

TESTING LATOUR'S APP: A USER'S GUIDE

by Stefano Bigliardi

Abstract. I reconstruct Bruno Latour's ideas about science and religion and compare them to Ian G. Barbour's and Mikael Stenmark's models, as well as to the discussion of technology and religion developed by John C. Caiazza and Antje Jackelén. I show how using "Latour's App" enlightens some aspects of said models which Barbour and Stenmark themselves were seemingly struggling with, and that Caiazza's and Jackelén's views can be reconciled despite their apparent opposition. The result of such tests is an overall assessment of Latour's proposal. I argue that, under the disguise of a flamboyant and original language, Latour's method is not that distant from those of the other authors analyzed here, and that his discussion might conceal some unwelcome philosophical shortcomings.

Keywords: Ian G. Barbour; John C. Caiazza; constructivism; Antje Jackelén; Bruno Latour; Mikael Stenmark; technology

In his recent essay "‘Thou Shalt Not Freeze Frame’ Or How Not to Misunderstand the Science and Religion Debate" (Latour 2010) the French sociologist of science Bruno Latour (b. 1947) apparently puts forth a powerful challenge to commonly endorsed ways of conceptualizing religion and science and therefore of conceiving the relationship between the two. This article tries to put Latour's ideas to the test in regard to models and debates familiar to many readers of *Zygon*. In other words, after a concise reconstruction of Latour's position, I explore the consequences of applying it to two intertwined discussions: the known attempts at mapping the relationship of religion and science elaborated, respectively, by Ian G. Barbour and Mikael Stenmark, and the debate over the relationship of technology and science carried out by John C. Caiazza and Antje Jackelén. I argue that in the first case adopting Latour's ideas allows us to perceive with clarity some tensions in Barbour's and Stenmark's models of which those authors themselves seemed to have some awareness while they were advancing such models, and that in the second case we can arrive at a reconciliation

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between Caiazza and Jackelén's intuitions, so that both appear liable to be considered sound despite their differences. The aim of this article is thus twofold: on the one hand I discuss Latour's ideas in light of specific conceptions of science, religion, and technology, while in his text mainly referred to here Latour seems to be developing his criticism in a vacuum; moreover, it is my ambition to explain such ideas in a plain way, whereas Latour tends to wrap them up in special rhetoric that makes them not immediately accessible (more about such rhetoric will follow later). On the other hand, I try to critically re-read some "classical" positions while showing, in a Latourian vein, their connections and perhaps unsuspected homogeneity.

In the first section, I reconstruct Latour's ideas about religion and science; since they are *normatively used* here as general guidelines, determining how one should think about the natures of religion and of science and their relationship, I somewhat provocatively call them "Latour's App." Latour produces such an interpretation of religion and of science in the framework of general views expressed in his previous works. For reasons of space, I will give privilege here to his most recent work and mainly highlight the connection with his groundbreaking monograph *Science in Action* (Latour 1987), leaving somewhat aside Latour's criticism of the concept of "fact" carried out in *We Have Never Been Modern* (Latour 1993). In the second section, after a brief reconstruction of Barbour and Stenmark's models, I try to think them through Latour's app. Analogously the third section, after briefly recalling Caiazza's and Jackelén's intuitions, filters them through Latour's ideas. In the final section, I summarize the virtues of Latour's app as they seemingly have appeared while putting it to the test and also formulate some hypotheses regarding what I call its "side effects": that is, some consequences of its usage that might appear unwelcome or detrimental.

LATOUR'S APP

Latour appears to be a staunch opponent of the attempts at mapping the relationship between religion and science. He expresses his dissent with a telling comparison. In his words, the advocates of such models "speak like Camp David diplomats drawing lines on maps of the Israeli and Palestinian territories. They try to settle disputes as if there was one single domain, or—following the terrifying similarity with the Holy Land—as if two equally valid claims had to be established side by side" (Latour 2010, 109). Other telling images that Latour employs to describe the debate on science and religion taught in such terms are "a comedy of errors," or a race between the rabbit and the tortoise (Latour 2010, 110–11). He also claims that, "there is no point of contact between the two" although even the thesis of their "incommensurability would be a category mistake" (Latour 2010, 110).

