
FAITH, BELIEF AND COMMITMENT

Alfred Kracher*

Iowa State University, Ames, IA 50011, U.S.A.

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Abstract

Religious belief is traditionally expressed, especially in Christianity, in the form of confessional language. Comparisons of religion with science tend to rely on parsing confessional language into propositions akin to scientific theory. This leads to the mistaken conclusion that religious faith is equivalent to tenaciously holding onto scientific theories even in the face of contrary evidence. While there may be some superficial similarity between confessional statements and theories, the analogy is fundamentally misleading for several reasons. First, confessional language starts with an existential commitment, not a theoretical one. Second, if one can talk about theological theories they are *about* confessional expressions and how to interpret them. That is, they are treated more like data than theories in science, although even this analogy is not very close. Third, confessional statements serve to delineate the boundaries of a particular faith community, a process that is just as important in the case of science as it is for religious communities. Ordinarily there are no confessional statements in science, not because science is open to change and religion is not, but because of contingent differences in history and practice. However, there are circumstances when commitments in science are expressed in language that is not altogether different from religious confession.

Keywords: confessional language, theory, tenacity, central beliefs, faith community, Intelligent Design

1. Introduction

How do we view faith in the age of Science? What is the status of religious belief in today's world? Is it an obsolete concept? Is it something needed for religion, but not in any other area of human thought or experience? Or is faith required equally for Science and for Religion?

These are large questions, and here I am only considering one specific detail in the complex of problems that these questions raise. In particular I want to explore the relationship between expressions of faith and conceptions in Philosophy of science, taking as a starting point the different forms of language in Religion and Science. The concern with language extends an earlier investigation [1] of the role that language plays in shaping the Science–Religion

* e-mail: akracher@iastate.edu

dialog. In the previous paper I explored how the incommensurability thesis would affect, or not affect as the case might be, the dialog between Science and Theology. This thesis, as put forward by Thomas Kuhn, mostly in his *Structure of Scientific Revolutions* [2], and in several papers by Paul Feyerabend [3], states that the claims of rival theories in science cannot always be rationally evaluated, because the meaning of terms in each theory is itself theory-dependent.

If this is true even within science, it might be hopeless to expect that scientists and theologians can ever understand each other when it comes to discussing issues that demand any degree of semantic sophistication. The conclusion of my earlier investigation was that *some* theological systems can be partners in a genuine dialog, but that the conversation will have to mostly avoid highly specialized concepts. In other words, adequate mutual intelligibility required that the dialog would have to be built 'bottom up' from a basis in the shared vernacular, not at the level of the specialized concepts of professionals in each field.

The kind of dialog I had in mind in the previous paper was mostly concerned with language that is theoretical and propositional, at least in a broad sense, or in other words a dialog between professionals in the respective fields of Science and Theology. But theological statements of this kind are arguably not the most important kind of religious language. In this paper I therefore turn to a different kind of religious utterances against the foil of scientific language, namely confessional language, or, as we might say, expressions of faith.

2. Propositions and Confessions

In religions, particularly in Christianity, faith is commonly articulated in confessional statements: "I believe in one God, the Father, the Almighty," etc. This first-person confession of faith is a different kind of language from the third-person abstractions and generalizations that make up typical scientific statements. In order to understand the relationship between faith and science (which should be distinguished from the relationship between Science and Religion, or between Science and Theology) we need to investigate both the similarities and the differences between propositional and confessional language.

Any comparison of the confessional language in religion with scientific language has to first of all address the question whether confessional language has any theoretical content, that is, whether at its foundation there is something that a scientist would call a theory. It is now widely accepted in Philosophy of science that *all* scientific statements have such theoretical content, regardless of whether they record observations or theoretical interpretation [3, 4]. In other words, there is no such thing as a pure observation statement, since observation can only be *scientific* observation if it is made within the framework of a particular theory. Since all scientific language has this character of being 'theory-laden', any other kind of utterance can only be usefully compared to it if that other language, too, can be shown to have *some* theoretical content. A personal utterance like 'I love you' may very well have the aspect of confession,

but it is not the kind of statement that has a generalizable foundation like a scientific theory.

