

Molten Praxis: Infrapolitics and the Inner-Outer Earth Juncture

Abstract

Setting out from accounts of metal working by authors Colson Whitehead and Toni Morrison, the paper looks at how heat-induced transformation of inorganic matter is at once a condition of possibility of modern politics and tends to overflow politicization. While Anthropocene science directs attention to the interaction between the flows of the outer Earth system and the rocky layers of the planet's crust, geoscientists have also been exploring the juncture between the exterior and the sub-crustal interior of the Earth. Looking at the manipulation of fire by our most distant ancestors and by artisans in the ancient world, I suggest that humans have effectively used high heat as a means of mediating or articulating between the inner and the outer Earth. But if we conceive of the hearth – the symbolic centre of the polis for Heidegger and others – as a formative site of high heat use, then there is something at once mundane or this-worldly and profoundly excessive or other-worldly about the relationship between high heat technics and the political. This leads to some infrapolitical considerations both about attempts to assimilate geo-cosmic exteriority and about finding ways to live with the unassimilability or withdrawal of the Earth and its forces.

Tending the Forge

Arnold Ridgeway's father was a blacksmith. The sunset glow of molten iron bewitched him, the way the color emerged in the stock slow then fast, overtaking it like an emotion, the sudden pliability and restless writhing of the thing as it waited for purpose. His forge was a window into the primitive energies of the world (Whitehead 2016: 73).

Part way through *The Underground Railroad*, novelist Colson Whitehead's depiction of the fiery transubstantiations wrought by a white metalworker offers brief respite from the

horrors of plantation slavery in the pre-Civil War Deep South. Ridgeway Senior finds his self-understanding of smithing filled out by the idea of the animating force of the ‘Great Spirit’ which he learns about from a Native American drinking partner:

Tom Bird’s testimony on the Great Spirit reminded him how he felt about iron. He bent to no god save the glowing iron he tended in his forge. He’d read about the great volcanoes, the lost city of Pompeii destroyed by fire that poured out of mountains from deep below. Liquid fire was the very blood of the earth. It was his mission to upset, mash, and draw out the metal into the useful things that made society operate (Whitehead 2016: 73).

Unable to match his father’s virtuosity, excluded from bar-room cosmological discourse, the young Ridgeway is left aimless and wanting. He seeks purpose elsewhere, finding it fatefully, brutally, in the work of tracking down runaway slaves, through which he becomes the nemesis of the novel’s protagonist Cora. ‘In the chase his blood sang and glowed’ (Whitehead 2016: 76). But there is no mystery or enigma in Arnold Ridgeway’s calling; the objects of his labour prejudged, reduced to instruments, stripped of spirit.

As a wordsmith, Whitehead finds his own way back to an underworld of generative forces, animating Cora with indomitable spirit and the underground railroad with an ineffable subterranean energy: powers that seem at once to support and overflow the politics of abolition. Fellow Black American author Toni Morrison looks to be tapping a similar undercurrent in an anecdote about her father, George Wofford – who routinely worked several jobs but identified above all as a metalworker. Morrison recounts her father telling her that after welding a seam of which he was especially proud, he would emblazon it with his initials. “I said, ‘Daddy, no one will ever see that.’ Sheets and sheets of siding would go over that, you know? And he said, ‘Yes, but I’ll know it’s there.’” (Morrison cited in Als 2003).

In the interplay of ownership and self-possession, visibility and concealment, there are echoes here of a fraught, unfinished history – one in which searing heat has featured in the worst possible ways. But George Wofford’s pride in handling high heat also belongs to another history; a deeper, older story of collective eloquence in the medium of ‘liquid fire’. Like the smithing of Whitehead’s Ridgeway Snr, Wofford’s industrial metalwork is

part of a tradition of heat-induced restructuring of inorganic matter – a lineage that crosses continents and reaches into the very seams that craze the Earth’s surface. From another angle, however, this is history involving sites, apparatuses and practices that are close to home – the ‘things that made society operate.’ So near at hand, in fact, that even without our efforts of concealment, they effect their own withdrawal.