In order to understand Latour's conceptualization of religious statements, we have to consider first what he says about another kind of statement, seemingly very different: lovers' speech. When a lover asks his partner to repeat whether she loves him, Latour points out, it is not as if he "simply pushes the play-button of a tape recorder in order to prove that, five years ago, she had indeed said 'I love you darling'" (Latour 2010, 108–09). This is because love talk is not subject to verification or, in Latour's phraseology, "double-click questions" (Latour 2010, 106). Love talk, Latour emphasizes, is one of those forms of speech to which we are accustomed and "that are evaluated not by their correspondence with any state of affairs, but the quality of interaction they generate in the way they are uttered" (Latour 2010, 102). The sentences belonging to love talk, Latour points out, need not be original nor are they informative; they are trans-formative, they induce a "displacement" in the listener as well as in the speaker (Latour 2010, 102). This change, according to Latour, has to do with proximity in space and time: the change consists of literally "re-present[ing] anew what it is to be present at what one says" (Latour 2010, 104). Latour emphasizes as well that "this form of talk is at once completely common, extremely complex, and not that frequently described in detail" (Latour 2010, 104).

Latour contrasts love talk with scientific talk, concerned with verification. However, contrary to what many might think, verification, in Latour's interpretation, has nothing to do with proximity or immediacy: he points out, "it builds extraordinarily long, complicated, mediated, indirect, and sophisticated paths so as to reach the worlds that are invisible because they are too small, too far, too powerful, too big, too odd, too surprising, too counterintuitive, through concatenations of layered instruments, calculations, and models" (Latour 2010, 111). Therefore, although science is, more properly than love talk, subject to double-click verification, such verification has nothing to do with the representation of the close and present and leads rather to the "distant" and "absent" (Latour 2010, 113). Hence, in Latour's interpretation, science is usually associated with a kind of objectivity, the objectivity of what is near and familiar that is in this case a misled and misleading notion.

The methodology followed by Latour in order to arrive at such conception of science, and therefore at such ideas regarding the way in which science and religion are related, has been traced by Latour himself long before the publication of "Thou Shalt Not Freeze Frame" in his monograph *Science in Action* (1987). What Latour does in such dense and groundbreaking work, consistently with its title, is refuse to consider science as *ready-made* and analyzes it instead in its *making* (cf. Latour 1987, 4). In other words, Latour places scientific concepts and inventions currently taken for granted (and often believed to be "mirroring" nature) in their social and historical contexts while pointing at the fact that the acquisition of their scientific status is the result of collective processes (cf. Latour 1987, 29);

said processes are a mixture of power struggles, decisions, and competition in all of which (a certain amount of fortuity and uncertainty notwithstanding) the availability of *resources* played a relevant role. In such social games, the scientists' capacity is also decisive in referring to pre-existing authorities (scientific and political alike) and creates strong social ties that in turn strengthen a new theory, concept, or device, eventually leading to its acceptance as an unquestioned and unquestionable "black box." Once any "black box" is opened (what Latour mainly achieves by historically reconstructing the early stages of its emergence—cf. Latour 1987, 25) a "disorderly mixture" is revealed, and differences such as text/context, subjectivity/objectivity, and natural/artificial fuse (cf. Latour 1987, 6). Even adjectives such as "rational"/"irrational," "logical"/"illogical" are considered by Latour as tools or devices used in a social (language) game in order to strengthen or weaken the status of the texts or notions they are applied to: "They simply help people to further their arguments as swear words help workmen to push a heavy load, or as war cries help karate fighters intimidate their opponents" (Latour 1987, 192).