However, in the case of a religious confessional statement, like the opening words of the Creed used in the above example, it is perfectly straightforward to isolate a stratum that is propositional. In this case the confession expresses a kind of ‘theory’, however different it may be from a scientific one: (1) There is an entity called ‘God’ (specifics see 3 and following below); (2) It is asserted that this entity called God exists; (3) God has the attributes of being almighty, etc. Perhaps (1) could be unpacked even further as (1a) there is a (non-vacuous) concept called ‘God’, (1b) the concept refers to someone, real or imagined (since “I believe” allows for the possibility of its opposite), etc.

We have here applied to the confessional statement a process that I will hereafter call *propositional parsing*, that is we have tried to extract propositions from a language that was not originally meant to be propositional. Although this is perfectly legitimate, something has been lost in this process, namely the fact that confessional statements involve a personal dimension that cannot be captured by general propositions. It is an ‘I’ who makes the confession. Unless this loss is acknowledged, there is something thoroughly misleading about this propositional parsing. This realization leaves us with two tasks: First, we have to describe in more detail what it is that is lost. Second, we have to find ways to properly compare confessional and propositional language without being misled by ignoring this loss.

3. Theory and Commitment

What is it that is lost in the propositional parsing? Confessional statements involve an existential dimension as well as a propositional one. The underlying existential dimension of faith can show itself through action, without any formal statements at all, as in the poignant phrase ‘this person *lives* the Gospel’. We can *see* the confession being made, without any verbal expression at all, in the actions of a particularly faith-filled person. In other words there is a commitment here to a particular kind of conduct that exists *prior to* the confessional statement that is its expression. The priority of the commitment over its confessional expression will turn out to be a key distinction in our subsequent considerations.

However, in order to talk intelligently about what such an existential expression of faith may mean, it is still necessary to have its propositional aspect explicitly articulated. In a confession the object of belief that is expressed in the words ‘I believe in...’ receives a particular formulation, which needs a kind of *Sitz im Leben*, i.e., a framework which relates the statement of faith to an epistemological background that allows it to be communicated, even to people who do not share the same confession. Otherwise belief would be fundamentally inexpressible, and therefore without consequences that can be publicly articulated.

Such an analysis applied to expressions of faith has perforce at least a formal analogy to an analysis of scientific inquiry, in that it has to address two questions: (1) how is belief (or knowledge in the case of science) possible, and (2) what is its content, or more specifically, how does the verbal expression relate to the aspects of reality it is trying to capture — that aspect of reality that a scientist would call data? However, in this analogy lurks the source of a misunderstanding that will have to be confronted before further progress can be made.

In order for a confessional statement to be genuine, that is, for it to be expressed in conduct as well as words, the propositional and existential part have to be thought of as inseparable. In practice, of course, it happens often enough that words and conduct are separated, which is why the Gospels contain so many warnings against hypocrisy.

Ignoring this holistic nature of confessions and trying to analyze propositional content and practical expression separately one can fall prey to the impression that the propositional part (e.g. God exists) is a *theory* and the confessional part ('I believe...') the *commitment* to it. On the analogy of science, then, we have a situation where people refuse to abandon their commitment under (almost) any circumstances. Indeed both scientists and scientific philosophers often criticize Religion on the basis of just that parallel, as for example most of the atheistic contributors to the discussion published as *The Logic of God* [5] demonstrate. But to portray Science as ever changing, but religious belief as immutable, is based on an invalid analogy, as a closer look at the commitments of scientists will show.

James Robert Brown perfectly articulates the erroneous analogy of confession and theory in his book *Who Rules in Science?*

"Every physicist allows that quantum mechanics could be deeply wrong... Could any Christian, by contrast, abandon belief in the divinity of Christ?... The difference between a physicist and a priest is not so much in the subject matter. Rather the difference is fundamentally this: a physicist can abandon all the central beliefs of current physics and still remain a physicist. A priest cannot abandon certain central beliefs without giving up the vocation. *Commitment* is a virtue in religion — and a sin in science." [6]

This is one variation on a popular theme of the purported differences between Religion and Science. Religious belief, so this argument goes, is static, because it relies on immutable 'central beliefs', whereas Science is open to 'wherever the data lead'. I leave unchallenged Brown's introductory assumption that "every physicist allows..." although I think it is in fact wrong. Instead I will look at the use of *commitment* and ask whether this concept really allows us to draw such a sharp distinction between Religion and Science as Brown claims.

