

Defending the Humanities in a Time of Ecocide¹

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Let me start with something like a joke. A man meets a friend in the street. The friend is obviously depressed. ‘You look terrible. What’s the matter?’ His friend replies that he is indeed feeling wretched, and for two reasons. The first is that it looks the end of the road for humanity. ‘The ecological situation is getting worse all the time, climate change is out of control and governments are doing nothing,’ he says. ‘It’s over.’ ‘That’s ridiculous,’ replies the man. ‘The human race is very hardy. Nothing can stop it!’ ‘Well,’ says his friend, ‘that’s my second reason.’

This is part of the context for what I want to say: contemporary ecocide. Climate change is by no means the only issue; equally worrying are biodiversity crash, the destruction of remaining wild habitat, ocean acidification, and pollution. The sixth mass extinction of life on Earth, this time caused by human beings alone, is now well underway.² Disguised as a realistic recognition of human power, this is what those who propose the term ‘Anthropocene’ fail to disavow, perhaps even tacitly celebrate. The meaning of the term is perfectly clear – the age of Man – along with its anthropocentrism and androcentrism. And I cannot see that this situation will improve anytime soon. It is easier to imagine the end of capitalism than to imagine collective voluntary self-restraint.

Another part of my context for this paper is a sense of humility. It is vanishingly unlikely that what intellectuals say – I mean in the broadest sense: workers with ideas as such – will be heard or read, let alone acted upon, by CEOs, Presidents or other holders of real power. This is true even of ‘public’ intellectuals (almost extinct in the Anglophone world, in any case). Hear John Ruskin’s poignant disclaimer: ‘Of wanton or ignorant ravages it is in vain to speak; my words will not reach those who commit them.’ Nor will we directly affect public opinion. And even if our words did prove so influential, neither we nor the powers-that-be would be able to institute a sane green New World Order. If there is ever an Age of the Earth, signifying the contrary of the Anthropocene, it won’t come from above but from the bottom up, beginning with independent citizens’ initiatives. Policy can contribute some measure of protection and philosophy of articulation (and maybe we can contribute to that), but neither can replace that process. And even then, sometimes all we can do is resist, whether with hope or without it.

Nonetheless, even with these two caveats in mind – contemporary ecocide and humility – there are still things intellectuals can do in the space between the global

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² Most recently see Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History* (London: Bloomsbury, 2014). Long preceded, however, by Richard Leakey and Roger Lewin, *The Sixth Extinction: Biodiversity and its Survival* (London: Weidenfeld and Nicholson, 1996.) (No one listened then, either.) For a more philosophically and politically informed account of ecocide, see the work of Ruth Thomas-Pellicer, as well as Teresa Brennan and Val Plumwood (references 14, 45 and 58 below).

power-elites and the masses of poor and disenfranchised struggling to survive. And I want to argue that one of the things which we can and should do is to *defend the humanities*. I don't mean only the academic disciplines coming under that aegis but also the older, larger and looser traditions of enquiry and learning, outside as well as inside the academy, that extend in turn to humanity *en tout*. And of all the kinds of learning which are our province, so to speak, the humanities hold the greatest 'green' potential. That is my first claim. Furthermore, the humanities are also, not coincidentally, the most endangered kind of learning; and prominent among their enemies, with good reason, are the sciences. Not only scientism, note. And that is my second claim.

As befits a living tradition which is itself ecological – complex, changing, interdependent – no simple and comprehensive definition of the humanities is possible, but there is enough to be going on with. What we now call the humanities is a hybrid of the *litterae humaniores* of late antiquity, Renaissance *studia humanitatis*, Dilthey's *Geisteswissenschaften* and Weber's *Kulturwissenschaft*, and modern liberal arts. Its contrast-class, always revealing, is the hard, physical or exact sciences and mathematics. (Theology is an ambiguous case which I shall avoid here.) Perhaps the most fundamental idea is that in studying human beings – and indeed other kinds of sentient beings – as distinct from inert physical objects (or purely spiritual beings), causal analysis and explanation of their behaviour, considered as objects, is insufficient and/or appropriate. Rather, what is required is empathic, imaginative and narrative understanding of people's experience as subjects. Hence the proximity of the humanities to the arts, which both draw upon and intervene in personal experience.

Why Defend the Humanities?

Why is it so important to defend the humanities – imperilled in the manner of some fabulous beast whose natural habitat is steadily being eaten away – in a time of ecocide? One reason is the attention they are attracting from governments local, regional and national throughout the over-developed world, from the corporations and industries who are calling their fiscal tune, and from the latter's intellectual apologists in universities and the media. Such contempt and hostility, reflected in cuts in public funding and forced privatisation,³ is not arbitrary but targeted, and thus significant. And since the same megamachine (to borrow Lewis Mumford's useful term) is driving ecocide, it signals not only an elective affinity between these two targets, wild nature and the humanities, when allowed to be wild, but also a site of necessary resistance.

A positive reason is the humanities' unique ability, among all forms of learning, to encourage ecological awareness and ecocentric values. This picture is certainly idealistic – a point I shall return to, and defend, later – but consider the following, if only as potential. To begin with, the humanities (as the name implies) are *plural*, loosely connected through a family resemblance constellated by the ideals of empathy, imagination and subjectivity. Given the attempted monism of the megamachine, a thinly secularised version of its monotheistic provenance – summed

³ See, inter alia, <http://www.researchtrends.com/issue-32-march-2013/trends-in-arts-humanities-funding-2004-2012/> -- also, on the funding of STEM studies (including their role in keeping the number of workers up and therefore wages down): <http://www.newrepublic.com/article/114608/stem-funding-dwarfs-humanities-only-one-crisis> -- and for supporting evidence, http://www.humanitiescommission.org/pdf/hss_report.pdf -- and http://www.britac.ac.uk/policy/Past_Present_and_Future.cfm

up in Margaret Thatcher's mantra, 'There is no alternative' – that is already a big plus. Second, by the same token, the humanities are inherently *relational*; so given that relationality is the essence of ecology, we could equally well describe them as ecological.

Finally, although in the humanities it is humans who are doing the relating, empathizing and imagining, there is no non-arbitrary restriction on who or what is related to, empathized with or imagined what-it-is-like-to-be. In other words, the other party *need not be human*. As David Wiggins says, 'The human scale of values is by no means exclusively a scale of human values'.⁴ This aspect of the humanities has an elective affinity, stemming from a shared philological and philosophical source, with the meaning of 'humane'. As Montaigne (perhaps the greatest non-modern humanist, and certainly the most loveable) insisted, you are not fully human unless you are humane, and the recipients of humane feelings and behaviour are by no means limited to other humans. We might also put it this way: it is just their potential as *ecohumanities* that protects the humanities from becoming simply all about 'us', and thereby succumbing to the instrumentalist anthropocentrism that is driving both natural and cultural ecocide.

Both the potential for reaching out to, respecting and/or revering other forms of life on this planet, and its importance, are thus obvious. So too is the corresponding political value: neither unity – that is, complete identification in which all differences, such as those between human and other-than-human, are obliterated – nor hyper-separation – an unbridgeable otherness with no evident common ground – but *solidarity* with other beings and kinds of beings.

I also find it tantalising and even moving that the 'humanities', along with 'humanism', 'humane' and 'human' itself, from the Latin *humanus*, come from the Indo-European word for earth, **dhghem*, which also gave us 'humus'.⁵ The obvious implication needs no etymological essentialism, only ears to hear: in the company of so many others, we too are Earthlings.

These points are, I think, what saves the case I am making from being merely special pleading on behalf of a group of academic disciplines. It is that but not only that, for the humanities in this context are rooted in, and extend, what it means to be human. And as David Abram points out, 'we are human only in contact, and conviviality, with what is not human.'⁶

Note something vital, however: nature, the natural world and other-than-human beings who are among the appropriate subjects of the humanities (both as others and as topics) are themselves *alive, subjective, agentic, sentient and wild*. Those are their salient characteristics in relation to the humanities. Indeed, it is what makes practising the *ecohumanities* possible at all. A relationship, properly so-called, is only possible between two subjects (I-Thou), not a subject and an object (I-It). When an object usually considered just a thing is part of a relationship, then it is behaving like a subject and should be considered and treated as one. (I shall return to this point.)