Back to "Thou Shalt Not Freeze Frame." Religious talk is compared by Latour with love talk. It is, in his interpretation, a kind of transformative talk that wants to redirect the listener's attention to what is near. Not only it is not subject to double-click verification, it precisely wants "to divert it, to break it, to subvert it, to render it impossible" (Latour 2010, 106). In Latour's interpretation, religious tales cannot be analyzed or reduced to verification; religious tales can just be repeated, "utter[ing] again a word that produces in the listener the same effect, namely the one that impregnates with the gift of the renewed presence" (Latour's example is Gabriel's salutation to Mary), whereas the requests for the verification of those very tales "want you to abandon the present time and direct your attention away from the meaning of the venerable story" (Latour 2010, 106–07). Religion, and not science, in Latour's paradoxical interpretation, "should be qualified as being local, objective, visible, mundane, un-miraculous, repetitive, obstinate, and sturdy" (Latour 2010, 111).

To sum it up, in my view the Latour App actually consists of three interacting devices, comparable to a three-stage rocket. We have (a) a general methodology, dating back to his 1987 monograph, consisting of the sociological inspection of science. Using it Latour yields his (b) specific epistemological interpretation of science and religion, according to which the two (*notwithstanding the confusion which can be entertained by the very practitioners or experts of the two fields or the philosophers who study them!*) never really interact. Finally we have (c) a normative endorsement of (b) according to which all talk not based on the recognition of the separation of science and religion is a misguided and misleading comedy: "Thou shalt not freeze frame!"

FIRST TEST: BARBOUR AND STENMARK

Barbour famously identifies four “types” of relationships between science and religion. They can be easily summarized. The first one is called *conflict*, and comes into being when science and religion are seen as making opposed, irreconcilable claims regarding the same domain. The second type is called *independence*, and it is the separation of science and religion as distinct domains. The third type is *dialogue*; it is achieved when those who engage in the discussion of science and religion emphasize the methodological similarities of their respective fields. *Dialogue* also means that science might recognize that the data it uncovers raise questions that can be addressed by religion. The fourth type of interaction identified by Barbour is *integration*, which is achieved when religion and science cooperate in a systematic metaphysical synthesis (Barbour 2000, 10–34).

Barbour’s discussion of such typology is not static or monochrome but dynamic and sophisticated. He sees each type as having several variants; each of the aforementioned labels is only a template for several options having substantial features in common. For instance, in Barbour’s opinion, *scientism*, according to which matter is the fundamental reality, and the scientific method is the only reliable way to study it, is conflictual. Equally conflictual, Barbour holds, is *biblical literalism*, according to which the Genesis narrative should be read as a description of the creation of the universe (Barbour 2000, 11–17). Furthermore, Barbour describes *natural theology*, which infers (or supports) the existence of God from nature (28–30), as integrative; according to him, *theology of nature*, which has its own conceptual sources but receives the data of science and adjusts to them, is also integrative: for instance, once the scientific data ascertain a threat to the environment, theology of nature can orient action to avoid it (31–34).

Barbour does not present the four conceptions in a neutral way. He deems conflicting views as unbalanced: in his opinion, scientific materialists try to pass for scientific ideas that are not part of science itself (Barbour 2000, 14 and 36), whereas biblical literalists unnecessarily stick to a pre-scientific cosmology and present it as an essential part of faith (Barbour 2000, 16 and 36). As to the perception of conflict, Barbour also states that it is overemphasized by the media (Barbour 2000, 10). Barbour judges independence unsatisfactory, since nature is not just an “impersonal stage” for the religious experience. Religion, according to Barbour, offers and aims at an all-encompassing interpretation of experience: sooner or later one feels the need for a unified worldview (Barbour 2000, 22 and 36). The two views toward which he shows to be favorably inclined are dialogue and integration; he recommends a *metaphysical synthesis* to which both science and religion contribute (Barbour 2000, 34–38). In a later response to some critics, Barbour recognizes that a typology such as his might appear somewhat rigid, but it still has an important didactical use; a guidebook,

he observes, is not a substitute to an exploration but it helps it (Barbour 2002, 348). In the same article he also emphasizes the dynamic, narrative character of his four types and their variants; they can be seen as successive stages in a thinker's attitude toward the two fields and he states, for instance, that "the line between Dialogue and Integration is also somewhat arbitrary" (Barbour 2002, 350).