First, as sweeping as Brown's statement sounds, he cannot possibly mean that scientists have no commitments whatsoever. They could not be good scientists unless they were committed to the intelligibility of the world, the value of rational inquiry, taking data seriously, and so on. To the extent that such commitments touch on ethics, such as a commitment to honesty for example,

they are demanded from the adherents of religions as well. When Brown talks about commitment as a sin in science he must mean *commitment to a particular theory* or a particular interpretation of data, not the commitments that are required for proper scholarship. The scientist's sin Brown has in mind is apparently what Kuhn and others have called *tenacity*, often characterized by quoting Max Planck's statement that "a new scientific truth does not triumph by convincing its opponents..., but rather because its opponents eventually die" [2, p. 151]. Brown's sinless scientists are the ones who let themselves be convinced by new truths.

Allowing commitment at the ethical or meta-theoretical level, but not the level of theories, presupposes that the distinction between these levels can always be sharply drawn. In fact, to be a good scientist one would have to be always clear about the level at which one is thinking and working at any given time. This is somewhat implausible. When it comes to a concrete situation, a commitment to honesty, for example, is rarely to an abstract concept of virtue. Rather it is being honest about a specific issue. The content about which a question of honesty might arise is important, in Science just as much as in everyday life. Being committed to the values that make one a good scientist cannot be surgically separated from the commitment to scientific content.

Still, it might be argued that a good scientist ought to try to keep these levels separate, and even that one of the necessary meta-theoretical commitments might be to not become too stubbornly committed to particular theories.

Second, we therefore have to ask whether commitment to the divinity of Christ in Brown's example is really analogous to a scientific theory. This gets us to the heart of our analysis of confessional language, since "I believe in Jesus Christ, the only Son of God, eternally begotten..." etc., is exactly the kind of language that is at issue in this investigation. In other words, are confessional statements in fact expressing commitment to something that is analogous to a theory in science?

This may have some superficial plausibility. However, the confessions of a community of believers are not directly comparable to what professional scientists say and do. For a valid comparison with scientific research we have to look at a comparable professional level in the sphere of religion, that is, to theology as a theoretical enterprise. In this sphere there are theological theories *about* the divinity of Christ and its meaning, just as there are scientific theories trying to explain certain observations and results of experiments. There are also criteria to evaluate these theological theories, such as whether they promote the kind of life that Jesus exhorted his followers to lead. In other words, it might make just as much sense to consider the divinity of Christ as analogous to *data* as it is to consider it a theory, since that seems to be the way that professional theologians mostly treat it.

Using the term *dogma* as shorthand for the confessional expressions of belief, we can thus distinguish between a dogma:theory analogy that underlies Brown's attack on commitment, and a dogma:data analogy considered in the preceding paragraph. Like all analogies, either one can be taken so far as to become absurd. The limits of validity for either analogy would have to be carefully mapped before further conclusions could be drawn.

One reason why the dogma:theory analogy is clearly misleading under many circumstances is that, as we have noted before, religious commitment is, or at least can be, *prior* to its confessional articulation. However, a scientific theory is by definition something that has to be worked out in some detail *before* any question about being committed to it might arise. To talk about commitment in Science only makes sense if the object of this commitment is not merely a vague idea, but a theory that is articulated to the point of being publishable. Brown's thesis regarding the difference between Science and Religion therefore seems to be based on a misuse of an analogy which, if valid at all, is quite limited in scope.