Furthermore, relationship as such rules out absolute control by either or any party such as is (in theory) possible when the other is an object. In other words, since a subject can act as an agent for and on its own behalf, real relationship entails an irreducible degree of wildness. At the same time, however, since your actions (in the

⁴ David Wiggins, 'Nature, Respect for Nature, and the Human Scale of Values', *Proceedings of the Aristotelian Society* XCX, 1-32: 7-8.

⁵ Sean Kane, 'Humanus', *Green Letters* 13 (Winter 2010) 22-34: 22.

⁶ David Abram, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World* (New York: Vintage Books, 1997): ix.

broadest sense) necessarily affect the other party(s) in the relationship, ethics are inherent and unavoidable. (This is why the deep green philosopher Richard Sylvan maintained that ‘the ecological community forms the ethical community’.)⁷

This point matters because in much scientific discourse a radically different sense of nature obtains, namely as inert and essentially inanimate, such that any apparent subject is merely ‘an incompletely realised object’.⁸ This ‘nature’ is therefore an appropriate object to analyse, explain causally, predict, control, manage, privatise, commodify, sell and exploit. No relationships in the full sense are involved or required or even appropriate. Nor therefore are ethics. This is the *modus operandi* of the megamachine which is destroying both nature in the first sense, including human nature, and the humanities, which are the natural mode of studying and appreciating it. Which brings me to my second question: what or who do the humanities need defending against, and why?

Against What or Whom?

Most obviously against capital, whose ever-expanding claims throughout the overdeveloped world include managing and instrumentalizing education, directly and indirectly, and extending the dominance of STEM studies (science, technology, engineering and maths) at the direct expense of the humanities.⁹ But for two reasons, I shall concentrate on science. First, science – or to give it its proper name, denoting what it has now become, wherein science and technology are a seamless amalgam, *technoscience* – is one of three interlocking engines of the ecocidal megamachine, which we could also simply call ‘modernity’. The other two are capital, to which it is subordinate, and the state, with which it works alongside. Examples include GMOs and the nuclear power industry: funded by capital investment, developed by technoscience, and protected by the state. (Whether the public actually want these things doesn’t really come into the equation.)¹⁰

The second reason for concentrating on technoscience is that of these three components, it is technoscience that most fulfils an intellectual, or perhaps I should say ideological, function. That function positions it as directly competitive and tententially hostile to the humanities.

It is a truism among intellectuals, including even those most sympathetic to the humanities, that while scientism is deeply problematic – that is, the dogmatic assertion that science is a uniquely privileged method of inquiry into the truth – science itself is a perfectly valid and honourable method, and there the matter rests. However, this view, true as far as it goes, doesn’t go far enough. It fails to identify a systemic or structural problem with science itself, one with both deep roots and dire consequences.

Taking consequences first (otherwise there would be no point in raising the matter), in its capacity as the motor of modernity that is explicitly concerned with power-knowledge, technoscience is instrumental to ecocide. Whether directly or

⁷ Richard Sylvan and David Bennett, *The Greening of Ethics: From Human Chauvinism to Deep-Green Theory* (Cambridge: White Horse Press, 1994): 91.

⁸ Eduardo Viveiros de Castro, ‘Exchanging Perspectives. The Transformation of Objects into Subjects in Amerindian Cosmologies’, *Common Knowledge* 10:3 (2004) 463-84: 470.

⁹ See Mark Slouka, ‘Dehumanized: When math and science rule the school’, *Harper’s Magazine* (Sept. 2009) pp. 32-40, and ref. 3 above.

¹⁰ Much of the following discussion grows out of and extends my *Ecological Ethics: An Introduction*, rev. edn (Cambridge: Polity Press, 2011).

indirectly, through universities, its research is overwhelmingly financed by private capital investment and protected by the state for its fiscal share of the profits, for purposes directly related to a return on investment, notably military applications, energy (especially oil companies and nuclear power), pharmaceuticals, the food industry, and new ways to survey and control populations.¹¹ Technoscience thus contributes directly to the economism, with its cancerous logic of unending growth, that is the biggest single direct cause of ecological destruction. When the economy frames all the important debates, money always wins. This said, though, we should not neglect the steady pressure, almost universally unacknowledged, of explosive population growth. (More workers and consumers, don't you know.)

Perhaps it's time for some qualifications. Yes, science which celebrates the wonders of the natural world and encourages its appreciation, as opposed to exploitation, still exists. Within the technoscience as a whole which now dominates, however, it is tolerated only as a motivation bringing young researchers into the fold, and for purposes of media presentation, e.g. TV documentaries. Otherwise, it survives only as a kind of personal spiritual practice on the part of individuals and voluntary groups. The vanquishing of natural history in the field by molecular biology and computer modelling in the lab, now almost complete, is both an instance and a telling symbol.

I also realise that there are many honourable people with high ethical standards, motivated by ideals such as reducing suffering, who are working in scientific research, perhaps especially medical and therapeutic. (I know some and know of others.) I also do not deny the many positive contributions to human welfare that have resulted. Unfortunately, however, that doesn't diminish my point that technoscience has been systemically and institutionally corrupted by capital to an extent that now affects, even if it falls short of fully determining, all its outcomes. And as both instance and parallel, consider the immensely distorting effect on medical practice, both research and treatment, by the pharmaceutical industry.

Third, scientifically-informed technology (subtly but significantly different) has much to contribute to solutions to some ecological problems, e.g. alternative technology, renewable energy, eco-forestry and so on, even if it cannot be relied upon to address those problems' root causes. And what about the work of the IPCC in addressing climate change? I agree they have played an important role in increasing awareness of both climate change. Against that, however, must be placed the armies of scientists in the employment of those industries principally *causing* climate change, such as geologists and chemists working for oil companies, without whom the latter's work would be impossible. I would add that those on the sharp end of climate change, living with disappearing ice, submerging islands and ever-increasingly violent storms – need no sophisticated instruments to know what is happening. They also have long had a pretty good idea of the underlying cause, too: rampant industrial interference in the Earth's natural processes, recast as 'resources'.

What then of the attack on science under the Bush administration in America, which included deliberately fostering uncertainty about climate change, and the ongoing ignoring of, even assault on, science in Canada and now Australia? This simply confirms the subordinate role of technoscience to capital, and the fact that the state now serves capital directly. It doesn't turn technoscience into a force for the

¹¹ Something that helped open my eyes to this was Paul Forman, 'Recent Science: Late-Modern and Post-Modern', in Thomas Söderqvist (ed.), *The Historiography of Contemporary Science and Technology* (Amsterdam: Harwood Academic, 1997). I very much doubt anything material has changed since then.

good that will help bring about the Age of the Earth! The servicing of the megamachine – quietly humming ‘science parks’, ever larger and more numerous data storage centres, and busy, well-funded research labs – carries on regardless.

Given the gravity of this situation, we should be wary of any attempt to downplay the lived reality of technoscience, with its increasingly multiple and destructive impacts on embodied, sensual, lived life on Earth, in favour of a romantic or idealist image of science as reaching out through chains of thought to ‘the invisible world of beyond’ with knowledge that is uniquely ‘spiritual, miraculous, soul-fulfilling, and uplifting’.¹² Against this claim, I make no apology for crude empiricism; sometimes it is just what is needed. As William James put it (who rarely put a foot wrong in these matters), ‘the stagnant felicity of the absolute’s own perfection moves me as little as I move it’.¹³ And haven’t we been here before, with the disembodied mind of Newton, in marmoreal tribute to the ideal of pure, disinterested, objective truth, ‘forever/ Voyaging through strange seas of thought, alone’? Wordsworth’s respectful approbation contrasts strikingly with William Blake’s perception of a dire enemy: ‘May God us keep/ From Single vision & Newton’s sleep!’ Blake was not only more uncompromising; he saw more clearly.

