

THE RELEVANCE OF AN EXISTENTIAL CONCEPTION OF NATURE¹

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ABSTRACT: It is often assumed that science provides the most accurate knowledge about nature. This view not only collapses distinctions between different forms of knowing but also results in a paradox whereby understanding what it means to exist in the world is dictated by practitioners of science. In this essay I argue for the relevance of an existential conception of nature via the philosophy of Martin Heidegger, and how his notions of thrownness and *phusis* enable us to recognize a certain ethical bond to nature. I conclude with a critical analysis of liability insurance and actuarial science to demonstrate my points.

KEYWORDS: Nature; Existentialism; Heidegger; Thrownness; *phusis*; Collingwood; Insurance

There is an inherent tension, if not paradox, in how we conceive nature as something accessible by virtue of its being ‘natural,’ and thus in conformity with our given senses, while believing at the same time that ever improving methods of analysis in the sciences provide more accurate knowledge of nature not accessible by means of the unaided human senses. Alasdair MacIntyre notes this tension in terms of the turn in Western history when empiricism and the natural sciences begin to part ways, when we no longer place much trust in what appears to us and seek instead the underlying causes of appearances invisible to the human eye.² It is true that assumptions as to what scientific theory is describing in actuality have been hotly debated by philosophers of science;³ however, our everyday existence is, despite these debates,

¹ My thanks to James Williams for reading and commenting on a version of this article as well as to Brian Smith for discussing with me debates on structural realism.

² Alasdair MacIntyre, *After Virtue*, Second Edition, Notre Dame, University of Notre Dame Press, 1984, p. 80; cf. R. G. Collingwood, *The Idea of Nature*, Oxford, Clarendon Press, 1945, p. 12.

³ See, for example, debates on structural realism in *Structural Realism*, Peter Bokulich and Alisa Bokulich (eds.), Dordrecht, Springer, 2011.

largely dominated by the belief that what science tells us must be true and accurate. This historical and methodological tension serves well to set the context in which I want to appeal to the relevance of an existential understanding of nature since there is something uncanny, to use Martin Heidegger's term [*unheimlich*],⁴ about a historical situation in which the most accurate form of knowledge is often thought to consist of the reports made by practitioners of the natural sciences. What is particularly uncanny is how we distrust knowledge accessible to us by virtue of simply existing as embodied beings in a life-world, that is, a world commonly and directly experienced. To use an almost cliché but nonetheless relevant example, one can say we believe in the astronomically represented universe in which the earth revolves around the sun. Yet, the modern astronomical representation of the earth and sun is not the same representation by which we live when orienting ourselves to horizons, cycles of the day, and especially the symbolic meanings of the sun and its light and warmth which we employ to give meaning to occasions.⁵

But a strong proponent of the scientific worldview may discount the credibility of so called existentialist complaints, either claiming that we should strive to live according to current scientific findings or simply disregard as trivial how we act in ways often contrary to these findings. Neither claim is satisfactory, not only because both involve a latent evaluative (and even ethical) position about the status of scientific discoveries and their relation to how we should live, but also because whatever science discovers is, in the last analysis, not accessible by its non-practioners. The argumentative force of existentialism can be seen as questioning the status and role of this expert type of knowledge and how human beings *qua* human beings require another form of knowing and relating that is experienceable directly—or what is often captured by the distinction between scientific *knowledge* and existential *understanding*.⁶ On this view, an understanding of nature and how we might exist in relation to it does not require science. This is not to say that it is a rival to scientific knowledge but that it precisely fulfils a different role in the actualising of an embodied and lived existence.

Having said this, there is no unified concept of nature for those philosophers often placed under the label 'existentialism.' In fact, basics texts on existentialism often begin by noting the historical inaccuracy of the term. The only philosopher ever claiming to be existentialist was Jean-Paul Sartre, and he later recanted the title. Nonetheless,

⁴ Martin Heidegger, *Being and Time*, trans. Joan Stambaugh, Albany, SUNY, 1996, p. 176/188. In keeping with convention, when referring to *Being and Time*, the pagination from the 7th edition of the German text will be given in italics.

⁵ Heidegger, *Being and Time*, p. 96/103.