We can see now what goes wrong when *propositional parsing* is thought to translate confessions of faith into theoretical propositions without any loss of meaning. This translation turns an analogy of limited scope into a dogma:theory identity. But an identity of dogma and theory cannot possibly be sustained, since theologians do not in fact treat dogmas in the way scientists treat theories. It may be wrong for scientists to be committed to particular theories, at least if the commitment is excessively tenacious, but that tells us nothing about the difference between Religion and Science, since the objects of commitment are not really comparable.

The third thing that is wrong with Brown's alleged distinction is that commitment in Science and Religion, rather than distinguishing between the two, is in fact much more similar than the quoted passage allows. Brown concedes that a priest does not have to be a staunch Neothomist in order to qualify as a believer; it is only, in his own words, 'certain central beliefs' that cannot be abandoned without losing priestly status. But is it really true that a physicist can abandon *all* the central beliefs of the field and remain a scientist in good standing? We will have to address this question in some detail.

4. Members in Good Standing

We can all be thankful that Science never imposed the fate on its dissenters that Michael Servetus and Giordano Bruno suffered for denying the divinity of Christ — both were burned at the stake, Servetus 1553 in Calvinist Geneva, Bruno 1600 in Catholic Rome. But excommunication in the milder sense of being no longer regarded as a member of the community (of a particular denomination or a particular scientific area) in good standing is well known in science, as almost any practicing scientist will admit. Certainly there have been examples in my own field of Cosmochemistry.

Consider an astronomer who becomes seriously involved with astrology, giving up traditional research in favour of improving horoscopes. Would we still regard this person as an astronomer? In a purely formal sense, yes, by still having a Ph.D. in Astronomy and perhaps even holding a job in an Astronomy department. But would we consider it proper scientific activity to publish a horoscope?

Likewise a priest who gives up belief in the divinity of Christ is still formally a priest, in the sense of being ordained and perhaps being pastor of a parish — at least until such time as he is defrocked or excommunicated. Such formal forms of expulsion are not available in science, but this is an administrative matter. Brown [6, p. 94] actually considers whether those who publish blatant nonsense about science should be eliminated from teaching posts. He does not seem to notice that this is the kind of fate that, on the evidence of the quoted paragraph, only priests are supposed to suffer.

In any case, something like ‘policing one’s scientific community’ seems to be necessary to maintain the authoritative voice of Science in society. And it is only logical that an anti-authoritarian like Feyerabend, who proclaimed to be *Against Method* [7], would be opposed to it. As Feyerabend liked to claim, there are no particularly good substantive arguments against astrology (ref. [7] and in many other of Feyerabend’s writings). The fact that astrology has been ‘excommunicated’ as a proper subject of scientific inquiry rests on the fact that against the background of established scientific theory its claims are wildly improbable. But its (im)probability depends on the established scientific opinion that serves as its foil.

The limits of sanctions for heterodoxy, in Science as well as Religion, are an issue for serious debate. But it is clear that some such limits must exist, however informal they may be. Someone holding to the phlogiston theory could be taken seriously at the end of the 18th century, even a few decades after the discovery of oxygen superseded that theory [8], but anyone who would do so in the 21st century could not really be a member of the community of chemists in good standing. So much so that ‘believing in phlogiston’ has become something of an inside joke among chemists to describe someone whose ideas are quite beyond the range of acceptable scientific opinion, even though in the real world no such chemical heretic might in fact exist.

In summary, the thesis of commitment as ‘sin’ in Science cannot be sustained for two reasons. One, because the strict delineation between scientific content and the meta-scientific level that the thesis requires is not always possible. Two, because in actual scientific practice it turns out that certain commitments to scientific content are in fact required.

A contemporary case that shows how these two aspects are interconnected is the reaction of the scientific community to the issue of Intelligent Design (ID). In the US, where this issue is of great political interest, much work has been done to analyze ID and its critics, which cannot be reviewed here. My discussion is limited to how this debate sheds light on the issue of commitment. Proponents of ID argue for an unspecified ‘designing intelligence’ which (or who) directs

the process that causes the cosmos [9] and life in it [10, 11] to evolve. The prevailing critique of this proposal amounts to claiming that ID proponents are unscientific because they are *not* committed to allowing only naturalistic explanations in science. But this methodological issue directly affects scientific content, since ID proponents cite specific features as purported evidence for their claim: the bacterial flagellum [10, p. 69], the blood clotting cascade [10, p. 74], and others.