Among the contemporary attempts at studying *in abstracto* how religion and science interact elaborated after Barbour's typology, Stenmark's models stand out as especially articulated and fine-grained. His aim in categorizing the possible relationships entertained by science and religion is to examine them "in an illuminating and unbiased way that is neither too simplistic nor too complex" (Stenmark 2010, 278). Stenmark identifies four main ways in which religion and science can interact. (1) According to the *irreconcilability model*, science and religion cannot be harmonized while remaining as they are: they make competitive claims over the same territory, meaning that only one of the two will ultimately gain the upper hand. (2) According to the *reconciliation* (or *contact*) *model* science and religion can coexist while being combined. (3) According to the *independence model* science and religion are compatible due to the fact that they never compete and remain separate. (4) Finally, the *replacement model* states that science might expand up to the point of becoming the new religion (cf. Stenmark 2010, 278–80).

Such initial, fourfold typology does not seem to be nuanced enough to Stenmark; he continues to discuss further subcases. The reconciliation or contact model can be elaborated and developed into a *reformative* view. *Reformative* means that one of the two fields should be reformulated. Depending on which of the two has to undergo a change under the impact of the other's doctrines, there can thus be a (2Ra) *religion-priority reformative view*, or a (2Rb) *science-priority reformative view*. However, the fact that *both* science and religion need to change and whether religion (or science) should undergo minor changes or a major overhaul it is not excluded; therefore, both 2Ra and 2Rb can be held in a *weak* or a *strong* framework (Stenmark 2010, 283). Yet *reconciliation*, according to Stenmark, can be seen in a different guise. Science and religion can namely be reconciled, endorsing that one can support or confirm the other; we then have the *supportive model* (2S) that can be combined with the reformative one(s) (2R + 2S) and all the possible intersections that could hold in *strong* or *weak* contexts (Stenmark 2010, 284–85).

Furthermore, Stenmark takes into account several complicating factors. Three of them can be easily summarized. First, science can be identified in a more inclusive or exclusive way (as coinciding with a specific discipline, e.g., biology or with a cluster of them). It can also be philosophically interpreted in different ways: realism, instrumentalism, empiricism, or constructivism (Stenmark 2010, 290–91). Second, religion and science can

be understood as social practices rather than as sets of beliefs (Stenmark 2010, 292). Finally, the notion that religion and science are not static but undergo processes of *expansion* and *restriction* over time should be taken into consideration (Stenmark 2010, 292–93). But four more submodels complicate the analysis. Bearing in mind the idea that religions can have more conservative or liberal versions, Stenmark identifies four more ways of attaining reconciliation: a *conservative reconciliation* (2RC), according to which *science* needs to change; a *traditional reconciliation* (2RT), where science and religion might need a change up to a certain extent (with the latter's central claims left untouched). The *liberal reconciliation* model (2RL) implies religion as in need of a major overhaul. Finally, a *postmodern* or *constructivist* reconciliation (2RP) demands radical changes for both religion and science (Stenmark 2010, 287–90).

For reasons of space we cannot explore here in full detail all the subtle distinctions exposed and analyzed by these two authors.¹ Those very authors' further discussions of such notions are not infrequently carried out in a self-critical vein. At this point, my reader should have a fairly precise idea of what we might call the letter and the spirit of Barbour's and Stenmark's respective philosophical enterprises. It is now time to ask: how do we read such discussions if we follow Latour's prescriptions? At first sight, one might be tempted to label and dismiss them, with Latour's lingo, as the Camp David diplomats we have mentioned before: aren't Barbour and Stenmark engaged in mapping attempts? Yet on closer inspection one realizes a deeper convergence between Latour on one side, and Barbour and Stenmark on the other one. In order to understand this, my reader is invited to bear in mind the description of the three stages in which I have dissected Latour's App.