It was just over a decade ago that I first got interested in the idea that forges, furnaces, and kilns are a kind of portal into the forces of the inner Earth, and I gave an excitable presentation along these lines at an early social science conference engaging with the Anthropocene concept. The format generously involved groups of discussants for each talk. Those tasked with commentating on my paper were candid about their misgivings. My respondents were troubled by the fact that I had affirmed a transitional moment in the way human agents engaged with the Earth without explicitly identifying who was disadvantaged by these developments – for they were sure that some social group must have been excluded from, expropriated or exploited by the emergent regime of high heat artisanship that I’d sketched out.

I recall trying to conjure up some more conventional social structural analysis in my reply, while finding it hard to justify why I felt more incited by other aspects of the story. In its essence, the line taken by my respondents was a microcosm of charges then and subsequently levelled at proponents of the Anthropocene hypothesis by social scientists – namely, their inadequate accounting for the socially uneven distribution of both causes and impacts of the changes in question. And why such oversights tend to occur, as the argument proceeds, is that they – or we – have failed to reflect out our own socio-cultural location and what that positioning enables us to see or not to see. Or as science studies scholar Donna Haraway presciently put it thirty years ago, it’s about ‘who speaks for the earth?’ (1992: 318), which is inevitably a matter of who isn’t talking or being heard.

Few critical social thinkers would deny the importance of situating knowledge claims – not least when these pronouncements take as their object the planet and all its beings – and none of us wishes to be complicit in the violence of eclipsing the multitude of other voices who speak about or through the Earth. In short, we are keen to uphold what literary theorist Alberto Moreiras depicts as the vocation and promise of locational thinking (2001: 22). But how far can the tactic of locating take us when a site opens onto

regions that are unreachable, when lived experience brushes against the unliveable, or when an utterance professes to the unknowable? For as Moreiras adds, ‘no thinking exhausts itself in its conditions of enunciation’ (2001: 24).

Things done or made with high heat figure prominently in scientific Anthropocene narratives: this includes metals, concrete, plastics, carbonaceous particles, fossil fuel combustion. These are justifiably objects of emergent or already intense political struggle. But the seething heat of the inner Earth, ‘the primitive energies of the world’ that interest me here overflow the kind of politicization in which matters of concern are defined and subject positions taken up or ascribed. Following the infrapolitical intuition that those aspects of existence which precede and exceed politics might – in some indeterminate way – help us to reimagine the political, I look first to the scientific study of the inner-outer Earth juncture, and then to the long human history of manipulating molten matter. These two very different fields open windows to decidedly inhuman forces, I suggest, offering glimpses of a planetary dislocation and self-othering that may have implications for our own other-worlding possibilities.

From the Anthropocene to the Inner Earth

Ostensibly, the Anthropocene hypothesis foregrounds the human: as perpetrator, witness, victim. But we already knew that informed and industrious activity was transforming the world – this being the basic storyline of enlightened modernity. What is new in the geoscience of the last few decades is a clear sense of a planet that is susceptible to being nudged into an unfamiliar condition because it has more than one possible operating state, and because it has shifted between operating states many times in the past. Arguably, this says more about the Earth than it does about ‘us’ (Clark and Szerszynski 2021: 19-27).

In institutional terms, what is distinct about the Anthropocene Working Group is the unprecedented degree of collaboration between the newer interdisciplinary field of Earth system science and the longer-standing discipline of geology. Whereas the study of Earth systems focuses on flows of air, water, life and the more mobile rocky material that makes up the outermost Earth, geology – being ‘overwhelmingly concerned with ancient, pre-human rock and time’ – has conventionally addressed the relatively slow-moving

layers of lithic matter that comprise the Earth's crust (Zalasiewicz et al., 2017: 85). Joint research aimed at testing the Anthropocene hypothesis has concentrated on quantifying human impacts on both the Earth system and the lithic strata, but in the process, it has generated a new level of understanding of the way these two major structural components of the planet interact – how their articulation shapes and transforms the outer Earth over time.

