

Time, Meaning, and Neurophenomenology

Ideas like "time" or "education" or "justice" or "mercy" are easy enough for most people to recognise, understand or use, but when it comes to the nub, quite hard to explicate or theoretically reconstruct. This tends to lead to nuances in interpretation which quite often are unnecessary or inappropriate in a particular context.

This fact comes out very clearly when relatively historically new concepts, like "electricity" are considered. Even today, it is sometimes said:

NA1: "In spite of everything we know about electricity, we do not know what electricity is."

The idea being perpetrated is that whilst we know what charged particles are, and we know Maxwell's laws and other such properties of electricity, but nonetheless however much knowledge of this kind is gained we will never know what electricity is. But this is wrong because by knowing about charged particles, Maxwell's laws etc for the most part, we do know what electricity is. Of course we cannot sum up this extensive knowledge in a brief paragraph.

To clarify even further, in NA1 we could just as easily substitute the words "your nose" for "electricity" and make it NA1n. It is absolutely clear that we do know what "your nose" is and to say we don't is splitting hairs for most real purposes, philosophical details aside. Hard cases are likely to make bad law, here as elsewhere and we must rely on context and in the normal context, NA1n is absurd.

Referring now back to space and time, Buber (1959) pointed out "A necessity I could not understand swept over me: I had to try again and again to imagine the edge of space, or its edgelessness, time with a beginning and an end or a time without beginning or end, and both were equally impossible, equally hopeless – yet there seemed to be only the choice between the one or the other absurdity". The problem here is that when Buber tried to get down to philosophical details he just had not got the right stuff and relativity theory shows us that. There is really no certain reason, using relativity, why time or space would have a beginning or an end - philosophical problem solved.

Now we could say that Buber's confusion was caused by his acceptance of Newton's concept of space rather than Leibniz's. In Newton's world-view physical objects could exist by being in space, but space could exist even if devoid of any physical objects. In Leibniz's view, objects existed anyway and could touch one another, be separated by various distances and so on but space, per se, did not exist. This immediately resolved Buber's problem. One can solve such a problem by showing that it contains an untenable proposition. In this case the problem was not with space itself, but with Newton's conception of space. The answer was to accept Leibniz's more economical view, or simply to look for a consistent definition of space, which without relativity was hard to find.

McTaggart reasonably showed that in his context time showed a contradiction and he was right and logical to suggest that time did not exist, or is unreal. That was a sensible and economic view but slightly harder to develop than in Leibniz's case, where Leibniz had effectively inferred that space, per se, did not exist and was able to get quite a good theory for his era. But McTaggart's concern with time is in many ways very analogous with Buber's concern with space. Buber knew more or less what space was, but when he thought about it, it looked somehow spooky and unreal. Maybe we could say that that is "Angst". It is certainly a clear indicator that something needed to be done.. Anyway, the same thing happened to McTaggart with time, and as we have already pointed out earlier, just as Einstein resolved Buber's philosophical worry about space, so too category theory

can up to a point resolve McTaggart's problem with time. But that of course does not give us the right to ignore McTaggart's problem just as relativity has shown we should not certainly not have ignored Buber's problem. Just as in a way we have all been *ersatz* Leibnizians, prior to Einstein. Let us importantly try to avoid continuing the same line of error with McTaggart, whether or not a resolution of his problems is more of a serious mathematical and philosophical challenge than Einstein's resolution of Newton's problem was.

Now Quinton (1962) describes a man living in England who when he falls asleep finds himself at a lakeside in a tropical setting. His experiences at the lakeside, unlike many dream-sequences, are as ordinary, as matter-of-fact, and as uneventful as are his everyday English experiences. Nothing dreamlike, fantastic, or wildly unlikely occurs in the tropical environment. The hero passes the day in the tropics and when he falls asleep there immediately finds himself in England. And these English and tropical experiences regularly alternate. Life in both locations appears equally real and Quinton has no reason to claim that objects in one reality have any spatial relations to those in the other, for no matter how hard he searches each reality he can never discover evidence of the other. That, at any rate, is Quinton's rather impractical concept-structure for the purpose of argument that two regions of space need not be connected and the structure has been considered again and again by philosophers since 1962.

But Quinton then asks whether we can construct an analogous tale showing the possibility of there being two times. Surprisingly he argues that time, unlike space, is unitary, that there can be only one time. But the same dream argument can be applied to time as to space and, unlike Quinton claims, but as philosophers subsequent to Quinton sometimes correctly claim (Swartz, 2001), there is no reason why the two regions of time need be connected either! This is because when Quinton's hero, according to Quinton, keeps a diary "At the beginning of day 1 in England I write down in order all the lakeside events I can remember. On day 2 in England I cannot remember whether the events of day 1 follow or preceded the lakeside events in the list. But the list will be there to settle the matter and I can, of course, remember when I compiled it" How does Quinton's hero know that he is writing down memories (of past events) and not precognitions (of future events)? I'll specifically quote Swartz here:" No mental phenomena carry with them an identifying mark of memoryhood. Some of the things we think we recall never happened at all, yet introspectively these thoughts (images, beliefs) are indistinguishable from genuine memories. Merely being memorable or, more exactly, having the felt quality of a memory is no guarantee of the truth of that which has that quality. Our mental faculties can be faulty or deceived. We can believe that we remember events and it turns out that these events did not occur, and similarly we can fail to remember events that did occur. That a thought or mental image is really of a past occurrence and not perhaps a precognition of a future one is guaranteed by nothing in the thought or the image itself. The manner in which memories and precognitions present themselves to consciousness seems to be all of a piece. To learn that a memory-like thought is really a memory and not a precognition we must depend ultimately on objective criteria and more exactly on physical criteria."

There may be philosophical problems as to what we can reasonably consider as a physical criterion and what as a mental criterion, but that is Swartz's argument as it stands and it could be amended further if we were desirous to do so. As Paul Churchland (1985) points out, for instance, precognition is occasionally occasionally cited in favor of dualism. Be that as it may, the argument does show that we cannot therefore logically infer that there is one unitary time but not one unitary space and Quinton's argument as amended shows that neither one unitary time nor one unitary space is required. We could say that modern string theory would presumably not object to that idea anyway but it would be naively accepting to do so and we most certainly cannot accept all the wild and woolly dictates of string theory without useful qualifications, and indeed we may not wish to support string theory at all.

We are much wiser to stop at the point, roughly, that we (or Swartz) have bested Kant and emphasised the necessity of category theory in an understanding of physics.

More next time.

References

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