable hands of the industrial-military complex that had emerged after the two world wars, democratic societies have expected more accountability from science and technology. Pharmaceutical scandals, environmental disasters, or the many battles about the extent and causes of global warming are only a few episodes through which the general public has felt the urge not to leave “scientific” decisions only to “the scientists”. Even the blind peer review system, which is still one of the major watchdogs to preserve Merton’s virtues in the scientific community, has proven to be flawed in several occasions. The ivory tower of science cannot be totally isolated.

The participatory turn in science should not be lightly identified with extreme social constructivism. The positive side of the so-called science wars of the 1990s, with denunciations such as Levitt and Gross’ (1994) *Higher Superstition* or the famous (or infamous, depending on the constituency) Sokal affair (Sokal and Bricmont, 1997), is that it helped clarify many issues. If the Strong Program in the Sociology of Scientific Knowledge was challenged, so was the perception of the scientist as the undisputed priest of nature. And here the status of the *oracles* comes to the fore.

When science is made socially accountable, the chances for the *oracles* to have their own way largely diminish. While they are entitled to act as popularisers or even to make logically or metaphysically erroneous extrapolations, their authority as spokespersons for science is challenged. In other words, the participatory turn in science is not mainly a way to democratise the most esoteric circles of science but, moreover, the exoteric ones. Thus, attempts by the *oracles* to act in the name of science may be immediately undermined not only because they are true or false, legitimate or illegitimate,

but because they are top-down, dogmatic interpretations of the nature and content of their views on science.

Ironically, that was the major criticism of Sokal and Bricmont to what they regarded as the *Intellectual Impostures* of the Humanities and the Social Sciences. Their success in publishing the hoax article “Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity” (Sokal, 1996) wanted to prove the contrast between serious, peer-reviewed, methodological sound sciences with postmodern gibberish. Fair enough. What they did not seem to include in their criticism was the dialectical excesses of the self-appointed missionaries of atheism in the name of science. Not surprisingly, even Richard Dawkins—the contemporary *oracle* par excellence—supported Sokal’s experiment. In his review of *Intellectual Impostures for Nature*, the great apostle of science accused the world of cultural studies and science studies of being full of “half-truths, falsehoods and non sequiturs”, written by “tenured professors at some of the best universities [...] wielding power over young academics who might secretly aspire to an honest academic career in literary studies or, say, anthropology” (Dawkins 1998, 143). If only we remember that Dawkins has used his Oxford chair in Popular Understanding of Science as a springboard for his crusade one wonders if he cannot see the beam in his own eye.

3. Oracles, prophets and science

If democratic and participatory understandings of science challenge the priestly status of the expert in the very construction of science, let alone its interpretations, why is it *oracles* still exist, and not without popular success? Perhaps we should not blame them and their arguments only. “Like the traditional oracles of classical Greece, Shakespeare, and even the hit movies about the Matrix, they tell us what we need to know. Are we alone in the universe? Where did we come from? Did the universe have a beginning? Is there a point to our existence? Are we the products of random chance?” (Giberson and Artigas, 2007, 5). *Pace* Max Weber, the modern world does not seem to be as disenchanted as some might think.

In an article initially intended for the *Oracles*, but published years later, Giberson (2011) stated that “in subtle and implicit ways, though, the arch-critics of religion are realizing that humans need more from science than factual accounts of how we got here and accurate descriptions of the world we inhabit”. Scientific accounts “provide no larger context for our lives, no guidance for how we should live, no insights into right and wrong, no recipes for the building of community. They do not, on their own, have anything to say about purpose. So, while they may be exciting on one level, they fall short of serving as replacement religions” (Giberson 2011, 206). The quasi-religious statements of the *oracles* in their popular books try to fill this gap. ‘Science is all there is’, so the mantra of the *oracle* goes; and ‘if factual science is not enough, let us introduce ethical, religious and mystical notions wrapped under the guise of science’. In this way the first premise, ‘science is all there is’, remains intact.

That the oracles are trying to re-enchant the world through science is rather obvious. More surprising may be the fact that they try to do so while holding a positivistic and authoritarian view of science. Who grants the scientists, or perhaps better, “science”, such authority over society? Lynda Walsh has an answer to this question worth noting. In her *Scientists as Prophets. A Rhetorical Genealogy*, Walsh (2013) argues that the rhetorical structure of modern science, now as well as in the times of Francis Bacon, is in continuation with the place of oracles in Ancient Greece or prophets in the Old Testament. In all cases, she argues, we find the same “prophetic ethos”: “a role that a polity—a group of people who must work together to stay together—authorizes to manufacture certainty for them”. The role of that prophetic ethos would be to grant “political certainty” in times of crisis: “When a polity encounters a crisis in which right action cannot be ascertained via traditional democratic debate, it turns to its prophets. But while it expects certain knowledge from those prophets, what it gets from them instead is a dialogue that can lead to political certainty” (Walsh 2013, 2).

The prophetic ethos that Walsh describes “can be performed by anyone who can (a) demonstrate privileged access to knowledge beyond the public ken and (b) use that demonstration to engage the polity in a dialogue about

its covenant values” (3). The examples she uses include the Royal Society as a place for discussion and for safely disputing received social values, J. Robert Oppenheimer’s affair as a challenge to the values of the Cold War in America, Rachel Carson’s role as the prophetess of Nature with her *Silent Spring*, or contemporary debates on global warming. In all these cases, Walsh finds that science plays not so much a role of providing with unquestionable data and certainty, but the locus for discussions on our lives and our collective values. From this point of view, and going back to Giberson and Artigas, the *oracles* only use their prestige as scientists, as bearers of some esoteric knowledge (point *a* of Walsh’s characterisation), to engage the public into debates on the role of religion in the public sphere (point *b*).