The commitment to naturalistic explanations, as demanded by mainstream scientists critical of ID, requires that such explanations are actually available in these specific cases, or at least that it is plausible that they can and will be found. In other words, the need to defend the particular epistemological stance of ruling out non-naturalistic explanations does imply a kind of ‘promissory commitment’ to theories that are methodologically acceptable. This makes it obvious that the separation of particular theory from methodological commitment, as demanded by Brown’s thesis, is impossible in practice.

5. The Multiple Functions of Creeds

The overwhelming majority of scientists reject the demand of ID proponents to treat their claims as scientific theory. In particular, they object to teaching ID in Science education [12]. Where the demand to do so crops up, public statements opposing this are produced that resemble in some ways the confessional statements of Religion. Short of being honed to the level of the Nicene Creed or the Westminster Confession, they nonetheless often imply ‘this is what we believe’. To forestall misunderstandings, I am talking here about a similarity that is primarily formal, without necessarily implying that believing a scientific principle is in any way substantively similar to believing a Church dogma. However, I suggest that this formal parallel does have implications for the understanding of confessional language in Religion.

To understand these implications we have to turn our attention to the community that is actively involved in professing these commitments. So far we have focussed on fairly small groups of professionals, such as scientists committed to their work, theologians engaged in interpreting dogma, or philosophers misunderstanding creeds by means of propositional parsing. But in fact it is the much larger community of believers that regularly recites professions of faith, just as it is a larger community that signs letters protesting the teaching of ID in science courses — in the case of ID, for example, over 10,000 members of the clergy of most mainstream denominations in the US who support the Clergy Letter Project [13]. Only a small fraction of these are practising scientists.

We apply the term ‘layperson’ in both religious and scientific contexts. Just like scientists attending a church are laypersons with respect to the officiating clergy (unless they are themselves ordained), so the clergy signing on to the Clergy Letter Project are laypersons with respect to Science (unless they are themselves scientists).

This tells us that professions of faith have more than one function, and that the implications they have need not be the same in all circumstances. To a theologian the theoretical aspect of a confessional text may be important, expressing a dogmatic pattern or articulating the structure of the faith that his particular community confesses. To the outsider the creed of the community may be a symbolic summary of what the community is about. But what about the believer who is not some kind of academic specialist, but recites the creed every Sunday as part of worship services?

Take the doctrine of God as person (in Trinitarian faith God the Father as one person of the Trinity). Clearly this is implied in the words “I believe in God the Father...”, and if we were to speculate what a typical believer might mean as she recites these words, it could be a number a different things. Not usually, one would expect, the kind of abstract semantic statement that a philosopher would give it, like “one of the necessary properties of what I would call ‘God’ is that it or he is a person”. More likely it is intended as a personal statement in the sense, “I believe God to be a person,” which has the experiential connotation, “I experience God as a person”. This statement of faith is more holistic than the preceding philosophical one; it implies both the *existential condition* of the faith content and some of the content itself. Or the person may simply mean, “I assent to the doctrine of personhood of God” without correlative experience. And it can mean any of the above for the same person at various stages in life.

The last alternative, simple assent to a doctrine, need not imply any particular ‘definition’, as in the semantic statement. But among those who want to construe Religion as totally dissimilar from Science it will probably be cited as evidence that religious belief consists in unquestioned acceptance of what is passed down by authority, and nothing but appeal to authority is needed in order to defend it. By contrast, it is argued, any appeal to authority in Science is a bad thing. Scientists do not appeal to authority, but find out things for themselves — if possible by experiment.

I have argued before [14] that this is a distorted view of the role of authority, and that authority in fact performs similar functions in both domains. Here we simply need to note that I am talking about the assent of a believer who has no professional obligation, nor perhaps the means, to conduct an academic study. But someone who is not a specialist in Science either is in exactly the same position with respect to scientific methodology and theory. Not everyone who signs a letter opposing the teaching of ID in Science classes has the means to independently explain why ID violates fundamental principles of scientific inquiry. Some simply assent to the principle that Science only accepts naturalistic explanations, because they trust the authority of professionals who have good reason to adhere to this principle.

