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PLANETARY SPIRIT¹

Origen of Alexandria said that to be, to exist, is to have fallen. And thus, we might infer, for a world to come into existence, it has to fall. So let us take some sand and air, and add some water, and let a little world fall into existence.



This world, like all planets, falls thermodynamically, relaxes down to a lower energetic state.

But it also falls geometrically, as it emerges from a region of an undifferentiated formlessness and immanence. Our words here – ‘settle’, ‘subside’ – come from the proto-Indo-European root **sed-*, ‘to sit’. So we might say, to invoke the name of the ancient Hindu texts, a planet is an *Upa-ni-shad* – a near-down-sitting. But when a planet falls into being it is not a student sitting near a teacher to gain his or her wisdom, but rock and metals and volatiles and noble gases that come to sit down oh so near – and oh, what wisdom will come out of this sitting-down-near!

But in space, before the planetary fall, which way is down? Up and down, verticality, and thus the possibility of falling or rising, is neither universal nor pre-existing; it is a local phenomenon, and one that is created and enacted in the collapse itself.

¹ This performance-presentation was first given at the conference *A Nonsecular Anthropocene: Spirits, Specters and Other Nonhumans in a Time of Environmental Change*, Copenhagen, 8-10 June 2017. All images are stills from a 45-second video made by the author.

With our little world we have cheated, there is already a ‘down’, provided by the greater world of which this little world is a part. But even here the settling, the sedimenting, the sitting-down-near is revealing.



In the *Physics*, Aristotle argued that all of the elements want to move to their natural place in the universe; so earth and water move down, air and fire upwards (1983). In 1937 Victor Goldschmidt returned to this way of thinking with his explanation for the distribution of the elements in the body of the Earth; he thus taught us to speak of the siderophile elements that sink down to the core; the chalcophiles that form ores and remain near the surface; the lithophiles with an affinity for oxygen, and are enriched in the Earth's crust; and the atmophiles that are liquid or gaseous at ambient surface conditions and thus form the atmosphere or are depleted into space (Goldschmidt 1937).

In effect, Goldschmidt, like Aristotle, is explaining the motion of the elements not in terms of the efficient cause of applied forces but the formal cause of things finding their place. But now we must say that, just as the planet enacts the vertical in its collapsing, so too does it create a *topos* and a direction for the different elements in its very taking of form.

Yet in the melee of planetary formation, before matter can find its proper place where it can get properly entangled, bound, caught up, it can become confused – as the world ‘enforms’ itself its elements can be ‘mis-enformed’, misdirected, we might say. Some particles, especially the tiniest ones, may not ever decide which way is up – caught up in the turbulence, they may never settle, never “sit down near” at all.



And even if earth and water, or siderophile and lithophile, does eventually go down, and air and fire goes up, which way does spirit go?

A planet is a falling. The planet forming is falling towards equilibrium; by becoming actual, it is spending its potential, is relaxing to a lower energy state. But a planet is not *just* a falling. Planets in falling are also forming, and in forming they are generating the ability to do work, to create order.

So how does a planet become a ‘whole full body’, where its parts are not just passive strata and compartments but organs subordinated to the organism (Deleuze and Guattari 1977)? First must come the settling, the sitting-down-near, the separating² that prepares the planet to do work on itself. The Dogon of Mali have a mythic explanation of why humans have jointed limbs. Once, human limbs were unjointed, but then the Dogon culture hero, the first metalworker, went up to heaven and stole a piece of the sun from the heavenly smiths. But he fell to earth, and the shock ‘broke his arms and legs at the elbows and knees ... In this way, he received the articulations specific to the new human form that was to spread across the earth, a form dedicated to work.... His arm became folded with a view to work’ (Deleuze and Guattari 1988: 42).³ Planets too in their falling become broken and folded into compartments and strata with a view to work. In our little world, we can see that it is like the preparation for a children’s game, where entities cross the playground in both directions, and thus sort themselves into teams, ready for play.

But, secondly, if it is gravity that makes the world relax into compartments, it is the energy flow produced by continuous applied gradients that prevents the world

² ‘Separate’ comes from *se-* (apart, on one’s own) + *parare* (make ready).

