## **Further Thoughts**

## Greg Littmann and Graham Priest<sup>1</sup>

## Priest

Many of the arguments raised by Littmann in his original paper<sup>2</sup> have now had a good airing, and I am happy for people to consider the details, and make their own minds up. I would like, here, to make a few comments on some of the interesting points his present paper brings up.

First, I entirely agree with him that in evaluating a philosophical view, one must weigh the pros and cons to come to a thoughtful judgment. And reasonable people may weigh the pros and cons differently. In particular, there may well be significant differences of opinion concerning the weight one should place on the Principle of Non-Contradiction (PNC)—what Littmann calls an intuition. I'm sure that most contemporary analytic philosophers would weigh it fairly heavily, as he does. I'm also sure that he is right that if one has already become persuaded of the reasonableness of sometimes accepting contradictions—for example, because of the way in which this provides a simple and robust solution to the paradoxes of self-reference—one will be inclined to put less weight on it here than would otherwise be the case.

However, when one appeals to an intuition—a gut feeling that something is right, without further grounding—it is important to ask where the intuition comes from. Are there good reasons to take the intuition seriously, or is it something that one has come to believe simply by being told it so many times? Thus, there are times and places—some of them in the not so distant past; some, indeed, in the present—where it seemed obvious to white males that women and non-Caucasians were of inferior intelligence. Why? They had simply absorbed these views from their patriarchal and racist culture. The fact that one finds something "intuitive", should always, I think, be an invitation to step back, and ask why.

<sup>&</sup>lt;sup>1</sup> Priest's paper 'Contradiction and the Instant of Change' and Littmann's paper 'Contradiction and Change' were both presented at the conference *Limit Decision Problems: Medieval and Contemporary Perspectives*, Topoi Excellence Cluster, Berlin, November 2015. This note reports some of the ensuing discussion.

<sup>&</sup>lt;sup>2</sup> 'Moments of Change', Acta Analytica 27 (2015): 29-44.

Even in philosophy, we are all prone to accept things simply because that is what tradition says. And when it comes to an intuition concerning the (PNC) I think there are strong reasons to think that it is merely the weight of a certain not very well grounded philosophical tradition. There has only ever been one extended defence of the Principle in the history of Western philosophy, as far as I am aware: that of Aristotle in *Metaphysics* Gamma. The arguments offered there are hardly rationally cogent. The first is so tangled that commentators cannot even agree what it is supposed to be; let alone that it works. Most of the others simply change the subject and argue for something else.<sup>3</sup> Yet without cogent arguments, one cannot help but feel that Aristotle did nothing more than create a dogma. This is not, of course, to say that it never reasonable to reject a contradiction; but the PNC is a universal claim: one must *never* accept a contradiction. Such universal nostrums about rationality strike me, at least, as rather simplistic.

Next, I turn to what he says about the solution to Zeno's paradox. A Hegelean account of motion, he says, is no better at solving the paradox than a more orthodox account. For even if (a point on) an arrow is in a contradictory state at some time, it is 'not intrinsically changing into or out of that state at that instant'. So 'there is no progress made by the arrow at any instant of the series'. Now, it is true that according to the Hegelean account, at any instant the arrow is and is not, at the places at which it is and is not. But it does not follow that it makes no progress at that instant. Progress is made precisely because of the fact that it is at more than one place at the instant. On a Russellean account of change, progress made at an instant is zero, and an infinite sum of zeros is zero. But on a Hegelean account, the arrow occupies an interval of positions, and the length of an interval is non-zero. If, as Littmann suggests, there were an object that is and is not at exactly those places for all time, this just shows that it is moving at each instant: states of motion are, after all, intrinsic. It is moving in those places where it both is an is not, and it remains thus for all time.

Finally, I turn to what Littmann says about how things stand if one accepts an eternalist account of time. According to him, since there is no change as such in such a picture, there is no need of states of changing, and so no need of contradictory states of changing. Now, I think that it is unfair to say that an eternalist denies that there is any real change. They just understand change in a certain way. For an object to be in a state of change at a certain time just is for it (or its part at that time) to be in a certain state at that time, and it (or its temporal parts at those times) to be in a different ones up to that time, or after that time. (So, in particular, they will reject McTaggart's claim that this does not constitute a real change.) And whatever arguments there are for some states of change in this sense being contradictory are just as valid as before.

<sup>&</sup>lt;sup>3</sup> See ch. 1 of G. Priest, *Doubt Truth to be a Liar*, Oxford: Oxford University Press, 2006.

Littmann adds a further consideration if the eternalism is of the kind standardly associated with the Special Theory of Relativity. He says that this makes time space-like, and that change over space does not deliver the same kind of inducement to suppose that there are states of changing, and therefore contradictory ones. Now I agree with Littman that spatial change does not offer the same kind of inducement. However, I think that what he says about the Special Theory is not quite right. In the Theory, events have three spatial coordinates and one temporal coordinate. So there is a difference between space and time. But the important point is that the distance between two events can be spatial with respect to one frame of reference, and temporal with respect to another (and mixed with respect to a third). Whether or not there will be a change in time will therefore be frame dependent. But this does not show that change in time is like change in space. It shows only that whether there is a contradiction associated with a change in time will be frame-dependent. The Theory tells us, after all, that a sentence such as 'the speed of object x is 1,000 km/sec' may be true with respect to some frames, and false with respect to others. It is no surprise, therefore, if a sentence such as 'x is in motion and not in motion' is also true with respect to some frames but not others.