Prima facie, by virtue of the language they have chosen, Barbour and Stenmark seem to be engaged precisely in that kind of futile exercise: mapping, freeze framing, and establishing borders and domains. However, if we strip down Latour's app of (c) (as well as of the special rhetoric in which (c) is wrapped up in Latour's essay), we can see with clarity that the former are far from elaborating a dogmatic, Camp David-like view of two fields. True, Barbour and Stenmark do not start off with an articulated recognition of a sociological method comparable to Latour's one, nor perhaps do they focus on the specific epistemological question of whether science and religion ever come into contact. However, we have to consider the very nature of their respective works, which is, a generalization of views about science and religion expressed by scientists and thinkers. In this sense, their methodology cannot be but latently the *same* as the one followed by Latour, perhaps with less clarity expressed as to the difference between what scientists *really do* and what scientists (and thinkers) *say* or *think* they do. It is for this reason that the independence of science and religion (that is comprised in Barbour and Stenmark's respective models), instead

of being focused upon as the only real or realistic option, is simply listed as one option among others. I also perceive in Barbour and Stenmark's discussions the awareness that, once one engages in an empirical and sociological investigation of the interaction of science and religion, one is deemed to encounter a "disorderly mixture." What I interpret as a sign of such awareness are, respectively, Barbour's later thoughts regarding the fluidity of the categories he had described as early as 2000, and Stenmark's successive refinements of his own typologies that, as we have seen, reach an extreme degree of elaboration. Arguably, there is more of Latour in Barbour's and Stenmark's method than one could suspect at first glance. In this sense, decisive is the fact that their respective models seem to encapsulate reference to what Latour in "Thou Shall Not Freeze Frame" is doing: Barbour indeed identifies the separation of science and religion as one of his types, and when he talks about *dialogue* he seems to be describing precisely the kind of philosophical analysis in which also Latour is engaged when he expands on the similarities and dissimilarities of religion and science having taken love talk as a term of comparison (and actually drawing upon the theory of speech acts for which we are indebted to John L. Austin and Ludwig Wittgenstein). Also Stenmark, as we have seen, takes into account separation as one of the possible types and he is aware of the different possible interpretations of science, listing constructivism among them. Finally, when one considers the richness of the levels of interactions identified by Barbour and Stenmark, it appears that Latour, all focused on his glaring defense of the fact that religion and science never really interact, forgets another relevant fact: that many think as if this interaction was possible. All this has, in my opinion, important consequences for the evaluation of Latour's app that will be elucidated in the final section of the present article.

SECOND TEST: CAIAZZA AND JACKELÉN

Similarly to Latour's 2010 essay, John Caiazza's seminal paper "Athens, Jerusalem, and the Arrival of Techno-Secularism" (2005) levels a criticism at all abstract models for the interaction of religion and science. Precisely because they focus on direct interactions, Caiazza holds, such models overlook the indirect way in which *de facto* science is interacting with religion. Science as such, argues Caiazza, has become so complicated and abstract, and at the same it has been so substantially challenged by the advocates of the "cultural relativity of truth" (Caiazza 2005, 13) that it cannot be said to pose a threat to religious doctrines any longer; both science and religion have rather "(...) gained some form of parity" (14). However, there actually is no truce, according to Caiazza, since science is triumphing over religion, even if indirectly, in the form of ubiquitous technology or the practical application of science itself. Caiazza points out

the existence of a “rampant secularism” (15); such secularism, following Caiazza’s argumentation, does not coincide with any doctrine of “doubt,” nor with the emphasis on the mundane rather than on the transcendent, nor it can be said to be a specific theory. Rather, it is a form of behavior and mental attitude encouraged by technology in its contemporary form. The hopes of bettering human life are now directed at technology, its experts and practitioners having assumed the role of priests (18). Furthermore, technology invades our sensorial field up to the point that, whenever we observe our environment, we aren’t encouraged anymore to think about, and praise, divine creative power, but rather human power (18).