This perspective has potential implications for considering how and where humans are positioned on the planet. Though it is neither the priority of the Anthropocene Working Group nor the way that most critical social thinkers currently approach the situating of human agency, we might conceive of ourselves as particularly active pivots or junctures between the rocky strata and the flows or cycles of the Earth system – and consider different kinds of Earth-oriented social activity as variations on the theme of hinging these two great regions of the Earth together (Clark and Szerszynski 2021: 93-99). Accordingly, the application of fire to forest or grassland, trapping sediment to cultivate grain, making pottery and mining ores can be viewed as a few of the manifold ways that skilled human agents articulate between the lithic crust and the flows and cycles of the outermost Earth system. Or it could be said that these human activities are themselves but another version of Earth's ongoing negotiation of its own thresholds or junctures.

We can extend this approach – which owes more than a little to the 'stratoanalysis' of Gilles Deleuze and Félix Guattari (1987: 22) – further and deeper. While the meeting point of the lithic strata and Earth system is a major structural divide, arguably an even more significant juncture in planetary terms is that between the inner or subcrustal Earth and the planet's crust (or rather, the crust-Earth system coupling that comprises the outer Earth system). If somewhat overshadowed by the Anthropocene debate, the last fifteen or so years has seen a series of major developments in understanding of the interplay between inner and outer Earth. As geophysicist Sabin Zahirovic and his colleagues elaborate:

time-evolving 4D Earth models have ... provided insights on the evolution of the plate-mantle system over supercontinent cycles, as well as shed important insights into the role of the churning planetary interior in vertical motion of tectonic plates and the continents they carry (Zahirovic et al 2019: 73)

There is now a degree of consensus around the idea that the viscous rock of the Earth's subcrustal mantle layer is self-organized into vast, slow moving convection cycles – though at what point in the planet's evolution this first occurred remains highly contested. As current theses have it, hot buoyant material (energised by the radioactivity of interior Earth materials) ascends from deep in the Earth while dense tectonic plate slabs sink or 'subduct' beneath the crust as they are displaced by the formation of new crust from the upwelling molten rock that reaches the surface (Schubert et al 2001). But this big picture is being complicated and nuanced. Newer research suggests that not all changes occur at the inchingly slow pace previously thought to characterise mantle-crust relations, pointing to episodes of 'sudden and perhaps catastrophic movements of material and heat' in the Earth's interior – which are possible triggers for the upwellings of superheated rock known as mantle plumes (Schubert et al 2001: 626).

Meanwhile, high resolution '4D' modelling of feedbacks between tectonic plate motion and the evolving planetary interior allows researchers to make increasingly fine-grained connections with unfolding events on the Earth's surface such as extrusions of molten mantle material, the uplift and stretching or rifting of landmasses, changing sea levels, long term climate and ocean circulation change, and the evolutionary pathways and dispersals of biological life (Zahirovic et al 2019; Müller et al 2018). There is also growing evidence that, just as the events in the mantle layer directly impact the topography of the Earth surface above, so too do 'conveyor belts' pull sedimented organic matter deep into the subcrustal Earth, with its own influences on the composition and dynamics of the planet's interior (Plank and Manning 2019).

That a smear of human activity will eventually infiltrate the vast, roiling inner Earth is a far cry from the idea – too easily distilled from the Anthropocene hypothesis – that the planet in its entirety is now shaped by the agency of (some) humans. It's worth recalling that of the estimated 3.2 billion photographs and 720,000 hours of video shared online each day (Thomson et al 2020), there will not be a single shot of the 99% of the mass of our planet that lies beneath the crust. In short, for all that it is a lively object of scientific inquiry, the inner Earth remains – to us and all other creatures – out of sight and out of reach. And yet, as we saw earlier, there is a vital sense in which its 'primitive energies' have been folded into our everyday lives, set to work, made useful.