³ See also Mary W. Helms, *Craft and the Kingly Ideal: Art, Trade, and Power* (Austin: University of Texas Press, 1993), pp. 56-7.

from relaxing to quiet equilibrium, and that over deep time brings its compartments into dynamic relation with each other. Deleuze and Guattari call this external agency that forces passive strata to become organs within an organism, machines in a larger machine, and get to work, the ‘Judgement of God’ (1988: 40). But we can be more specific, and call it a judgement of ‘heaven’ and ‘hell’.⁴

The outer planets of our solar system, the gas giants and ice giants that exist beyond the frost line, the orbit beyond which volatiles are not burnt away by solar heat but can fall into the body of the planet, these worlds are judged by *their own past* – for these planets, the main applied gradient is the vestige of the energy of the original planetary collapse, now locked into the heart of the planet. These are the ‘hell worlds’. The inner planets like our world are different, ‘heaven worlds’, judged by *the Sun* – forced to take form by the constant flux of energy from outside.

The breaking into strata plus the energy fluxes make it possible to do work. Thus the applied energy gradient from the sun forces each subsystem of the Earth to unending relaxation – and as it endlessly dissipates the applied energy, some of its energy does work on other subsystems and pushes them away from equilibrium (Kleidon 2010). So: the liquid mantle under the Earth’s crust convects to release the inner heat – but some of that energy of convective motion lifts up the land into mountains; and the wind rushes from sea to land to try to degrade the pressure gradients – but in doing so it dehumidifies the air over the oceans, making it possible to evaporate more water, creating the water cycle; and this water cycle drops desalinated water on the land that can dissolve salts and move them around and concentrate metals into ores; and so on.



⁴ See also Tyler Volk, *Gaia's Body: Toward a Physiology of Earth* (Cambridge, MA: MIT Press, 2003) on ‘Helios’ and ‘Vulcan’.

And in this world at work, how do things move in the body of the Earth? Let me simplify into three broad types of physical motion that we can see in our little world, and how they prefigure possible social forms. First, equilibrium, stillness, and diffusion: tiny, local, multi-directional motion – here is intimacy, locality, tribe, community, gift. Second, laminar advection – long distance transport in parallel motion – here is empire, state and market. Third, turbulence, vortices, eddies that accompany and subvert the single laminar stories – these are the tricksters, rule-breaking culture heroes, the hecklers, the chaos that is the origin of order but never allows order to settle.

When planets take form, where does spirit go? Where does spirit fit in a story of planetary differentiation? The spirits of the Earth are part of a more general story of how planets pass through key moments of immanence-breaking as they self-differentiate over deep time.

We have seen how planetary falling broke the immanence of the solar nebula, and then planetary differentiation into compartments broke the immanence of the young planet. But planets, subjected over astronomically long periods to metastable flows of energy from their hot cores and ‘parent’ stars, are constantly generating otherness within themselves – sometimes fleeting, sometimes stabilised into at moments of ‘bifurcations’ into new kinds of entity with different relations between inside and outside. And at each moment of immanence breaking, there is always a remainder which exceeds representation within the terms of the new system, an excess, a longing.

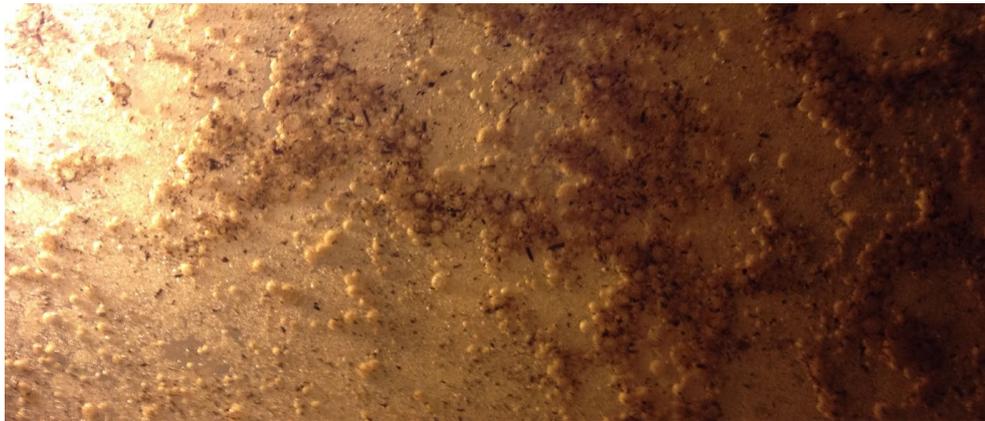
Spirits for Viveiros de Castro are non-representational ‘images’ or ‘signs’ of the originary immanence, the virtual plane of an undivided ‘intensive multiplicity’ (2007: 157-160). And for Bataille humans with culture and tools have ‘lost intimacy’ with the immanence and immediacy of animal being, which comes to play a central role within human culture as an object of both horror and fascination that manifests in the world of spirits (Bataille 1989).