The nonintellectual “displacement of religion from civil life” is defined by Caiazza as technosecularism (Caiazza 2005, 18–19). As I have recalled, such secularism, following Caiazza’s reconstruction, is not identifiable with a specific doctrine; nevertheless, it is an attitude that carries with itself some “implicit concepts” that, according to Caiazza, constitute an “ethics”; such ethics are described by Caiazza as “instrumental,” “utilitarian,” “eudaimonian,” and “materialistic.” Paraphrasing Caiazza, this means that such ethics give priority to the application of technology regardless of other specific ethical systems, that it equates “good” with what can be technologically controlled, and that it is concerned with well-being, contrasted with the highest degree of pleasure, since well-being can entail giving up more immediate and easy pleasures (19). Furthermore, Caiazza holds that technology constantly diverts attention from death, and hence drains another fundamental source of religious reflection (20).

Antje Jackelén’s “What is ‘Secular’? Techno-Secularism and Spirituality” (2005) counts among the invited responses to Caiazza’s essay. Jackelén chooses Nietzsche as her guiding spirit throughout all of her reflections: according to her, the German philosopher rightly identified in science and religion competing forms of spirituality. The grain of truth in Nietzsche’s theory that Jackelén highlights and opposes to Caiazza’s ideas is the “bold complexity” in the science/religion relationship envisaged by Nietzsche as opposed to the “dualistic approach” by Caiazza (Jackelén 2005, 864). The most relevant methodological flaw in Caiazza’s theory, argues Jackelén, is that he adopts an “ontological” rather than a “heuristic” use of the concept of secularism: if one aprioristically defines secularism, Jackelén holds, one loses sight of its complexity (e.g., its multiple causes) as well as of the complexity of reality, and ends up “pitting up different forms of knowledge against each other” (866–67). Jackelén’s essay is indeed dedicated to the demonstration of the multidimensionality of secularism and of the complexity of its relationship with religion, a relationship not necessarily seen as antagonistic. Once again drawing on Nietzsche’s concepts and parlance, secularism and religion are indeed presented as “dancing partners” (866). The sacred scriptures, Jackelén points out, “integrate secular knowledge” (865); furthermore, she argues that, if one looks at the public role of the

church in many debates, the thesis of the disappearance of religion from the public sphere sounds at best premature (867). Technology, Jackelén highlights, has always been used “in and by religions,” “in both wholesome and unwholesome ways” (868); hence, religion has changed through technology, instead of being replaced by it (869). Jackelén points at various religious (or religiously connoted) events and phenomena that seemingly confirm such an idea: suicide bombers, televangelism, the life and death of John Paul II (as well as the media event of his funeral), and the existence of spiritual communities on the Internet (868–69). For all such phenomena, which apparently represent a symbiosis of technology and religion, Jackelén employs the term *technoreligion*.

In the final part of her essay, Jackelén also sketches a “spirituality of technology”; she identifies and emphasizes the “religious depth to technology”: technology, she argues, represents a way of coming to terms with our finitude, extending our life “both in space and time;” furthermore, it “(. . .) uses the highest power of imagination, creativity, and freedom (. . .)” and is therefore “where mortality and creativity meet” (Jackelén 2005, 870). In a reply to his critics, Caiazza did take into account Jackelén’s objections, but disposed of them quite sweepingly: “It is true that film, television, cable and the Internet all have been energetically utilized for religious presentations,” argues Caiazza, yet he continues: “however, the benefits of technology for religious persuasion are equivocal”; his example is that of a church where hymns were so loudly transmitted that one could hardly pray and meditate; moreover, he remains convinced that technology is an opponent of religion through its implicit ideology (Caiazza 2006, 242).

