

Memetics and the A Series (1)

When we look at the A Series and the work of, for example, Varela and Ehresmann as frequently referred to in earlier blogs, but consider problems such as (and only "such as", certainly not exclusively) that the A series may be a proper class (that is, roughly, a class which is not a set) we are left with at least two obvious approaches, the first being to examine further immediately the A series properties of time and consciousness in terms of the work of Varela, Brown and Ehresmann for example.

Now attempts (which unfortunately normally did not specifically invoke A series) have already been made in the literature to do something like this - I am thinking particularly of the work of Baas (1997, 2004), the work of Ronald Brown often referred to in this blog, and in particular a recent summary of the situation in the n-Category Cafe blog (Baez, 2006) and there is the Blog "Machine Learning Thoughts" (Bousquet, 2006). The latter brief blog entry makes it exceptionally clear that not only is a lot more work needed before machine learning can reasonably aspire to the rare and refined level of detailed philosophical debate, but we can see that the maths is not yet well enough founded even allowing for the fact that nowadays proofs or even establishment of ideas is in itself tied up in computerisation (I'm thinking Chaitin and further, also Note 1 in addition as other problematic areas), which of course could make it all far more complex.

So basically what simply looks like a relatively straightforward mathematical exercise (if undoubtedly an extremely difficult one) is truly fraught with complexities. In other words I am not just saying, OK it's a difficult topic but I am suggesting that perhaps the easiest option might be to take a different angle on the whole thing, even though in my opinion we have very much gone some way along the course by establishing the apparent need for the A series as well as the B series and suggesting that all this is mathematically and philosophically feasible. So **we may have made some headway, which we will retain if possible.**

What I am saying now is - lets look at the facts, find enough new scientifically establishable work, take a head on view that there may well be a real 'hard problem' as well as many other basic philosophical problems which we must at this time seriously confront, and keep it all very empirical to begin with.

Whilst nowadays many regard Carl Gustaf Jung as somewhat of a ladies' man and simply a verbose mystifier, he said a lot of smart things. In particular in his disagreements with Freud he brought out the idea of the Oedipus Stain - this meant that in a way Freud was considering his patients as if looking at a culture under a microscope and, by staining it, considering only certain features. Clearly if he had used a different 'stain', he'd have considered different mental faculties and of course up to a point Jung seemed to profess that he had a whole series of different 'stains' he could use or even, up to a point, no stain at all. So what we may need to do is to consider different mental perspectives on the problem of A series time, and see which if any of them produce the best results and even allow us to present an effective, even predictive, mathematical model. This could be either a true A series (which we would hope for) or a pseudo A series, perhaps even presented mathematically like a B series or concatenation of B serieses, as mentioned in earlier blog entries.

For this purpose at least, why not consider memetics?

Considering Memetics

I have been looking further at the idea of memes and genes, since it does look as if it could possibly fit in with the McTaggart A series in the way which I am using it at the moment, assuming that the A series is a proper class. Thus a complex systems explanation of the A series could help to tie in with

experiment.

I note that memetics has a long way to go yet, for example Susan Blackmore's (1999) ideas in her important early work tends to run against problems with mirror neurons, which I think were not well known (Rizzolatti, 2004) at the time of writing, and certainly are now known to occur in animals and humans. There is other potentially hostile work such as some fairly recent work by Edmonds (2002, 2005), insofar as both his "three challenges" and the "revealed poverty" article are concerned but the "revealed poverty" article itself, for example, has problems as the "Journal of Artificial Societies and Social Simulation" which he refers to as to an extent providing more successful replacements for memetics seems little more successful than the (currently discontinued but possibly to restart) "Journal of Memetics", and I know from many years of experience, high circulation of a journal does not relate to correctness, relevance or often even much to popularity and acceptability anyway.

So I think the meme idea still may have mileage and use, but the idea of memes being a sort of "Theory of Everything" may be a bit much as even physics is finding that idea difficult.

The early papers on Chaos Theory by Lord May for example, were pretty precise but maybe it is too much to expect that sort of precision at this early stage, I feel we are still, relatively speaking, in the days of Lorenz.

Part 2 of this paper will provide preliminary results.

References

Baas N.A., Ehresmann A.C., Vanbremeersch J-P., (2004), "Hyperstructures and memory evolutive systems" International Journal of General Systems, Volume 33, Number 5, October, 2004, pp. 553-568(16)

Baas, N. A., Emmeche, (1997) "On Emergence and Explanation", *Intellectica* 1997/2, no.25, pp.67-83

Baez J., Corfield D., et al (2006), n-Category Cafe
http://golem.ph.utexas.edu/category/2006/12/back_from_nips_2006.html

Blackmore S., (1999), "The Meme Machine", p49, OUP, ISBN: 0198503652

Bousquet, O., (2006) Machine Learning Thoughts, "Making Machine Learning more Scientific",
http://ml.typepad.com/machine_learning_thoughts/2006/06/making_machine_.html

Edmonds, B. (2002). "Three Challenges for the Survival of Memetics".
Journal of Memetics - Evolutionary Models of Information Transmission, 6.

Edmonds, B. (2005). "The revealed poverty of the gene-meme analogy – why memetics per se has failed to produce substantive results". *Journal of Memetics - Evolutionary Models of Information Transmission*, 9.

Josephson B., (2001) Cavendish Physical Society talk 9 May 2001,
<http://www.tcm.phy.cam.ac.uk/~bdj10>

Kandel E.R., (2000) "The Molecular Biology of Memory Storage" Nobel Lecture,
http://nobelprize.org/nobel_prizes/medicine/laureates/2000/kandel-lecture.html

Rizzolatti G., Craighero L., The mirror-neuron system, Annual Review of Neuroscience. 2004;27:169-92

Notes:

1. Brian Josephson, for example, has written papers on mathematics and brain functioning, and without including a bibliography of such work, a brief description as in (Josephson 2001) makes it clear that he has plumbed to the depths of a lot of relevant ideas. Perhaps on a more practical note, workers such as Kandel (2000) try to sort the brain out but my take on Kandel's work is that in his own way he is a good deal more practical than say Penrose but he certainly does not answer all our questions, or so far even point a finger as we might want.