Molten Praxis

'Primitive' is of course a loaded term, not least when race is on the agenda, and origins are inevitably complex, messy and resistant to full recovery. But originary sites and events can also serve as incitements to thought, in spite or because of their excessive possibility. Human origin stories, western and now globalised, have come to focus on a site where powerful forces have rent the Earth's surface. The East African Rift is described by geoscientists as the largest, most enduring example of the fracturing that occurs when rising plumes of extra-hot magma push up against a section of the Earth's crust. As the land stretches and splits, blocks of rock subside – creating long steep-walled valleys (King and Bailey, 2006). As one theory has it, plume activity beneath the Rift Valley has been intercepted and modified by a huge chunk of subducted plate from the ancient Tethys Ocean seabed which has been slowly migrating through the Earth's mantle since the late Jurassic (Chang et al 2020).

While the drifting slab has not been directly implicated in the emergence of ancestral humans, the landscape shaped by active tectonics is increasingly being factored into accounts of hominin evolution. Researchers have drawn attention to the ways that the complex, dynamical topography of the Rift Valley at once provided opportunities for early humans and prompted them to be ecologically flexible. Water bodies came and went leaving rich deposits of sediment, while recurrent volcanism primed and revitalised the land. As well supporting diverse, nutrient-rich mosaic ecosystems, evolutionary theorists propose, the rocky, lava-strewn landscape may have provided shelter and nesting sites for a relatively defenceless ground-dwelling primate (King and Bailey, 2006).

There has also been speculation that living in close proximity to lava flows helped familiarize early humans with the transformative power of high heat and may have been implicated in their capture of fire (Bailey et al 2000). What is clearer from the fossil record is that very early hominin toolmakers appreciated the properties of volcanic rock. Much later evidence from South African sites indicates that by around 70,000 years ago, human groups who had migrated away from the volcanic landscape of the Rift Valley had learned to systematically apply high heat to local rock – most likely to improve its flaking and sharpening qualities but perhaps also because they were attracted to the

blood-red colouration of some heat-treated stone (Brown et al 2009; Clark 2018). Effectively, these early artisans were using their hearth fires to transform rock created by sedimentary processes so that it behaved more like volcanic or igneous rock, a practice also widespread among more contemporary foraging peoples.

Archeological evidence from the ancient Fertile Crescent suggests a similar logic. Excavations at the 4000-year-old Mashkan-shapir site uncovered grain-grinding stones seemingly hewn from hard, fine-grained volcanic rock. Tests reveal that grindstones were in fact made from crumbly alluvial silt that had been transmuted to a basalt-like density by heating to around 1200 °C (Stone et al 1998). As the researchers explain, making ‘synthetic basalt’ was an offshoot of a much wider suite of high heat transformations of inorganic matter that included ceramic and metallurgical industries (Stone et al 1998: 2093). Indeed, much of the texture and substance of urban-agrarian existence, by this stage, was a product of heat-induced transmutation. In the words of metallurgist J.E. Rehder: ‘The material fabrics of nearly all settled civilizations have by and large consisted of things that exist only because of pyrotechnology – the generation, control, and application of heat’ (2000: 3).

It is Rehder who notes that the furnace temperatures of around 1200 °C routinely reached by ancient artisans are at the higher end of the heat of lava in an active volcanic system (2000: 54). This point deserves elaboration. When metallurgists coax ores through solid-liquid-solid phase transitions, there are echoes of the transformations that occur when the viscous rock of the mantle rises in the direction of the outer Earth – first melting then subsequently re-solidifying when it stalls in cavities in the hard rock of the crust or erupts (as lava) onto the planetary surface. Likewise, in the process through which metallurgist concentrate and purify metallic ores by pushing them across thermal thresholds within the chambered space of the furnace, there is much in common with the way that differential temperatures and rates of crystallization in a magma chamber or other cavity serve to separate ore from non-ore minerals (Clark 2022).