When I consider technoscience I see instead a mode that Teresa Brennan perfectly summarized as ‘sadodispassionate’.¹⁴ For example, from this perspective – which, I insist, is demanded by ecocide as a ‘matter of concern’, not to mention plain honesty in language and thought alike – rats and all the countless other animals (mice, rabbits, sheep, pigs, cats and dogs) who have suffered and died in labs are not the ‘unsung heroes’ of scientific research; they are its victims.¹⁵ When the German Green Party approved experiments on animals, Rudolf Bahro, one of its founders, rightly described accepting the infliction of deliberate suffering on other animals in order to extend human knowledge and save human lives as ‘the basic principle by which human beings are exterminating plants, animals, and finally themselves’.¹⁶ I am also reminded of a remark by Michel Foucault: ‘Where religions once demanded the sacrifice of bodies, knowledge now calls for experimentation on ourselves, calls us to the sacrifice of the subject of knowledge.’¹⁷

The English philosopher Henry More, writing in horrified admiration to Descartes, saw it coming (and here we have moved nearer to the roots I spoke of): ‘I recognize in you not only subtle keenness but also, as it were, the sharp and cruel blade which in one blow, so to speak, dared to despoil of life and sense practically the whole race of animals, metamorphosing them into marble statues and machines’.¹⁸ Could the contrast possibly be clearer with humanity as an animal who learns, through the humanities, among other related ways, to be humane? But I am more directly concerned with another contrast between the sciences and the humanities. Many have pointed it out; the poet Czeslaw Milosz, for example, mused that ‘we forget too easily the centuries-old mutual hostility between reason, science

¹² Bruno Latour, *On the Modern Cult of the Factish Gods* (Durham NC: Duke University Press, 2010): 111.

¹³ William James: *A Pluralistic Universe* (Cambridge MA: Harvard University Press, 1977 [1909]): 561.

¹⁴ Teresa Brennan, *Exhausting Modernity: Grounds for a New Economy* (London: Routledge, 2000).

¹⁵ Bruno Latour, ‘Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern’, *Critical Inquiry* 30 (Winter 2004) 225-248. ‘Unsung heroes’ is Latour’s term: *Modern Cult*: 114.

¹⁶ Rudolf Bahro, *Building the Green Movement* (London: GMP, 1986): 210.

¹⁷ From ‘Nietzsche, Genealogy, History’, pp. 76-100 in Paul Rabinow (ed.), *The Foucault Reader* (Harmondsworth: Penguin, 1984): 96.

¹⁸ L.D. Cohen, ‘Descartes and Henry More on the Beast Machine’, *Annals of Science* 1 (1936): 50.

and science-inspired philosophy on the one hand and poetry on the other...'¹⁹ Then is Charles Darwin's disturbing observation, in his 'Recollections'. 'Poetry of many kinds,' he wrote, 'gave me great pleasure, & even as a school-boy I took intense delight in Shakespeare.... But now for many years I cannot endure to read a line of poetry: I have tried lately to read Shakespeare, and found it so intolerably dull that it nauseated me. I have also almost lost any taste for pictures or music... My mind seems to have become a kind of machine for grinding general laws out of large collections of facts...'²⁰

I make this point not to confirm a metaphysical dualism but to register a *difference*, and to say that if and when circumstances force a choice, as I believe they now do, we too – in the humanities certainly, but no less in the social sciences, for the sake of whatever humanity they retain – must be on the side of the poets. How else can we expect to defend nature, including human nature, against its enemies which include, preëminently, 'science and science-inspired philosophy'?

I don't intend to follow that hostility back to Plato and his many followers, although of course one could. Instead I want to use my remaining time to consider its conceptual and axiological dimension, which includes the 'structural problem' I mentioned earlier. What is it about the sciences which renders them problematic in the context of ecocide but does not take in the humanities too?

Metaphor, Licit

The answer is their differing relationships with metaphor. This is a key issue, so let me remind you that metaphor is not a thing but a relation, or perspective, that connects, affects and indeed constitutes two or more entities. Take a classical example: 'Achilles is a lion'. (It should really be more like, 'Oh! Achilles is a lion!') Note that this isn't a simile, a kind of domesticated metaphor; it doesn't say 'Achilles is like a lion in certain specifiable respects'. Rather, it asserts that Achilles, a human being, who is therefore *not* a lion, nonetheless, at the same time, *is* a lion. He is both a man *and* a lion. This is what the great theorist of metaphor, Paul Ricoeur, called the 'tensive truth' of metaphor. It contains, *without resolving*, a tension between truths that are logically incompatible ('Achilles can't be both a man and a lion'). And it tells us something new and important about Achilles which being told that Achilles is a man, or even a man who resembles a lion, wouldn't convey. (By implication it also tells us something new about lions, but let that pass.) The price of this tensive metaphorical truth, part discovery and part creation, is paradox.²¹

Now metaphor has an epistemic dimension, which is *seeing-as*, or *understanding-as*. More radically, however, metaphor is ontic: *being-as*; or rather, in the appositely non-Platonic spirit of Heraclitus, *becomings-as*. The implication is that everything and anything only exists as something else as well, and nothing and no one exists purely or completely in or as itself. The idea of anything in itself, or self-sufficiently itself, is a philosophical cheque that cannot be cashed in. As we say in West London, self-

¹⁹ Quoted in Seamus Heaney, *Finders Keepers: Selected Prose 1971-2002* (London: Faber and Faber, 2002): 326.

²⁰ Charles Darwin: *Evolutionary Writings*, ed. James A. Secord ((Oxford: Oxford University Press, 2008): 421-22.

²¹ See Paul Ricoeur, *The Rule of Metaphor: The Creation of Meaning in Language*, transl. Robert Czerny (London: Routledge, 2003). On paradox, see also Philip Wheelwright, *Metaphor and Reality* (Bloomington: Indiana University Press, 1962).

identity is a constitutive impossibility. Or in Brook Ziporyn's ultra-terse formulation, 'Isness is asness is metaphoricity'.²²

Not coincidentally, this situation is fully ecological. The natural world is nothing if not the ongoing sum of its relationships, including those between living nature and the abiotic elements on which they depend, together with the rest of the so-called environment both 'internal' (genes, proteins, cells, organs and so on) and 'external' (sun, earth, rain, plants, other animals and other humans), and those of life-forms with each other. All of these are constitutive. These relationships comprise us; we *are* them. And we can add transformation in time, by which beings remain 'the same' while becoming 'different'. So every being in the great republic of life both is *and* is not itself. In short, we are and all living beings are embodied and ecological metaphors. And although metaphor is a relation, not a thing, it is not an idealist or spiritualist add-on. Life is metaphor all the way 'down' and material all the way 'up'.²³

I also want to draw out another aspect of the affinity between metaphor and nature. Ricoeur elegantly shows the impossibility of trying to domesticate, let alone eliminate, the metaphorical 'is'. Simply put, since we can only say what reality is to us at any given moment,

There is no non-metaphorical standpoint.... The theory of metaphor returns in a circular manner to the metaphor of theory... If this is so, then there can be no principle for delimiting metaphor, no definition in which the defining does not contain the defined; metaphoricity is absolutely uncontrollable.²⁴

In other words, *metaphor is wild*, in the same way that the more-than-human natural world – including human nature – is wild. This common ground is what Gregory Bateson was pointing to when he avowed 'the necessary unity of mind and nature' and insisted on the validity, for both mind and life, of Charles Peirce's principle of abduction, a specific kind of metaphor. To borrow Bateson's favourite example, what he called 'the syllogism by grass': 'Grass dies. Men die. Men are grass'.²⁵ As he knew perfectly well, this is a logical fallacy ('affirming the consequent'), but that is its very point, or an important part of it. But I want to add an insight from the great poet Wallace Stevens. Nature's prodigy, he wrote, 'is not identity but resemblance' – in other words, not a grand unity but relationships, bridging without erasing differences in the solidarity I just mentioned – and '*Because this is so in nature, it is so in*

²² Brook Ziporyn, *Being and Ambiguity: Philosophical Experiments with Tiantai Buddhism* (La Salle: Open Court, 2004): 173. See also pp. 101-102, 171-73.