And now let us try to discern in our little world ‘images’ or ‘signs’ of a time when its compartments break up even more and start to work on each other, when this world might pass through further immanence-breaking and moments of emergence of new forms – of life, societies, economy – and the world grows more complex –

emergent, alive, semiotic, social, eventually maybe technological – and its matter starts to move in more complex ways and the world finds new patterns of coherence, involving the reconfiguration of fluxes and flows, the destratification of minerals and energies and their restratification into new layers.

We do not know exactly how to name the transformation that is happening in the Earth; in attempts to provide a single story, rival totalising deities clash in the contemporary geophilosophical imaginary. For, out of the melee of these transformations are being convened ‘full bodies’ on whom these complex processes of planetary change are being coded – Anthropos, Gaia, Sol, Yahweh – and in whose name and image bands of devotees armed with their own liturgies thereby seek to advance or resist the remaking of the Earth (Szerszynski 2017).

And we can use our little world to illustrate the three ‘socio’ or ‘full bodies’ that Deleuze and Guattari discuss in *Anti-Oedipus*, the recoding and reterritorialisation of the flows and powers of the Earth onto full bodies of land, desert and capital (Deleuze and Guattari 1977).



In the first socius of tribe, all flows and production are *coded* and *territorialized* into the Earth and its spirit denizens; here spirit takes the form of the left-hand sacred both light and dark, and immanence is periodically connected with through festival and shamanism. Our little world in its multiple lands and skies echoes the layered cosmos of the Yanomami of the northern Amazon rainforest (Kopenawa and Albert 2013). Omama is the demiurge, who created sun and wants everything to live forever, and the Yanomami are his people; and Yoasi is his evil brother, who introduced the moon and death. Humans and animals share the world with *yai thëpë*, ‘invisible

nonhuman beings’, including the *xapiripë* or ‘shamanic spirits’, images of the primordial, mythological animal ancestors.

The Yanomami cosmos is storied in a double sense. The uppermost layer of the four not visible here is *tukurima mosi*, a fragile, transparent sky, ‘pristine’ and ‘tender’ (68). The next layer down is called *hedu kä misi*, the sky layer. The underneath surface of *hedu* is what we on earth actually see – the visible stars and planets. The top surface of *hedu* has trees, gardens, villages, animals, plants, and, most important, the souls of the deceased Yanomamö, who are in some sense similar to mortals. They garden, hunt, make love, eat, and practice witchcraft up there. Some, *xapiri*, are images of beings who live on the sky’s back and even beyond (ibid.). Then there is ‘this layer,’ *hei kä misi*, where humans – the Yanomamö – dwell. Their forest is the back of the old sky which fell, which they call *wāro patarima mosior hutukara*. Finally, below this is *hei tä bebi*, which is almost barren. When the old sky fell to form ‘this layer,’ it pushed it and its inhabitants underground who are now the meat-hungry ancestors of the Yanomami they call the *aōpatari* or *amahiri-teri*.



How does primal immanence reassert itself in the socius of the tribe? Bataille argues that in the ‘general economy’ of nature, governed by the continuing gifting by the sun of its energy in unproductive expenditure, the key problem is not scarcity but abundance: ‘the living organism... ordinarily receives more energy than is necessary for maintaining life; ... if the excess cannot be completely absorbed in ... growth, it must necessarily be lost without profit; it must be spent, willingly or not, gloriously or catastrophically’ (Bataille 1988: 21). Like the submarine volcanoes in our little world, premodern societies do not try to hoard the flows that pass through

them. The socius of the tribes solve the problem of lost immanence and surplus through temporarily reconnecting with the sacred in festival and the *sacrifice of the useful*, placing both sacrificed and sacrificer back in immanent immediacy (Bataille 1989).

But for Deleuze and Guattari the first socius of the tribe has been succeeded on the Earth by other full bodies, the laminar recordings of empire and capital.