Already in the ancient world, pyrotechnological networks were trans-continental: ‘merged into a vast, decentered, and “polyarchic” platform of know-how and componentry’ that stretched across the very rifts in the Earth’s crust out of which mineral ores ooze up towards the surface (Clark 2016: 281). This doesn’t mean that knowledge was open

source. Transmission tended to be guarded and selective, both the extraction of subsurface minerals and their fiery metamorphoses being bound up in rites and rituals (Eliade 1978: 75). Like Whitehead's Ridgeway Snr, early artisans intuited the connection between their craft and the immense forces of the inner Earth – with the same deities that presided over volcanoes also overseeing metalwork and related high heat crafts in numerous Old-World cultures. Across countless generations, the transmutation and shaping of inorganic matter was also accompanied by what metallurgist-historian Cyril Stanley Smith refers to as 'creative participatory joy' (1981: 355). Vital technological breakthroughs, he contends, arose out of 'rich and varied sensual experience of the kind that comes directly from play with minerals, fire, and colors' (1981: 203).

If recent geoscience findings help us appreciate how traffic between the interior and exterior Earth shapes the world humans and other living things inhabit, the material-cultural history of high heat technics serves to situate humans *within* this juncture – pointing to how our own species has learnt to function as a conduit or pivot for traversing this momentous planetary structural divide. We should not, however, overlook the sheer ordinariness of so much of this social interjection in the becoming otherwise of the Earth. As metallurgical historians note, the likely origin of subsequent high heat technology was the domestic cooking hearth. 'Its walls', observes Theodore Wertime, 'were a self-registering pyrometer showing in their colors and hardness the degrees of temperature attained as well as the oxidizing or reducing atmospheres' (1973: 672). And it is this articulation between the most volatile, unliveable planetary powers and the homeliest, most commonplace of human contrivances – the 'darkness of the originary home, never to be reached, but approachable through nearness' (Moreiras 2016 unpag.) – that resonates with the questions and tasks of the infrapolitical.

Infrapolitics at the Inner-Outer Earth Juncture

Viewed as an 'object' there is nothing exceptional about the Earth, or any other planet. As object-oriented ontologists like to say, every thing has a withdrawn interior dimension, a 'subterranean realm' that eludes human access, or the access of any other being or thing (Harman 2002: 5). But this doesn't imply that the Earth shouldn't be a special object for us or other creatures who dwell on or in it, or that the planet shouldn't be concerned with its own eventualities. In this regard, those of us who work in western-

globalized fields of social thought owe a great deal to Anthropocene Earth scientists for prompting us to think about what kind of planet we live on, what it has done in the past and what might it yet do, just as we are indebted to the geoscientists who have been exploring the ‘4D’ relationships between interior and exterior Earth.

So while it doesn’t make sense to simply map abyssal alterity or inaccessibility onto the subcrustal Earth, there are good reasons for conceiving of the inner-outer Earth juncture as a philosophical and practical issue. One of these reasons, I’ve been suggesting, is that members of our species have found their own ways of enfolding geodynamic forces into the everyday spaces they inhabit, and in the process a tiny fraction of the power and agency of the interior Earth has been imported into human worlds. While climate change and related global environmental issues have spot-lit the largely (but not fully) calculable consequences of tapping into the Earth’s crustal energetic and mineral reservoirs, the implications of the more ‘deep-seated’ encounter with the inner Earth seem more resistant to identification and quantifying. But we should keep in mind that discernible outputs or effects that overflow from one system or subsystem to another are not the same thing as the murmur or irruption of withdrawn interiority, though neither are they fully separate or easily teased apart. And this is where the hearth – in all its enigma and ambiguity – offers its provocation for a reimagining of the political beyond the play of light, truth, and power.