## Littmann

Priest raises four points that I wish to reply to. Firstly, Priest maintains that the intuition in favor of the PNC is suspect because of its origin. He writes, "when one appeals to an intuition—a gut feeling that something is right, without further grounding—it is important to ask where that intuition comes from." In particular, he sees the intuition as being undermined by the fact that it is likely an intuition "that one has come to believe simply be being told it so many times."

I disagree that whenever intuition is appealed to, it is important to know where the intuition comes from. In fact, I think that this is rarely true in philosophy. The source of an intuition is relevant if the intuition is being presented as evidence. For example, if I present my intuition that Jones is guilty of murder as evidence of Jones' guilt, the issue of where my intuitions come from would be important. However, in most cases in philosophy, when intuition is appealed to, it isn't in a context in which the intuition could constitute evidence. For instance, Priest appeals to the intuition that there are instants of change, but such intuitions can't be evidence that there are instance of change. Not only is there no demonstrated track record of our intuitions being right on this point, but we can't even offer an account of why such an ability would evolve. Presumably, none of our ancestors ever survived or reproduced because they had unusually reliable intuitions about the existence of an instant of change.

Likewise, intuitions about the PNC don't constitute evidence. After all, no intuiter has any proven record of reliability, and there seems no reason for an ability to form reliable intuitions about the PNC to evolve. Obviously, our ancestors needed to avoid believing some contradictions and needed a non-explosive system of reasoning, but an ability to tell whether contradictions are in principle possible lacks any obvious practical application. It is entirely possible that, as Priest suggests, the intuition in favor of the PNC is so widespread only because the PNC has been endorsed so often. However, it doesn't matter if this is true, since if the reason for the intuition is something else, it is presumably something just as arbitrary.

However, intuitions in philosophy remain important because they produce inclinations to hold certain beliefs. They are important because we are interested in the world as we believe it to be, whether our beliefs are justified or not. This is why philosophical skeptics like myself, as well as those who are not skeptics but who find that they can offer no reply to skeptical arguments, remain engaged with the world as we perceive it. For as long as we think it is real, we will care about it, whether we can justify thinking it is real or not.

The importance of non-evidential intuitions might be most obvious in the case of moral intuitions. Such intuitions seem to provide no evidence for corresponding moral truths, yet our moral intuitions pay a central role in our moral thinking because, as it happens, they determine what we believe.<sup>4</sup> A theory that conflicts too much with our moral intuitions will be rejected. Moral intuitions are clearly liable to be a product of how we have been raised and the traditions of our society, but recognizing this makes them no less compelling. Had I grown up like Aristotle, I would probably have had no intuitions against slavery. As it is, I find slavery wicked, and can't do otherwise.

Likewise, while intuitions that the PNC is correct provide no evidence for the PNC, they produce inclinations to hold certain beliefs. To follow sufficiently strong intuitions isn't to abandon the search for truth, but to admit what we believe the truth to be, or at the very least, what we are inclined to believe it is.

Secondly, Priest takes me to be begging the question in my discussion of Zeno's paradox when I deny that change without a difference is real change and movement without a difference in position real movement. It seems that Priest and I are again left with a clash of intuitions, in this case regarding what might count as change and movement. It is possible that our difference is not even one of intuition, but word usage —that both of us are right in some sense of "change" and "movement" and not in another. If so, it seems to me that my use of the word "change" is the orthodox useage and Priest's is not, but the question is an empirical one. At most, I can point out that Priest's "change" is change without a difference, and leave it to others to decide if this is acceptable to them or not.

<sup>&</sup>lt;sup>4</sup> Obviously, not all philosophers accept that "moral beliefs" have propositional content. Such philosophers will reject my example here, but hopefully not the point it illustrates.

Thirdly, Priest rejects my argument that since eternalism is true, there is no real change, and so no need for an instant of change. Priest is quite right that there is no consensus, among eternalists or elsewhere, that eternalism is incompatible with real change. However, since eternalism seems to be true, and since there is an intuition that eternalism cannot allow for change, this is an intuition to weigh against our intuition that there must be an instant of change.

Fourthly, Priest rejects my claim that the eternalism associated with the Special Theory of Relativity renders time space-like, and so undermines our intuition that variation over time requires an instant of change. He does so on the grounds that even on a relativistic model, there is a difference between time and space. This is true. While a relativistic model makes time like space in many ways, time remains different in other ways. The point is just that the more that time resembles space, the less that variation over time intuitively requires that which is not required by variation over space, such as a specific location where the variation occurs.