Empire reorders flows of both matter and spirit. With the rise of empires, despotism and military order, material flows are reordered around the city creating a metabolic rift; the powers of the Earth are *spiritually recoded* and *reterritorialized* onto the magical body of a despot, whether the earthly or celestial, who is seen as their source and ruler; and festival is replaced by warfare as expenditure and violence are both *made productive* and *externalized* – resulting in the expansion of territory and power.



And then in capitalism, living flows are directed into dead commodities; the powers of the Earth are *decoded* and *detrterritorialized* onto abstract money or capital; and the empirical world is now understood only in terms of productive expenditure, with carnivalesque waste suppressed and instead the surplus reinvested in order to grow the economy.

Let's go back to our three forms of motion, and see how the capitalist transformation of the earth generates and depends on its own configurations of spirit.

What is the spiritual dimension of the capitalist loosening of the denizens of the Earth from intimate bonds and their incorporation into global laminar flows of matter, energy and value? Marx called this *primitive accumulation*: the violent moment of separation of producer and means of production that tears individuals and groups from subsistence and gift economies and subjects them to the logic of

capital. But primitive accumulation is not a singular moment in the past, but an inherent and continuous moment involved in any transfer of value from pre-capitalist to capitalist areas, that continuously enacts and reproduces the primal split between producers and the means of production (De Angelis 2001).

This is both a physical and a psychic rupture. It is a story as old as the earth, as entities are broken out from equilibrium rest and diffusive locality and entrained in long-distance advection. But also primitive accumulation is a ‘mythic’ moment of fall and anti-festival - a constant operation of immanence-breaking that invokes immanence at the same time as it holds it at bay.

Any laminar, unified story of the Earth hides a story of turbulence. Within each geo-spiritual formation, along with any ‘laminar’ high gods come a range of turbulent entities. The wings and halos of the deities and angels are bound vortices that can be shed and themselves take flight.

The third social machine, in which capital serves as the full body of the technosphere on which all production is encoded, generates its own turbulent spiritual powers whose existence serves the full body of the capitalist geo-social formation and the accelerating movement of matter and energy around the earth – spirits that might be subject to their own kind of ‘spatio-temporal fix’ by being displaced in space or time or otherwise concealed. And at points of incorporation of local subsistence and gift economies into global flows, the ongoing immanence-breaking of primitive accumulation manifests as low spirits that effect the motilization involved in the incorporation of local diffusion into global advection.

Let me mention three examples – cannibal, devil and vampire.⁵ The cannibal *xawarari* spirits of the Yanomami, are ‘first socius’ reterritoralisations of Anthropocene violence in a tribal cosmos. White people are *Yoasi thëri*, (‘people of Yoasi’, Omama’s evil brother), and dig up the oil and metals that are the blood and bones of the earlier sky that fell, cook them in their factories, and make the metal tools, cotton cloths, and plastic goods that they offer to the Yanomami in trade, that give off dangerous fumes that have in turn produced an invasion of evil cannibal spirits, the *xawarari*, spirit doubles of the white people that eat the chests of the Yanomami and make them sick, and the chest of the current sky and threaten to make it, too, fall (Kopenawa and Albert 2013: 288).

⁵ For more on these figures, see Szerszynski, "Gods of the Anthropocene,".

The Devil appears at moments of expropriation, as local gift economies are incorporated into global flows (Taussig 2010, Ball 2014). The Devil is a second-socius figure who nevertheless comes to express third-socius forms of global magic, a foundational infant fantasy of omnipotence, a denial of the aporetic metabolic relation between inside and outside, a being who has no life of his own so survives only by capturing life. From the late medieval period onwards the Devil is associated with the production of money from money and the conversion of the energies of life into dead commodities (Brennan 2000).

Finally, the vampire is a third-socius figure of capital. Stories of vampires around the world appear in colonial contexts as blood-sucking agents of colonialism. The vampire is a deterritorialized, global monster, set to subjugate the world; a global, totalising figure of the bourgeoisie – a saver, who must use every drop, who cannot die, and who must create ever more victims and subjugate the whole of society (Moretti 1982; Tsuneishi 2012).

What has our experiment with a small, synthetic, self-organising world shown us? We need to be more imaginative about the possible paths that could be taken in the self-organisation of matter in planetary evolution. We need to cultivate a ‘speculative planetology’ that draws on the physics and philosophy of self-organisation; on our growing knowledge about the long story of our planet; on vernacular investigations of matter and how it behaves; on an engagement with the diversity of cultures and literatures on the Earth; and an openness to the nonsecular dimensions of planetary transformation.

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