²³ For more detailed explorations of these two sentences, see my 'Radical Metaphor: or why Place, Nature and Narrative are Each Other but aren't Themselves', *EarthLines* 6 (August 2013) pp. 35-38; 'Embodiment, Alterity and Agency', pp. 85-118 in Patrick Curry (ed.), *Divination: Perspectives for a New Millennium* (Farnham: Ashgate, 2010), esp. pp. 91-99.

²⁴ Ricoeur: 299, 339.

²⁵ Gregory Bateson, *Mind and Nature: A Necessary Unity* (Cresskill: Hampton Press, 2002); Gregory Bateson with Mary Catherine Bateson, *Angels Fear: Towards an Epistemology of the Sacred*, London: Bantam Books, 1998: 26-27. See the excellent discussion, to which I am indebted, by Wendy Wheeler, 'Gregory Bateson and Biosemiotics: Transcendence and Animism in the 21st Century', *Green Letters* 13 (Winter 2010) 35-54; also Deborah Bird Rose, 'Pattern, Connection, Desire: In honour of Gregory Bateson', *Australian Humanities Review* 35 (2005), <http://www.australianhumanitiesreview.org/archive/Issue-June-2005/rose.html> (last accessed 11.9.14).

metaphor'. It follows, as he also points out, that 'The body is the great poem' (although it surely makes the Earth a greater poem still).²⁶

Now metaphor is the life-blood of the humanities. There can be no empathic, imaginative or narrative understanding (which is to say, understanding-as) or being (becoming-as) without it, and without the tensive truth of being who you are as the reader, viewer, listener or whatever, while also being the other, equally an animate subject whatever its technical status, about whom you are reading. By the same token, such metaphor is relational, or dialogical, and plural. It's relational because when it occurs, the agency of that other is obvious – he, she or it is also doing things to you. (I don't say 'apparent agency': epistemological law enforcement is not our job.) This is why the natural 'religious' mode of metaphor, in the humanities and elsewhere, is animistic.

Metaphor is also plural because it is ongoing and open-ended. There is and can be no one, single, final, all-encompassing metaphoric entity or event. Not even Gaia. That is why I prefer the term and concept of animism, which I would broadly define as a disciplined habit of remaining open to subjectivity or agency wherever and whenever it manifests, regardless of whether or not the other party is technically animate or sentient.²⁷ Animism is thus twinned with metaphor, whereby a mutual-discovered commonality bridges, without erasing, differences and boundaries. This process gives rise to the cardinal political virtue I have already mentioned, solidarity. (Why cardinal? Because solidarity with other beings and other kinds of being is at the heart of the green virtue ethics that is in turn a *sine qua non* for resisting and reversing ecocide.²⁸)

Like metaphor, animism is both thoroughly embodied and completely perspectival. It is not a belief but a practice. It doesn't require anyone to surrender a distinction between animate and inanimate, only the theoretical belief that you already know, *a priori*, what can and cannot be a subject. And that you decline to engage in the tired epicycles of modernist self-policing. ('Oh, I *thought* that mountain/ stone/ tree/ bird was telling me something important, but *actually* my [my?] unconscious [whatever that is] was *projecting* something onto it, which then...') *Cui bono?* Who benefits from such exercises in disenchantment? As Bateson recognised, intelligence is a property of relative wholes or networks rather than their parts – in his systems terminology, 'circuits' rather than 'arcs' – which means it can show up anywhere.²⁹ And since it requires actual encounters, which can neither be predicted nor ruled out, to become real in lived life, animism is integrally plural.

Let me come back to Gaia for a moment. I am not suggesting it doesn't have positive potential. Nor should we overlook the problem, however, that its singularity – the very thing that tempts us as a great green unifier – invites that imperium which,

²⁶ 'Nature's prodigy': Wallace Stevens, *The Necessary Angel: Essays on Reality and the Imagination* (London: Faber and Faber, 1960): 73 (my emphasis). 'The body is the great poem': Wallace Stevens, *Collected Poetry and Prose*, ed. Frank Kermode and Joan Richardson (New York: The Library of America, 1997): 908.

²⁷ See, *inter alia*, Graham Harvey, *Animism* (New York: Columbia University Press, 2006), Graham Harvey (ed.), *The Handbook of Contemporary Animism* (Durham: Acumen, 2013), Tim Ingold, 'Rethinking the Animate, Re-animating Thought', *Ethnos* 71:1 (2006) 9-20, Gary Snyder, *The Practice of the Wild* (Berkeley: Counterpoint, 1990), Val Plumwood, *Environmental Culture* (London: Routledge, 2002) and David Abram (reference 6). Other references could, of course, be added. Note that animism differs from both pantheism/ panentheism (no God is needed) and panpsychism (a realist theoretical/ metaphysical assertion).

²⁸ See chapters 4 and 12 of my *Ecological Ethics*.

²⁹ Actor Network Theory, it seems to me, affirms the same animistic point.

whether gross or subtle, attends every monism: ‘the effort,’ as Barbara Herrnstein Smith says, ‘to identify the presumptively universally compelling Truth and Way, and to compel it universally.’³⁰ In the case of Gaia the question is, just as Bruno Latour asks, ‘How to make sure Gaia is not a God?’³¹ We are already familiar with this mode in the long lineage, beginning with monotheism, that has culminated in modern ecocide. This is reason enough to doubt that a Gaian ecotheology (or even ecothealogy, though that would be preferable) is desirable. But secularizing Gaia would be a cure as bad as, or worse, than the disease. There is no doubt that it would be the prelude to a disastrous programme of geo-engineering, the apotheosis of anthropocentric hubris, to ‘tame’ and ‘manage’ the Earth.

The solution to this riddle is realize that ‘God’ doesn’t exhaust the spiritual or sacred, in particular not the emplaced, embodied and relational spirituality at the heart of animism.³² There is nothing whatsoever supernatural – above or beyond nature – about the latter. In other words, the problem is with Gaia as God, not as *a* god (lower-case ‘g’). The difference is crucial. We urgently need to recover, reanimate and/or retain the ability to respect the lives of others, our fellow Earthlings, but also an awareness of the Earth the home and source of all our lives – and as such, sacred. What could be more so? And the sacred is so ungroundably, for its own sake, not for its use-value. It is precisely what is, and must remain, *not for sale*.

In this context, the fact that ‘Gaia’ is the name of a divinity, specifically a chthonic divinity, and furthermore a goddess, is no accident. The symbolism of the maternal female as the origin of life, including both males and females, could hardly be more to the point. But have we now returned, circuitously, to a monism? Almost, but crucially, not quite. Gaia, not as God but as a goddess, may be first among equals, but she is not alone. We are surrounded by countless instances, differentiated incarnations or avatars, of her life.

Furthermore, plural and local gods, cults and rituals were never an obstacle to cosmopolitan translation between one set and another. On the contrary, as Jan Assmann makes clear, it was monotheistic universalism, sufficiently entrenched, which put a stop to that.³³ In fact, localism is a *prerequisite* to cosmopolitan or cosmotheist translation. And why, as William James asked plaintively, ‘should we envelope our many with the ‘one’ that brings so much poison in its train?’³⁴

Significantly, pluralism was Milan Kundera’s principal line of defense of imaginative literature in *The Art of the Novel*. It is also a fundamental value in the work of other defenders of the humanities, notably William James, Max Weber, Wittgenstein and Isaiah Berlin, and more recently of Barbara Herrnstein Smith. But the one of its most succinct formulations was that of Paul Feyerabend, not coincidentally our sharpest and soundest modern critic of science: ‘The objection that [a] scenario is “real,” and that we must adapt to it no matter what, has no weight. There are many ways of thinking and living’.³⁵ Why is this principle metaphoric?

³⁰ Barbara Herrnstein Smith, *Contingencies of Value. Alternative Perspectives for Critical Theory* (Cambridge MA: Harvard University Press, 1988): 179.