The discussion of technology and religion represented by Caiazza’s work, independently on one’s judgment on his specific views, seems to me to have two main virtues: first, it brought technology at the center of the stage, and second it acted as a useful counterbalance to the risk, in my opinion constantly latent in the development of models *à la* Barbour (or Stenmark), of hyper-generalizing. Caiazza’s clarion call might be compared to Edmund Husserl’s famous cry “To the things themselves,” reaffirmed in the science-religion debate. In this sense, Caiazza’s discussion, as well as Jackelén’s reaction (which refutes the former’s specific ideas, yet accepts the shift in focus on technology) appears to me in tune with Latour’s methodology. The attentive reader will have already noticed that, in his definition of science contained in “Thou Shall Not Freeze Frame,” Latour packs together elements that are not exclusively methodological or theoretical—let me repeat it here: “(. . .) concatenations of layered *instruments*, calculations, and models” (Latour 2010, 111, emphasis mine). Actually, already in 1987, Latour refused, by virtue of his sociological bent, to draw a line between science and technology. Once we start to open “black boxes” (as I have recalled at the beginning), we discover indeed, in his view, such a strict interaction of concepts and machines that we can only feel entitled to use

the expression “technoscience” (cf. Latour 1987, 131–32). Therefore, in my interpretation, Caiazza and Jackelén (and all the related contributions that, for reasons of space cannot be recalled here) represent a healthy irruption in the debate over science and religion of the methodology aimed at following scientists, believers, engineers, and machines through society, and that the two are therefore convergent and complementary rather than at odds. That being said, Caiazza and Jackelén cease to be Latourian (at least if we refer to the Latour of *Science in Action*) when, after having selected different sociological and psychological phenomena actually instantiated in the world (attributing salvific powers to technology, seeing technology as an expression of divinity-given creativity, and so on), they assume those perspectives in an absolute, prescriptive, normative fashion. This is also, in my view, the reason why the two authors end up seeing each other’s positions as opposed rather than complementary while they share the same method.²

LATOUR’S APP: VIRTUES, SHORTCOMINGS, AND SIDE EFFECTS

Latour has put forth an interpretation of science and religion that strikes the reader by virtue of its imaginative and flamboyant language. With a touch of irony, Latour expresses his view about such debate as if his own discussion was a religious sermon³ and employs memorable metaphors. Seduced by the utter contempt with which he wittingly disposes of the attempts at mapping the relationship of science and religion, one might at first blush think that he has produced a theory that acts as a fatal solvent for the less exuberantly exposed models such as those elaborated by Barbour and Stenmark. However, on closer inspection or test, the capacities of Latour’s App turn out to be much less powerful than one might suspect. Let us see in more detail why, drawing upon some of the intuitions that emerged during the previous tests.

The very fuel that keeps Latour’s device going is his sociological methodology, dating back to his 1987 monograph. This seems to be the specific aspect of Latour’s App that still proves most useful. For, in order to construct abstract models such as those put forth by Barbour and Stenmark, there is no alternative to the inspection of what scientists, religious folk, thinkers, and so on *do* and *think*. While their own methodology, as I have argued, is much more Latourian than one might at first perceive, they themselves seem at times to be baffled at the fluidity and “disorderly mixture” of the landscape they encounter; hence their successive corrections and increasing epicycles to which they turn. Also, the “re-discovery” of the technology–science link, and hence its relevance for the discussion of science and religion seem to represent the re-emergence of Latourian intuitions on the pages of *Zygon*. In this sense, a more explicit assumption of a Latourian methodology would have helped readers and authors alike

in attaining clarity and in order to perceive the similarity of apparently opposed models.