Walsh uses the *Oracles of Science* in one of her chapters. One reason for the success of modern *oracles*, she claims, is that “three additional features of mass media synergize with the prophetic ethos of science advisors”; namely, “the tendency to frame science in terms of controversy; heavy trade in visual and verbal metaphor; and, the uncontrollability of mass media messages” (140). The first, controversy, has always been part and parcel of science, not only in modern media. As Shapin and Schaffer (1985) famously showed, scientific controversies do not happen in an ideological vacuum but in politically and philosophically biased environments. The context of the English Civil War was not just a stage but the locus that enabled and shaped Hobbes and Boyle’s differing interpretations of the air pump. Similarly, the political context of the so-called Bible belt in America, for instance, is not just a contingent stage for debates on Creationism or Intelligent Design, but the only place where such controversies can happen. Thus, when trying to make sense of the success of some *oracles*, one should be aware not only of the reasoning at stake but the social context in which those disputes take place. Without the controversy to which they address, the naked arguments appear only too naïve.

Metaphors are also an intrinsic part of science, and not just a rhetorical device for educating the masses. Pace most logical positivisms, numbers are not the only language of science. Even these need to be presented in the form of graphs, charts and diagrams. Soul-less depictions of supposedly

neutral facts in what Daston and Galison (2007) call “mechanical objectivity” are not the only kind of representations we find in science. From botany to nanotechnology, communication between specialists is more often than not mediated by idealised images, metaphors and analogies. Moreover, such metaphors and representations often constitute the starting point for scientific reasoning, not their terminus for educational purposes only. And here we reach a loophole: the same metaphors that helped guide the initial stages of a research may re-appear explicitly after a theory is developed and needs to be explained. In Walsh’s words (2013, 148): “When these theory-constitutive metaphors are in turn employed as “exegetical” metaphors to explain science to the public, we get a sort of epistemological and rhetorical “black hole”: the divinatory metaphors used to answer questions about the natural world become the very way we experience those insensible aspects of the natural world”. Thus, the *oracles* cannot be blamed for using metaphors in their representation of nature; only, perhaps, for not making the public explicitly aware of this resource.

Finally, the uncontrollability of media messages accounts for the success of the oracles. In Delphos, the pythia would never say something totally alien to the expectations of the city. Her messages were vague enough so as to generate consensus, and in order to incite assent they would never frontally challenge the *status quo* of the contestants. In the case of modern *oracles*, this is a “good reminder that prophet’s messages must confirm underlying currents in public discourse to be heard, and that a prophet cannot unilaterally determine the outcome of a dialogue that he begins with the polity” (Walsh 2013, 151). In other words, the success of the *oracles* of science in their attacks to most forms of religion can only be explained not on the grounds of their arguments but because they authoritatively say what a part of the public opinion already want to hear.

The *oracles* “are the ‘public intellectuals’ of this generation, perennially present in media outlets [...] They are the leaders of the Third Culture, doing exactly what C.P. Snow lamented was not getting done” (Giberson and Artigas 2007, 7). But, ironically, the result is not what Snow expected would happen. With their abuse of prophetic rhetoric, rather than bridging

the gap between the Sciences and the Humanities, they reinforce those boundaries; the *oracles* present their science, not as common sense but as special knowledge granted only to them, thus “reinforcing the extraordinary calling of scientists-prophets” (Walsh 2013, 154).

Conclusion

In 1870, the First Vatican Council of the Catholic Church proclaimed that “although faith is above reason, nevertheless, between faith and reason no true dissension can ever exist [...] A vain appearance of such a contradiction arises chiefly from this, that either the dogmas of faith have not been understood and interpreted according to the mind of the Church, or deceitful opinions are considered as the determinations of reason” (Pius IX 1870). This dogmatic declaration has shaped much of the science-and-religion debates in Catholic milieus. The emphasis on the compatibility between human reason and (Catholic) faith, both as legitimate and congruent instruments to access reality, has put truth at the centre of science-and-religion debates. This is possibly the most important task of the philosopher in addressing these issues, and Artigas and Giberson pay tribute to this tradition in their *Oracles of Science*.

In this paper I have attempted to broaden the picture and to point at complementary dimensions that may help understand the public disputes triggered by the so-called New Atheists. By showing the historical and social loci in which these arguments take place, philosophers and apologists will have more instruments in their task. Otherwise they may find themselves repeating the same arguments over and over again not knowing why they fail to convince. Moreover, by not acknowledging the broader picture they may end up promoting their opponents’ agendas. One instance in which this might happen, and indeed does happen, is by trying to create a clear demarcation between science and non-science, and to criticize the *oracles* for stepping outside their zone. This may consolidate the positivistic view on science and the attempts to establish a criterion of demarcation or, worse, a criterion of meaning. Another example would come from the philosophers’

attempts to universalize the conflicts (and their solutions) between science and religion. Extending arguments against non-existing problems may easily backfire, by highlighting decontextualised disputes where they did not exist. Attention to the locality of the *oracles'* arguments is thus an essential point to stress in the philosophical analysis of potential conflicts.

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