³¹ ‘How to Make Sure Gaia is not a God? With special attention to Toby Tyrrell’s book *On Gaia*’, a paper delivered at ‘The Thousand Faces of Gaia’ colloquium.

³² See my ‘Post-Secular Nature: Principles and Politics’, *Worldviews: Environment, Culture, Religion* 11 (2007) 284-304, and chapter 10 of my *Ecological Ethics*. See also Val Plumwood, ref. 26.

³³ See Jan Assmann, *The Price of Monotheism*, translated Robert Savage (Stanford: Stanford University Press, 2010). Cf. Latour’s first Gifford Lecture (Feb. 2013), where he apparently attributes the inability to ‘translate’ to being ‘too local, too ethnocentric, too sectarian’, and advocates secularising Gaia.

³⁴ William James, *A Pluralistic Universe* (Cambridge MA: Harvard University Press, 1976): 140-41.

³⁵ Paul Feyerabend, *Killing Time* (Chicago: University of Chicago Press, 1995): 164.

Because each way entails its own truth, but that truth is dependent on and constituted by other, potentially contradictory truths. There is no way whatsoever to step outside these truths and measure them all, without contradictions, paradoxes or ambiguity, against a single non-metaphorical meta-principle or truth. (Hence what Kundera called ‘the unbearable lightness of being’.)

Contrast this perspective with what Weber identified as the hallmark of modern disenchantment: ‘increasing intellectualisation and rationalisation’ based on ‘the knowledge or belief...that one can, in principle, master all things by calculation’³⁶ – something that requires just such a single, monological truth or principle, on pain of agonistic incommensurability. Or in a word, Newton’s sleep. (As with so much of modernity, God used to do this job. The job itself hasn’t changed much.)

It’s clear where technoscience lines up here. Notwithstanding all the ‘hybrids’ of ‘vibrant matter’ you can imagine and their supposed enchantments (I see not wonders but horrors), in both formation and continuing self-constitution it is fundamentally anti-ecological *and* anti-metaphorical. I don’t say metaphor isn’t present, of course; but it is inadmissible, with all that follows. A few examples follow.

Metaphor, Illicit

Stephen Jay Gould’s objection to Gaia Theory was that there is no ‘mechanism’ for it. Clearly, even for an intelligent and well-informed scientific thinker like Gould, metaphor is something that exists in opposition to mechanism: a depressing thought, because it isn’t so hard to grasp – absent training to obscure it – that mechanism is itself metaphorical. To assert that the Earth or the world (or the brain or the self) is a machine, say, is precisely to engage in metaphor. This is what Ricoeur meant when he said that the only way to criticise a metaphor is by trying to replace it with another. And since the total absence of metaphor is not an option, once this is admitted the discussion can then move on to where it belongs: whether the metaphor in question is a good one, a fruitful one, a constructive one and so on, in terms of what those adjectives mean that themselves cannot avoid debate. (‘The selfish gene’ is a pretty unbeatable example of a terrible metaphor by any further defensible criteria. This is not a recent development, by the way; it always was.)³⁷

E.O. Wilson avers that ‘the brain is a machine assembled not to understand itself, but to survive.’³⁸ Now from a humanities point-of-view, both are certainly possible. But Wilson is forced, by the formation of his own discipline, into the absurd position that either he is wrong or, if right, then he is wasting his time in trying to understand the topic he is writing about, and ours in reading the result. (The same objection applies to the risible concept of ‘memes’.) Equally, according to Wilson’s cuddly-sounding ‘biophilia hypothesis’ we value other life-forms because we are ‘hard-wired’ by evolution to do so: a metaphor that not only accords primacy to ‘wiring’ but instantly downplays the possibility that we value them *because they are valuable*. Yet isn’t that precisely the possibility and perception that in a time of ecocide we most need?

William Hamilton’s pseudo-mathematical cost-benefit analysis of altruism need detain us even less. Much hailed by the sadodispassionately rational heroes of science,

³⁶ H.H. Gerth and C. Wright Mills (eds.), *From Max Weber: Essays in Sociology* (London: Routledge, 1991): 139. (Horkheimer and Adorno brilliantly developed Weber’s insight in their *Dialectics of Enlightenment*.)

³⁷ See longstanding critiques by Mary Midgley and Richard Lewontin.

³⁸ Wilson, *Consilience*: 96.

it takes love, courage and benevolence and turns them into an unconscious calculation of genetic advantage. (Now *that's* magic!) It also positions the scientist as one who 'knows', apparently apart from the rest of the human race, who 'believe', wrongly, that they are being altruistic. The logic of imperialism remains epistemologically – which is to say, in effect, scientifically – impeccable.

The potential of the humanities for an ecological and ecocentric apprehension of nature as living, wild subject is thus inversely mirrored by technoscience's drive to turn it into something inanimate, bounded and inert, to be managed externally by World System Governance or some such apparatus – a development that is already underway in the Orwellian name of 'the new conservation', whose advocates propose to extend scientific management on behalf of private capital to the last remaining places of relatively wild nature.³⁹ (A programme for the hyper-control, itself out of control, that is already driving ecocide? Give me more of that!)

Technoscience also depends on pretending that one can observe phenomena from the outside without affecting or being affected by them in any relevant ways, thanks to 'controls' (as if these were somehow exempt). This may work with 'matter' but where its object are other subjects, human or non-human, its limitations become disabling. Ultimately it is again the inverse of the truth that the humanities acknowledge and try to accommodate: that truth is not something that survives being put in a proposition. It can only be lived. It is ultimately ontological, not epistemological, and exceeds and contains us, not the reverse. Truth worthy of the name, as Max Weber put it in radically anti-Platonic spirit, is 'only that which *wants* to be true for all those who *want* the truth.'⁴⁰

Progress as defined by the sciences, and *a fortiori* technoscience, depends in part on hunting down metaphor and eliminating or replacing its tensive and ambiguous 'both-and' with an apparently clear-cut 'either-or'. The choice of which alternative is accepted and which rejected then follows from the application of a *method* to determine truth that has been predetermined by a far-from-scientific process called methodology, whose importance is reflected by its effective status as, to borrow Mary Midgely's brilliant coinage, methodolatry. (More magic: just apply the right method and you will necessarily obtain the right result, one which only a 'replication' resulting from applying it again can confirm.) Method here, no matter how algorithmic, still requires a human operator – a persistent cause of scientific regret – and even ideally is only asymptotically reliable, but these limitations hardly touch its revered status. In the humanities, although methods abound, the prerequisite is a particular personal, intellectual, axiological and ethical *stance* or *intention*, without which any method will fail in those terms. But this is just why the sciences and their backers feel entitled to look down on the humanities.

The social sciences occupy debatable territory here. They share subject-matter with the humanities but are prey to serious physics envy, and the inroads of methodolatry and all its bureaucratic trappings are obvious tribute to the suzerainty of the hard sciences: inappropriate quantification, appallingly bad abstract language and an embarrassing eagerness to sign up to the latest scientific fashions, notably neurophysiology and evolutionary psychology, mesmerised by their promises of

³⁹ See George Wuerthner, Eileen Crist and Tom Butler (eds), *Keeping the Wild: Against the Domestication of Earth* (Washington D.C.: Island Press, 2014).

⁴⁰ Quoted in Lawrence A. Scaff, *Fleeing the Iron Cage: Culture, Politics, and Modernity in the Thought of Max Weber* (Berkeley: University of California Press, 1989): 118. (William James's definition of truth is very close; see Robert D. Richardson, *William James: In the Maelstrom of American Modernism* Boston: Houghton Mifflin, 2006): 511.)

explanation, prediction and control, and therefore generous funding. (Perhaps it is fitting that so much energy in the social sciences is now absorbed, after administering a technoscientific society, in dealing with the pathological symptoms that result.)