In a western tradition that self-consciously reaches back to Ancient Greece, the hearth fire symbolizes familiarity and solidarity – at the most intimate, familial level but radiating out from there to the more extensive identifications of community, state and nation. As Heidegger puts it with reference to Plato, ‘the hearth, the homestead of the homely, is Being itself in whose light and radiance, glow and warmth, all beings already have gathered’ (Heidegger 1996: 114). But such a vision too easily insinuates that those who don’t belong or conform have no place at the fireside. What Heidegger is actually trying to do here, in the course of a conversation that Sophocles’ *Antigone*, is to render the hearth, and by extension the polis, uncanny or unheimlich (Moreiras 2016). In her willingness to make a fatal or impossible gesture, Antigone reveals that there is something unhomely within the communal gathering that is the polis and in the very essence of being human. Antigone, then, figures for the task of fronting up to the obscure, insuperable difference within the human and our inevitable dwelling in the un-

familiar, along with the risky, groundless opening that is the very condition of possibility of the purported security and solidarity of the polis. It is this quest for ‘becoming homely in the unhomely’. that that Heidegger refers to as the poetic and Moreiras and others term the infrapolitical (Moreiras 2016; 2021: 108-111).

Later, riffing off Heraclitus, Heidegger reminds us that while the hearth itself is bound to the Earth, its smoke wafts heavenward into the domain of the gods (de Beistegui 1997: 139; Williams 2021: 12). But Heidegger isn’t especially interested in fire and its properties or affordances, although he appreciates good, old school, metalwork. Likewise, his acknowledgment of an intrinsic geocosmic discordance is decidedly secondary to his concern with human not-at-homeness: ‘The most powerful “catastrophes” we can think of in nature and in the cosmos’, he declares, ‘are nothing in terms of their uncanniness to that uncanniness that the human essence in itself is’ (1996: 77). It is precisely the co-implication of these two domains, however; the utterly familiar but strangely opaque enfolding of the seething groundlessness of the planet into the mundane working of the hearth and subsequent fire chambers, I am suggesting, that render them so infrapolitically ‘question-worthy’.

In a literal sense, the products of high heat provide the conditions of the polis, just as they furnish the infrastructures of the global economy: Rehder’s ‘material fabrics’ of settled civilizations repurposed in the era of electronic communication, smart materials and devices, and a far-from-obsolete heavy industry. If we are to recognise the extent to which pyrotechnologies underpin contemporary socio-political existence, so too should we acknowledge the receding of hands-on experience of heat-driven metamorphosis: the industrial appropriation and automation of artisanal traditions, their relegation to specialized and often sacrificial zones, the generalized attrition of ‘creative participatory joy.’

But we should be wary of nostalgia for high-heat golden ages. The approach I’ve been taking would read the former glory of heat-induced metamorphosis not as an expression of harmony with earthly forces but as homage to their utter assimilability: less a matter of early Heideggerian gathering-in and more in keeping with Heidegger’s later poeticizing of insuperable dislocation. In a related sense, we may need to be careful not to bluntly condemn capitalist technological modernity for its appropriative imperative, its limitless

extractivism, its drive to leave no stone unturned or uncrushed. For as philosopher Reza Negarestani cautions, under conditions of unavoidable cosmic and terrestrial uncertainty, including rifts of its own making, capital is more than willing to put itself forward as the only viable means of confronting, isolating and assimilating the Earth's own world-shattering proclivities:

In binding the exorbitant register of exteriority, capitalism is able to present its dynamism as an intrinsic planetary system ... this ensures that the system's dialectic with the outside is conducted only in a way it can afford and thereby, any other mode of binding the outside ... is staved off (Negarestani 2011: 16-17).

Negarestani is not dissuading us from exposing and tallying the environmental devastations of capital, but he is cautioning that blunt condemnation can block off other possibilities if it buys into the idea that capitalism's planet-shaping powers have no beneath or beyond or beside. What Negarestani proposes in place of any claim for capital's full subsumption of nature is a critical-speculative practice that fully acknowledges and seeks to work with the inherent and insurmountable volatility of the geophysical realm, or what he refers to as the push for an 'ever-deepening and widening traumatic synthesis' (2011: 18). In other words, any conceivable passage through the totalising hold of the current social order, given the inescapably fraught geocosmic predicament, must set out from the fault lines that cleave the outer Earth and fissure the human subject.