This brings us to a further analogy between the ‘confession’ contained in a statement like the Clergy Letter and the dogmatic underpinnings of confessional language expressed in Christianity’s creeds. In both cases the primary motivation was originally to guard against error; the Nicene Creed, for example, arose from the necessity to delineate the mainstream of early Christianity from

Arianism [15]. Although formulated in positive language, the intent of the confession is essentially what *not* to believe; which kinds of things are outside the bounds that define the confessing community. In the case of the ancient Christian creeds this origin is often overlooked by those who would compare them to scientific theories, but a similar function can be seen just as clearly in the foundational statements of the Reformation. In these much longer and more elaborate documents the confessional aspect is made explicit by their names, like Augsburg Confession or Westminster Confession. These, too, state in positive terms what to believe, but the context of their origins makes it clear that their primary intent is to repudiate those parts of Catholic belief that the confessing communities can no longer accept.

As we have seen, any community, whether religious or scientific, must at some point articulate what kinds of statements are incompatible with their own central identity. Such a delineation of a community's identity is clearly something rather different from a theory in Science. The Clergy Letter mentioned as an example from Science does not endorse any specific theory, and by its analogy with confessional statements in Christianity neither do they. This is another reason for rejecting the view that commitment in Religion is something analogous to tenacity in the defence of scientific theories.

How this delineation of identity is articulated may, of course, be subject to many contingencies. But the fact that historical circumstances have led scientific communities to use a different style than religious confessions can hardly be used to assert a difference in substance. If there is a substantial difference, as there well may be, one has to look elsewhere for the demarcating criteria.

6. Conclusion

This investigation has started by asking whether the dogmatic structure expressed in professions of faith is something analogous to the structure of scientific theories, as some scientists and philosophers seem to imply [5]. The alternative that confessions are the 'data' that theology works on has been considered. Either analogy, as it turns out, can sometimes be illuminating as long as it is not pressed too far, but on the whole neither one can do full justice to the function of confessional language in Religion.

A more fruitful way of addressing the issue would be to begin with the principles (metaphysical, epistemological, ethical, etc.) of each enterprise, and ask what kind of language might be appropriate to express them. Taking this approach, what can we say about confessional language in Religion in light of the scientific mind set of our age?

One, confessional statements may be more important in Religion than 'theoretical' (propositional) ones. Confessions express an already existing commitment to a way of life, not an assent to a formulated theory. If there is something analogous to scientific theories in Theology, then it consists of theories about how to understand these prior existing expressions.

Two, it is in principle possible to extract theory-like propositions from confessional language, but the effort becomes thoroughly misleading when it is ignored that something essential to confessions of faith is lost in this process. Unlike the depersonalized language of Science, first-person confessional language expresses an existential stance as well as a set of proposition. The two aspects are inseparable, even though for the sake of discussion each can be treated on its own terms.

Three, the dogmatic aspect inherent in confessions of faith is not analogous to theoretical statements in Science; it has at least as much in common with data as with theory, although neither analogy is a perfect match. Commitment in Religion is therefore *not* analogous to tenaciously clinging to (potentially outdated) theories in Science.

Four, one major function of confessional language in the form of creeds is a public, symbolic confirmation of commitment on the part of believers. The absence of formal creeds in Science is connected with the absence of a well-defined ‘community of believers’ (Church) in Science, not with the alleged non-rational nature of creeds in Religion. In the realm of public discourse one can nonetheless find statements that are roughly analogous to confessional language in Religion. This is especially true when mainstream Science is being defended against politically motivated attacks, as in the case of public repudiation of Intelligent Design.

Finally, the conclusion that neither the category of commitment, nor the confessional language that expresses it, can provide a substantive demarcation between Religion and Science does *not* imply that such a demarcation does not exist. It simply means that if it does one has to look elsewhere. But this is a much more complex task than the one that has been addressed here.

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