I also strongly suspect that every time a social science is practised creatively – which is to say, effectively – it is, in practice, an art, not a science in the sense the scientists mean it. When the founders of Neuro-Linguistic Programming claimed to have systematised the work of the great hypnotherapist Milton Erikson, having exhaustively analysed videotapes of his sessions with clients, he commented that ‘They have me down to a nutshell. Trouble is, they left out the nut and just took the shell.’ (And when Bateson wanted to praise Erikson’s skill, he called him ‘the Mozart of communication’.)

Is another kind of science – humane, consciously metaphoric, oriented to intrinsic rather than instrumental value – possible?⁴¹ Of course, but how *likely* is it? When you consider the amount invested, literally and figuratively, in science as power-knowledge, together with its historical record, the answer must be, very unlikely. There seems to be rather a lot of wishful thinking in this regard. The anthropologist David Turnbull, for example, says blithely that indigenous and scientific ways of knowing can work together while respecting their differences as long as science is ‘re-imagined...as performative and local.’⁴² We may indeed re-imagine science that way, and it may even *be* that way (I believe so), but neither point is going to shift the way the great majority of scientists see and conduct themselves: precisely as dealing, whether humbly or ambitiously, with universal truth, and in ways to which ‘performance’ is irrelevant.

It goes without saying, I hope, that there are scientists of the minority stripe who survive professionally. But institutionally, in the broadest and deepest sense, I’m quite sure that most lesser-known scientists who insist on giving room to metaphor and metaphoric truth in their work simply aren’t hired or published, while middle-ranking ones are ejected from the club as people doing Something Else, viz. Bateson’s version of systems theory, the physicist David Bohm and his ‘implicate order’, Stuart Kauffman and complexity theory, Mae-Wan Ho’s genetics and Francisco Varela’s autopoiesis.⁴³ I’m afraid that the same fate awaits the currently most promising attempt to humanise physical science, namely biosemiotics – even though (or perhaps, if I am right, just because) natural metaphor is the essential insight that biosemiotics develops.⁴⁴

Eminent scientists such as Einstein, dealing in wisdom, *horribile dictum*, are tolerated in the manner of ex-Presidents or ex-Secretaries of Defence musing on the contingencies of power, including their own mistakes, in a way that would be unimaginable for active players. Even potentially subversive theories which have proved impossible to avoid, such as quantum physics and dissipative structures, have failed, thanks to institutional, theoretical and experimental damage-limitation, to change the dominant research paradigms and directions of technoscience. Their active development is largely restricted to what can be appropriated to generate devices

⁴¹ Isabelle Stengers, *Une Autre Science est Possible!* (Paris: La Decouverte, 2013).

⁴² <http://indigenousknowledge.org/discussion/native-conversations/big-question-2-reimagining-ways-of-knowing/post/david-turnbull> (accessed 9.10.14)

⁴³ I wasn’t sure whether to include Rupert Sheldrake’s morphogenetic fields but in any case, his faith that the scientific community will admit him if he scrupulously follows its rules is touching.

⁴⁴ See Wheeler, ref. 24. Also *The Whole Creature: Complexity, biosemiotics and the evolution of culture* (London: Lawrence and Wishart, 2006), and her forthcoming book, *The Flame and its Shadow: Reflections on Nature and Culture from a Biosemiotic Perspective*.

suitable for mechanical application and a ROI, e.g. quantum computing. The same promise underlies every appeal for funding for still bigger linear particle accelerators to find the ‘God particle’, advance our knowledge of ‘the mind of God’ and all the other leaden clichés of technoscientific cheerleaders.

Science vs. Metaphor (Life)

But why should the sciences have this hostility towards metaphor? And what is the structural problem I mentioned earlier? It lies in a perspective (that denies it is a perspective), a metaphor (that is used to kill metaphor) and a myth (that asserts it is mythless) which has never stopped informing the sciences. It survived the seventeenth-century Scientific Revolution and all subsequent ones unscathed – indeed, strengthened – including quantum physics. Assmann calls it the Parmenidean Distinction: a radical distinction between a perfect, unchanging, unmoving world of Truth – precisely a serenely spiritual, tendentially disembodied, coolly masculine ‘invisible world’ beyond this one and its sensuous, fecund, material world of generation, growth and decay and multiple particulars in which we live – in short, the Earth – accompanied by the methodological imperative to ceaselessly enquire: is this item, whatever it may be, true or false?⁴⁵ Note that in exhaustively equating divine truth (*logos*) with what is and falsehood, error and delusion (*mythos, demos, doxa, panta rhei*) with what is not, the first world not only becomes the only real one but the second one ultimately doesn’t even exist.

As developed by Platonism, this toxic idea, rightly termed by Val Plumwood a ‘philosophy of death’, is still circulating in the Western metaphysical imaginary, not least that of the sciences. It is not only anthropocentric but deeply anti-ecological, and not only androcentric but misogynist, rendering the maternal feminine, the symbolic source of life itself, not only valueless but invisible – indeed, in the final throw, non-existent! What bolder stroke of ontological and axiological reversal could there possibly be? For make no mistake: ecocide is inseparable from the symbolic matricide inscribed from the start in Western philosophy, and the scientific reason to which it gave rise.⁴⁶

To recount the trajectory with necessary brevity, Plato incorporated Parmenides’s profoundly anti-ecological idea (along with Pythagorean mathematics) into the centrepiece of his philosophy, although he softened the blow by allowing the sensuous world of ‘appearances’ a limited and derivative reality. Plato’s student Aristotle made various adjustments in turn, only one of which concerns us here, namely his logical truths, which later became universal and singular ‘principles of reason’, and three in particular:

⁴⁵ The (originally Greek) Parmenidean Distinction exists alongside and in secret sympathy with the (originally Jewish) Mosaic Distinction, always asking, ‘Is this a true or false god?’, which drives monotheism. But Assmann should be read in conjunction with Cavarero (see note 46 below).

⁴⁶ Val Plumwood, *Feminism and the Mastery of Nature* (London: Routledge, 1993), ch. 3; see also her ‘Prospecting for Ecological Gold amongst the Platonic Forms: A Response to Timothy Mahoney’, *Ethics and the Environment* 2:2 (1997) 149-68. For a brilliant interpretation of the impact on and in philosophy and thence beyond, see also Adriana Cavarero, *In Spite of Plato: A Feminist Rewriting of Ancient Philosophy*, transl. Serena Anderlini-D’Onofrio and Aine O’Healy (New York: Routledge, 1995). Also see Genevieve Lloyd, *The Man of Reason: ‘Male’ and ‘Female’ in Western Philosophy*, rev. edn (London: Routledge, 1993). In more explicitly ecological context, also see my ‘Revaluing Body and Earth’, pp. 41-54 in Emily Brady and Pauline Phemister (eds), *Human-Environment Relations: Transformative Values in Theory and Practice* (Dordrecht: Springer, 2012).

1. The principle of identity: P is P.
2. The principle of non-contradiction: not at the same time P and not-P.
3. The principle of the excluded middle: either P or not-P.

Note that that these are actually three aspects of one primary truth, namely that of identity, which expresses just Parmenides's assertion: the self-identity of what is, and by implication, the non-existence of whatever is not self-identical: that is, whatever changes, moves, varies according to time or location or depends for its identity on what is it is not, whether other beings or circumstances; in short, whatever is metaphorical and ecological.⁴⁷ I shall borrow for a moment Michel Serres's authority: 'Aristotle posits the identity principle as the founding necessity of science'.⁴⁸

P is P: so simple, even innocuous, isn't it? It practically shrugs off any serious consideration. Yet this was the fulcrum for an enduring empire, and all without any need for self- or other-understanding of the kind suggested, and only permitted, by 'P both is and is not P.' Indeed, such understanding is strongly discouraged. After all, what use is it to mastering, let alone producing or consuming? And anything without a *use* is doubly unwelcome. What is celebrated instead is 'the violence of identity'.⁴⁹

Here, then, is the formative dimension of the sciences which has permitted, and arguably even encouraged, their transformation into modern technoscience whose ecocidal role is what concerns me here, and should concern us all. Mind you, as Serres reminds us, 'Behold science, fully developed now, mature, powerful, revelling in its triumphs, celebrated above all else; do you imagine it cares what it looks like, at this stage?'⁵⁰ No, but resistance is still possible.