While neither Levinas, Blanchot or Derrida are reference points for Negarestani, there are resonances here with their shared insistence that at the heart of all human powers is a constitutive vulnerability: 'a nonpower subtending everything we experience, live, think, or say' as philosopher Philippe Lynes puts it (2018: 13). Effectively, Negarestani extends this generative but potentially overwhelming permeability deep into the human encounter with planetary processes, and onwards into the Earth's own fracturing and wrenching. In this regard, it's worth recalling that the convulsing or self-sundering of the planetary body is the condition of possibility of much of what geoscientists know about the 4D Earth. Subcrustal mapping relies largely upon seismic tomography, a method of remote sensing that tracks naturally generated tremors as they reverberate through the

irregularities of the planet's interior. Far from any penetrating light, the 'truth' about the great bulk of our planet is bound to the same quakes that can spell ruin for the formations and life worlds of the Earth's surface – from which observing bodies and instruments themselves are far from immune (Clark 2018).

But what we term science, I have been suggesting, is a late arrival at the scene of human intervention at volatile inner-outer Earth interzone. This returns us to the capacity some humans share with their planet for brazing rifts and fissures with molten heat. It brings us back not only to ancient pyrotechnics but to the heartland of industrial fire, to George Wofford's secret celebration of the welding of a perfect seam – in a world, that is for him and his people, always already out of joint. At odds with the enduring Euro-centred amalgam of light, visibility and power, this an act that seems to both reach back to an unrecoverable past and forward to an unanticipatable future, in a way that effects, to borrow from philosopher-poet Fred Moten, 'a certain disruption of, property, of propriety, of possession and self-possession, of the modes of subjectivity these engender' (2017: 192).

While property and possession and their subversion have very specific meanings for Black Americans, Wofford's re-tooling of temperatures hotter than the Earth's mantle is also an elemental engagement – a clandestine and inappropriable articulation with a planetary outside. In a more general sense, there are several related aspects of this 'other mode' of praxis which resonate with work in an infrapolitical register in other fields. First, any political project – any organized collective endeavour to make the world and ourselves otherwise – draws at least some of its power from the Earth's own capacity to become otherwise. Second, this power, however cautiously we tap into and elaborate upon it, will always bring with it something of the excess that inheres in every inhuman force, and that superfluity will rumble and surge through all our collective ventures, ensuring such world-shaping efforts are never entirely ours to own. Finally, this nonpower is not simply an unintended consequence or aftereffect of a more positive power, but its originary condition or complication. In Derrida's terms, this is 'the wound or inspiration which opens speech and then makes possible every logos or every rationalism' (1978: 98). Or as literary theorist Gareth Williams would add, it is the wound that 'is always and only ever prior to and beneath the political itself' (2021: 216).

The dynamic flow of heat and matter in the structurally divided Earth, I have been proposing, also disrupts the planet's own properties, propriety and self-possession: those processes of dislocation and self-othering that the geosciences diagram without hope of delivering into full visibility. That 'we' struggle to make sense of geodynamic processes is an echo of the way the Earth strains to negotiate its own wounding, rupture and division; that our enfolding of 'liquid fire' can be less than predictable is a reminder that the churning and pulsing of super-heated rock is part of the planet's ongoing, open-ended probing of its own possibilities. If an evolutionary and deep historical perspective on molten praxis point to how constitutively our species and genus is enmeshed in the other-worlding of the Earth, so too does the current environmental crisis compel us to continue our experimentation and improvisation with the shifting contours of the inner-outer Earth juncture. At the same time, and inseparably, this predicament should also serve as an incitement to confront and live with our own limits, or as Lynes puts it, to 'reimagine how we might best let the earth be the earth, let nature be nature, and release these to their secrecy, veiling and withdrawal' (forthcoming, 16).

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