Immunity and Community: Being Stuck and Getting Moving

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Abstract: The text contributes to the special issue celebrating the 10th anniversary of the journal *Tecnoscienza* by presenting a reflection departing from viruses, biology and relationships.

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> It may also be given to us to invent metaphors that do not belong, or that do not yet belong, to accepted patterns (Borges, 1967/8).

I had a good friend years ago who died, painfully and slowly, of Hodgkin's lymphoma. There was a metaphor ready to hand for his experience – "he showed bravery in a long battle against cancer"; "he was another victim in the war on cancer" and so forth. This is what Borges called a "pattern metaphor" – one that could generate myriad variations but which freighted a singular vision. David, though, had another relationship with his cancer – he wanted to live with it, to share his body with it, to learn how it was part of him; not some foreign invader out to storm his barricades. I thought this was so wise, but it has taken me a number of years to begin to understand it. I've been thinking of David a fair amount in the context of the war against Covid-19 (get your battle kit her: https://www.beyondmybattle.org/covid19!) – this silent and 'evil' disease which is attacking whole families.

Let's start with the fact that if viruses 'want' anything, it's that we





should all just get along. Just in terms of self-interest, a virus has no interest in wiping out its host – any more I guess than people do in wiping out their ecosystem... It just looks like it sometimes. Successful viruses, such as herpes – which infect more than half the US population – find niche nerve ganglia and largely lie dormant. Lynn Margulis' widely accepted theory of mitochondria (which provide oxygen/energy within cells) is that they are endosymbionts – 'invaders' which did such a good job that were incorporated into our (in the sense of we eukaryotes') genetic code.

It's easy to think of the world in terms of me in here and the rest of the world out there – the first line of defense for the self being the skin. This is an historical construction – in Western Europe, the skin got to close us off from the rest of the world in the early nineteenth century (Reinarz and Siena, 2007) – earlier it was a porous membrane which took in effluvia and exhaled waste. Great pragmatist philosopher Arthur Bentley (1941) was surely right when he wrote that: "Human skin is the one authentic criterion of the university which philosophers recognize when they appraise knowledge under their professional rubric, epistemology", going on to say that: "if philosophers cease thus crudely to employ it, all their issues of epistemology will vanish, and the very type of attack they make on cognition will be discredited".

Which brings me to something I've been reading for no good reason. A friend and I were talking about insides and outsides of folks¹ and we got into the immune system – leading to this piece in the Stanford Encylopedia of Philosophy (Swiatczak and Tauber, 2020). What got me as once was the idea of the immune system as another sense – not something which is setting up boundaries, but something which – as with our other senses – is exploring the world. My taste buds don't just exclude Mars bars – they work out what to include, and how; similarly, all my other senses. The immune system would be a monumental failure if it merely tried to keep stuff out: over 90% of the cells in our – and I stress our – bodies are microfauna and microflora. The digestive system can be seen as the 'outside within': what do we choose to 'incorporate' and what keeps sliding down and out.

The general point for me here about stuckness and knowledge is that we look at the world wrongly from the beginning if we break it up into separate entities. The theory of evolution is just wrong if it only accounts for the origin of species. What is much more interesting is the development of relationships – as in Michel Serres' discussion of the parasite form as central. In a related context, Martin Buber argued that the relationship – to thou or that – was always prior. We murder to dissect... at any level... within or without the organism. There are reasons why many biologists say the species concept is unreal: there is no singular slicing apart of a set of entities. We interpenetrate. There are also reasons why many cleave to the species concept. It's an available and easy background while we do what

¹ A discussion of chiasm and flesh in late Merleau Ponty.

we want to do. Like the nation state for historians: it's nice to have a defined border to scope your history (especially if it's in one language for the historians/speciality for natural scientists) but really doesn't do much to weave stories of how change happens.

This stuckness is a mirror image of the Enlightenment. Above all else, Enlightenment scholars classified – they organized the world and developed stories about each of its parts. Chapeau! As ever, within the movement were the seeds of it's change – Claude Bernard with his theory of homeostasis reimagining relations; Beniger's *Control Revolution* privileging relationship (feedback). Or, much more interestingly, Theilhard de Chardin's noosphere and more recent Gaian imaginings. We've gotten stuck along the highly successful strategy of dissection; time to move on.

References

- Bentley, A.F. (1941) *The Human Skin: Philosophy's Last Line of Defense*, in "Philosophy of Science", 8, pp. 1-19.
- Beniger, J.R. (1986) The Control Revolution: Technological and Economic Origins of the Information Society, Cambridge, MA: Harvard University Press.
- Reinarz, J. and Siena, K. (eds.) (2013) A Medical History of Skin: Scratching the Surface, New York, Pickering & Chatto.
- Serres, M. (2007) The Parasite / Michel Serres, trans. Eng. Minneapolis: University of Minnesota Press.
- Swiatczak, B. and Tauber, A.I. (2020) Philosophy of Immunology, in E.N. Zalta (Ed.), The Stanford Encyclopedia of Philosophy (available at https://plato.stanford.edu/archives/sum2020/entries/immunology/).