The Parmenidean Distinction took new forms in Descartes's dream of a *mathesis universalis*, Galileo's discarding of sensual, qualitative experience in favour of abstract quantitative formulae and Newton's mathematico-experimental physics. It remains at work in contemporary biology today, in its drive to ever greater abstraction and quantification.

None of this should be surprising to anyone acquainted with the history of science. In *Cosmopolis*, for example, Stephen Toulmin showed that the Scientific Revolution was an attempt to overcome agonism and uncertainty, especially religious, which entailed a dogmatic *counter*-revolution against the sceptical, humane and life-affirming humanism of the sixteenth century.⁵¹ Contrariwise, Montaigne, one exemplar of that school, advocated tolerance, abhorred cruelty as the worst vice, respected women (certainly relative to his milieu), defended animals and abhorred European colonialism in the New World. (Descartes's subsequent sleight-of-hand redefinition of scepticism as dogmatic and non-reflexive is still with us, not least in the New Atheists posturing as 'sceptics'.)

The contrast with classical and humane studies could hardly be clearer. In these, the questions don't finally revolve around a method for distinguishing truth, let alone Truth, from falsehood, but a – not *the*, but *a* – good way to live; or rather ways, and the varying truths they embody. So an ontological, axiological and ethical dimension

⁴⁷ For a good discussion see Henri Bortoft, *Taking Appearance Seriously. The Dynamic Way of Seeing in Goethe and European Thought* (Edinburgh: Floris Books, 2012).

⁴⁸ Michel Serres, *The Five Senses: A Philosophy of Mingled Bodies*, transl. Margaret Sankey and Peter Cowley (London: Continuum, 2008): 283.

⁴⁹ Joshua Delpech-Ramey, 'Lost Magic: The Hidden Radiance of Negative Dialectics', *Radical Philosophy Review* 12:1-2 (2009) 315-337: 324 (describing Adorno's critique of Hegel).

⁵⁰ Serres: 195.

⁵¹ Stephen Toulmin, *Cosmopolis: The Hidden Agenda of Modernity* (Chicago: University of Chicago Press, 1990).

to such research, if we may use that word here, is inalienable. But all this leaves the humanities as inherently marginal to the project of modernity!

Opposing the ecocidal values and logic of that project thus requires us to support the humanities – or, more judiciously, the best of the humanities – as a vital part, in John Cowper Powys's words, of 'the cause of the unseen against the seen, of the weak against the strong, of that which is not, yet is, against that which is, and yet is not.'⁵² Yet there is a paradox at work which must also be noted: the humanities cannot fully do their good work unless they are valued for their *own* sake. If they are valued only, even mostly, for their effectiveness in promoting ecological virtue, then one has already slipped into the mode of technoscience *par excellence*: use-value and instrumental reason. And it is that mode, strapped to our necessarily short-term, ignorant and selfish desires, that has become the ruling ideology of our global ruin.

Questions and Cautions

In calling for a choice between two starkly-posed alternatives, the humanities and the sciences, am I guilty of inconsistency with my advocacy of 'both-and' over 'either-or'? Maybe, but I am at least innocent of the one-size-fits-all dogmatism that characterises triumphalist scientism. 'Always to be on the side of ever greater pluralism is not to recognize that, even to the question of pluralism, there is more than one side'.⁵³

Am I guilty of naïve antimodernism, something especially to be pitied when we have never been (entirely) modern? Again, maybe; but if modernity is ecocidal (something that for me is not in dispute) – if, to quote Kundera again, 'To be absolutely modern means to be the ally of one's gravediggers' – then we must perforce be antimodern in the best way we can.⁵⁴

Am I trying to 'turn back the clock'?⁵⁵ Say it softly, but *there is no such clock*. I say so given, first, the profound problematicity of monotheistic eschatology, with History going Somewhere, even when in a secular key – second, the *non*-modern experiences of enchantment that happen every day, everywhere, completely ignoring the official linear trajectory⁵⁶ – and third, the inadequacy of a hermeneutics of suspicion that knows all about clocks and time but nothing about moments, the moments that only offer themselves to what Ricoeur called a 'second naïveté'.⁵⁷

There are certainly historical conjunctures which have their own metaphorical equivalent of momentum, but in their contingency they are nothing like what the metaphor of a clock implies. As Teresa Brennan remarks, in the course of a passionate and intelligent prescription to return to local and nonspecialized economies, 'To say that we need to "go back, slow down" will be portrayed as anti-progress. But progress lies in straining the human imagination to its limits in cleaning up the mess – while

⁵² John Cowper Powys, *A Glastonbury Romance* (London: John Lane The Bodley Head, 1933): 1174.

⁵³ Eric Griffiths, in the *TLS* (28.5.93).

⁵⁴ Milan Kundera, *Immortality*, transl. Peter Kussi (London: Faber & Faber, 1991): 159.

⁵⁵ Latour, *Modern Cult*: 94-95.

⁵⁶ See my 'Enchantment and Modernity', *PAN: Philosophy, Activism, Nature*, Issue no. 12 (2012) pp. 76-89; accessible at

<http://www.patrickcurry.co.uk/papers/Enchantment%20and%20Modernity%20for%20PAN.pdf>

⁵⁷ Paul Ricoeur, *The Symbolism of Evil*, transl. Emerson Buchanan (Boston: Beacon Press, 1967): 351-52.

retaining the information that mess has yielded'.⁵⁸ *Imagination*, note; not more knowledge. And I hope it is clear that this advice is not an argument against modern plumbing, hygiene, anaesthetics, antibiotics, dentistry or surgery. These obviously good things do not constitute a valid reason to simply accept Big Energy, Big Pharma or any of the other hyper-industrial interventions in our and other beings' lives. To what extent it all constitutes an unpickable package remains to be seen, and is partly, at least, up to us.

I don't deny insights from both the physical and social sciences with significant human implications, as opposed to plenty of what Feyerabend called 'disasters in the social domain and...empty formalism combined with never-to-be-fulfilled promises in the natural sciences'.⁵⁹ But the value of such insights is only realised in the fullest sense – that is, they are only discovered/ invented, conveyed, and brought to lived fulfilment – *through metaphor*.⁶⁰ For scientists practice metaphor too, of course. They haven't much choice in the matter. But they can practise it badly. For the Parmenidean Distinction enshrined in Aristotle's logic acts as a constant temptation, even imperative, to deny and suppress metaphor, especially deep paradox, and the ontological truths only they can convey;

Hence scientists, *qua* scientists, overwhelmingly tend to engage in metaphor in disguised, inadmissible and unconscious ways. Ironically for professed rationalists, that only makes it harder to evaluate and criticise. The questions which matter – not whether metaphor is present or not but whether the ones in hand are apt, fruitful, helpful and so on – become that much harder to ask and to answer.

E.O. Wilson's 'consilience', attempting to 'reconcile' the two by absorbing the humanities into the sciences, was thus positioned precisely the wrong way round.⁶¹ The hard sciences are actually a weird, counter-form of the humanities, energised by the same 'antagonistic energy' as the antecedent monotheistic counter-religions which were reacting to the primary, archaic and local religions that remain, like metaphor and animism, the human benchmark.⁶²

I am also aware that practitioners of the humanities in recent decades have, wittingly or not, conspired with their enemies. Afflicted by what Owen Barfield nicely termed 'residues of unresolved positivism', they have fetishised method and methodology, and in so doing not only imitated the sciences but allowed the entire argument to take place on ground owned by science and science-inspired philosophy, namely epistemology.⁶³ (Structuralism is an obvious example but even post-structuralism was sucked into this tendency – as if deconstruction could ever be a method!) Learned idiocies such as asserting the equal value of Shakespeare and a telephone directory were, of course, seized on by the powers-that-be to justify

⁵⁸ Teresa Brennan, *Globalization and its Terrors. Daily Life in the West* (London: Routledge, 2003): 165. See also Ariel Salleh, *Ecofeminism as Politics: Nature, Marx and the Postmodern* (London: Zed Books, 1997), and Val Plumwood, *Environmental Culture: The Ecological Crisis of Reason* (London and New York: Routledge, 2002).