However, in “Thou Shalt Not Freeze Frame,” Latour seems to be unfaithful to himself, and apparently falls into a few philosophical blunders. In a nutshell, such blunders consist of emphasizing the separation of science and religion (that he seems to detect *empirically*) and turning it into (i) the only option worth being talked about and (ii) into a *prescriptive* norm. In so doing, compared with Barbour’s and Stenmark’s discussions, Latour’s sermon loses descriptive force and completeness. An illusion entertained by an agent (be she a scientist, a philosopher, a religious person) about what she is doing, even if it is such, might contribute to explain her action as much as the list of facts and physical conditions surrounding her. Columbus did not reach India. Yet if we delete from the tale of his discoveries his expectation that he would do so, and his perception of the new continent as such, we seriously impair the understanding of the events linked to his historical figure, as well as most of the reasons of the behavior of those who accompanied and followed him. Who would be satisfied with an account of the discovery of America taught only in terms of physical displacements of ships and people, or of geographical coordinates? For his homily, Latour produces an artificial restriction and oversimplification of the disorderly mixture he himself has discovered and elevates an (alleged) “is” to a “shall” (analogously to what, in my interpretation, Caiazza and Jackelén also do).

We arrive therefore at a double paradox: an author starting off with a sociological outlook ends up missing out on the richness of the panorama he explores, and a social constructivist position ends up telling us, in an objectivist fashion, how things really are and how we should act. Hasn’t Latour taught us that qualifications such as “rational”/“irrational” and the like are just war cries or swear words? How can he reconcile such attitude with the production of instructions on how *not to misunderstand* science and religion? In other words, aren’t his original comparisons (the rabbit and the tortoise, the comedy of errors . . .) war cries and swear words as much as the aforementioned ones? If we are faithful to a social constructivist methodology the category of misunderstanding should be abandoned: the *fact* that someone misunderstands someone else’s *facts* is also a *fact* with its consequences and links worth being explored. In this sense, a prolonged use of Latour’s App might result in a loss of analytical sharpness, and in a hasty dismissal of important contributions.⁴ From the point of view of a scholar interested first of all in empirical reconstructions, Latour’s cry for the separation of science and religion is at best, notwithstanding its original expression, one among others. As an overall assessment, my suggestion is to use Latour’s App as we should probably use any technological device, that is, as a useful but not exclusive tool; when used in an obsessive way,

any machine turns from an extension and enhancement of our physical, natural possibilities, into a constraining impairment. Latour's App certainly reminds us of the richness of the science-technology-religion interaction and, in its initial stage, it reminds us of the inherent risks of slipping from the empirical into the dogmatic; however, the prolonged use of all of its three stages (as apparently happened to its own inventor) is liable to inducing us in exactly the opposite behavior.

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NOTES

1. For instance, I cannot here linger on Stenmark's discussion of "religiously partisan science" that, consistently with his method, he develops into an extremely fine-grained analysis of variants and subcategories. The reader is directed to Stenmark (2005a, 2005b).

2. With Latour's (1987) language we might say that Caiazza and Jackelén were simply cutting off different slices of the same *pâté* (cf. Latour 1987, 107).

3. This *escamotage* is particularly emphasized in Latour (2013).

4. Another point that remains to be explored and assessed is the possibility of employing Latour's attitude toward religion in order to produce a *religious* understanding of religion itself. Latour indeed does not want to claim that religion is some form of "necessary irrationality," reducing it to a form of nonsensical, irrational, or subjective although possibly beautiful expression (Latour 2010, 109). Therefore, Latour's position seems to be respectful of religiosity even if it might not be in harmony with the way in which religious folk conceptualize their own beliefs. In that case, what will we have produced if we build a systematic discussion of religious beliefs and practices through Latour's concepts? [An interesting attempt is Miller (2013).] Some effects of the Latour App might be welcomed by religious thinkers: for instance, abandoning the idea that religious statements can be "double-clicked" might bring about the dismissal of the whole debate regarding the degree of literalism with which some religious narratives should be read, and would help us to leave behind what Barbour criticizes as conflict. At the same time, embracing a position such as that of Latour would mean getting engaged with a sophisticated philosophy that is difficult to communicate, and that has to give up the popular appeals according to which (a specific) religion and science are in harmony (if such harmony is not seen as one of the lines which never meet).

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