⁵⁹ Paul Feyerabend, *Farewell to Reason* (London: Verso, 1987) 61.

⁶⁰ Only metaphor, as distinct from either deductive or inductive logic, can result in a genuinely new discovery. See Wheeler, 'Bateson': 41. (On metaphor in the construction of scientific theories, see Mary Hesse, *Revolutions and Reconstructions in the Philosophy of Science* (Brighton: Harvester Press, 1980.)

⁶¹ E.O. Wilson, *Consilience: The Unity of Knowledge* (New York: Knopf, 1998). His call (or demand) was recently repackaged by Steven Pinker in the *New Republic*. See the excellent discussion by the editors of *The Point* in 'The New Humanities', <http://thepointmag.com/2014/criticism/the-new-humanities> (accessed 20.8.14).

⁶² Assmann, *Price*.

⁶³ See Eduardo Viveiros de Castro, ref. 8.

parsimonious philistinism, while research in the humanities has been deliberately pursued and presented in unforgivably scholastic language, not only arcane but downright obfuscatory.

To a dispiriting extent, the humanities in the academy have already sold the pass. With embarrassing eagerness and extraordinary naïveté, philosophy and literary studies in particular have opened up to brain science, evolutionary biology and cognitive psychology, abandoning their own traditions and practices of independent informed critical judgement by conferring the right upon the hard sciences to ‘verify’, ‘confirm’ and even produce the truth. And the results, predictably banal, even fail to nourish the humanities in whose name they speak. ‘Literary studies may employ cognitive psychology in its attempt to better understand literary texts, but if it is driven by a psychological question (say, what is the effect of reading on moral sympathy?), then what is being done is psychology, not literary studies (and probably *bad* psychology, since it is carried out by people trained to read novels, not data sets).’⁶⁴

Indeed, such claims are commonly downright dishonest. What is involved is a tacit reductionism that reformulates the kind of questions that the humanities developed in order to be able to ask and, to some extent, at least, answer – questions of quality, personal experience and ‘inwardness’ – into the kind of questions the hard sciences can process, ones of quantity, magnitude, and empirically observable and measurable data. The original questions are then assumed, and not always by sincere error, to have been answered.⁶⁵

Given as well the aggressive scientism of their public professoriate, the sciences have thus come to occupy (without any sense of the irony, of course) the enviable position of medieval theology: queen of the sciences and final arbiter of all knowledge. In that spirit, God save us from the ‘neurohumanities’! Yet where is the warrant for this authority that does not already assume, in a completely circular and question-begging way, science’s ultimate value? As Feyerabend (a sorely-missed defender of humanity and the humanities) succinctly put it, ‘the choice of science over other forms of life is not a scientific choice.’⁶⁶

In sum, the image of the humanities here is an ideal one that is only sometimes realised in practice. Here and there, however, it is still so realised. Some excellent practitioners remain in the academy, of course. But as the technoscientific and scientific stranglehold on universities increases, the humanities are also returning to new forms of their old homes, independent publications. Nor is the independent

⁶⁴ *The Point* (see ref. 61). Cf. Marilynne Robinson, *Absence of Mind. The Dispelling of Inwardness from the Modern Myth of the Self* (New Haven: Yale University Press, 2010) and Nikolas Rose and Joelle M. Abi-Rached, *Neuro: The New Brain Sciences and the Management of the Mind* (Princeton: Princeton University Press, 2013). The latter is only marred by the extent to which its critique pulls its punches – not surprising, given Rose’s brief for social science.

⁶⁵ See, variously, Barbara Herrnstein Smith, *Scandalous Knowledge: Science, Truth and the Human* (Durham: Duke University Press, 2006), Robinson, *Absence*, and Thomas Nagel, *Mind and Cosmos* (New York: Oxford University Press, 2012).

⁶⁶ Paul Feyerabend, *Against Method* (London: NLR, 1975). Cf. another doughty defender, Mary Midgley, e.g. in *Science and Poetry* (London: Routledge, 2001). This point was also made nearly a century ago by Max Weber; and the same sort of people still don’t want to hear it. Science, he wrote, ‘presupposes that what is yielded by scientific work is important in the sense that it is worth being known. In this, obviously, are contained all our problems. For this presupposition cannot be proved by scientific means. It can only be *interpreted* with reference to its ultimate meaning, which we must reject or accept according to our ultimate position towards life.’ (H.H. Gerth and C. Wright Mills (eds.), *From Max Weber: Essays in Sociology* (London: Routledge, 1991): 143.) The same sort of people still don’t want to hear it.

scholar altogether extinct, as I can attest. In our over-professionalised time even the ‘amateur’, a modern term of contempt, might begin to reclaim its original meaning: one who loves the subject. (Who but consummate professionals have given us the Iraq War, Fukushima, the banking crisis and carbon markets?) But over and above all this, the potential of the humanities to develop into genuine ecohumanities endures, and it is something that no amount of betrayal can destroy.⁶⁷

Finally, what does all this have to do with Brazil, say? Much of it – ecocide in particular, and the role of technoscience therein – applies directly. In terms of the humanities, however? I apologise for such extreme brevity, even if it is unavoidable, but the need and the promise alike surely lies in humbly learning as much as possible from the equivalent of our humanities as practised by indigenous cultures: the kinds of ‘Amerindian philosophy’ that Eduardo Viveiros de Castro, among others, has opened up to us.⁶⁸ I am not advocating indiscriminately adopting indigenous perspectives, nor am I suggesting that they cannot be tested to destruction; plainly they can. Nonetheless, they are potentially ecological – attuned to local and living nature – to an extent that we in or from the West urgently need to rediscover. And if we need a contrast-class to sharpen what I am advocating, gene prospecting – technoscientific imperialism par excellence, setting out not to learn from but to carry off, for private profit – will do nicely. Or even more fundamentally, the modern disappearing, worldwide, of so many indigenous cultures, languages and particular ways of being human. For these are humanities too.

Is this *desideratum* a special case? Actually, I see it as a paradigm for the ecohumanities as a whole. In the overdeveloped world, where (to quote Serres again) technoscience has ‘destroyed a prodigious body of knowledge in the realm of the perceived’, the humanities need to grope their way back to recovering something like what our own local, indigenous ecological sensibility would have been and could still be, not only in terms of a seeing-as but a being- and becoming-as.⁶⁹

In sum, metaphor is the very heart of the humanities, as it is of the more-than-human natural world. That is why, in this time of ecocide, we must defend them against their enemies, including technoscience, and try to develop them further in local and indigenous cultural idioms. And if we actually do need a new term for the current geological era, let it be Earth-centred: ‘Geocene’, perhaps, or ‘Ecocene’. Because whatever it’s all about, it’s not all about us.

⁶⁷ Although within the academy, once again, some advocates of modernist ‘ecocriticism’ are trying to do just that, thereby replicating the technoscientific takeover of the humanities as a whole that I have described above. For an uncompromised guide, see Laurence Coupe (ed.), *The Green Studies Reader: From Romanticism to Ecocriticism* (London: Routledge, 2000). See also my essay-review ‘From Ecocriticism to Ecohumanities: An Essay-Review’, *Green Letters* 13 (Winter 2010) 95-109; the editorial in the same issue, on ‘Ecophenomenology and Practices of the Sacred’, by Patrick Curry and Wendy Wheeler; and my ‘Nature Post-Nature’, pp. 51-64 in *New Formations* 26 (Spring 2008).

⁶⁸ For a general discussion, see Viveiros de Castro, ref. 8 above. Among many possibilities see also Lesley J.F. Green and David R. Green, *Knowing the Day, Knowing the World: Engaging Amerindian Thought in Public Archaeology* (Tucson: University of Arizona Press, 2013), Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (Minneapolis: Milkweed Editions, 2014), and Denis Noble, *Biology Beyond Genes* (Oxford: Oxford University Press, 2006).

⁶⁹ Serres: 253.