⁶ Paul Ricoeur, 'The task of hermeneutics,' in John B. Thompson (ed.), *Hermeneutics and the Human Sciences*, trans. John B. Thompson, Cambridge: Cambridge University, p. 53–54.

what I take to be consistent with many of the philosophers thought to be existentialist is the insistence that our general understanding is misguided and staked on illusion in some respect. Consider Albert Camus when he says we must encounter the absurdity of our existence as we might enter a desert. There it finds 'its bread,' realizing that 'it had previously been feeding on phantoms.'⁷ Karl Jaspers regards as highly problematic our tendency to want to describe things as objects. He refers to so-called objective knowledge as a limited form of relation that cannot encompass the whole of being and reality: 'Reality is therefore what resists all thought.'⁸ When Sartre famously states that 'we are condemned to be free,' he does so on the basis of conceiving our perceptions of the past as a form of limitation which can result in an existence predicated on bad faith. What is possible remains open, and so in this sense, one cannot even speak of a future since it defines what is to be expected or what is to come.⁹ It should not be forgotten that, in addition, existentialism often views science and technology as exacerbating our condition of misunderstanding; they incapacitate our ability to return to a basic reflection on our own existence and how we relate to things in this existence in our efforts and desire to be. This criticism of science and technology¹⁰ has primarily to do with the manner in which it shapes our forms of understanding and relation by insisting on what is really real. Gabriel Marcel calls this intrusion the reduction of existence to function, in which the highest value is usefulness. 'Life in a world centered on function,' he concludes, 'is liable to despair because in reality this world is *empty*.'¹¹ A life reduced to usefulness means deciding what constitutes use and what therefore, by virtue of not having this quality, should be discarded or ignored. One effect, as Marcel notes, is how elderly people, no longer conceived to be of economic usefulness to a society, are neglected by 'some appalling mistake.'¹²

Given this suspicion of science, what may be termed an existential understanding of nature would involve bracketing out expressly scientific representations of natural life which might influence our relation to nature, or what is the way in which scientific definitions of nature come to be represented in the non-scientifically concerned

⁷ Albert Camus, *The Myth of Sisyphus & Other Essays*, trans. Justin O'Brien, New York, Vintage, 1955, pp. 16–17.

⁸ Karl Jaspers, *Philosophy of Existence*, trans. Richard F. Grabau, Philadelphia, University of Pennsylvania, 1954, p. 69.

⁹ Jean-Paul Sartre, *Being and Nothingness*, trans. Hazel E. Barnes, London, Routledge, 1958, pp. 128–29.

¹⁰ Or what is 'technoscience'; see Robert C. Scharff, 'Displacing Epistemology: Being in the Midst of Technoscientific Practice,' *Foundations of Science*, vol. 16, no. 2, 2011, pp. 227–43.

¹¹ Gabriel Marcel, *The Philosophy of Existentialism*, trans. Manya Harari, Secaucus, The Citadel, 1956, p. 12.

¹² Marcel, *The Philosophy of Existentialism*, p. 12.

cultural imaginary. Popular notions of social Darwinism, for example, not only draw on a distortion of Darwin's theory of evolution but also talk as if we (i.e. everyday people) can readily observe evolution at work.¹³ So if the critical orientation of existentialism can be expressed as a suspicion of the relevance of scientific knowledge for grasping the relation between human existence and nature, its constructive bearing involves not only proposing an alternative but also offering a conception of nature readily accessible to us as existentially embodied beings. Beyond this suspicion, I want to add a more specific thesis that is arguably existential insofar as it is Heideggerian: Nature is not merely resource but source. The former is generally consistent with a scientific understanding even where science supports notions of environmental conservation. A forest, even conserved, is still a resource.¹⁴ The latter (nature as source) is what I will attempt to show derives from an existential relation and has meaningful *existential* implications. I will draw on two facets of Heidegger's philosophy in attempting to persuade the reader how our relation to nature can best be described as a form of existential bond.

In the first half of this essay, I examine what I argue to be a key feature of the scientific worldview that informs the cultural imaginary—i.e. R. G. Collingwood's notion of the reduction of substance to function. I then employ Heidegger's concepts of thrownness and *phusis* (nature) to show how nature is not resource but source, and as such, how it gives rise to a type of existential bond, which can be understood broadly as an ethical relation. I conclude by briefly examining liability insurance and how it distorts our relation to nature when attempting to account for contingency through the use of actuarial science.

THE REDUCTION OF SUBSTANCE TO FUNCTION

Collingwood's influential *The Idea of Nature* (1945) begins by distinguishing three major historical shifts in the conception of nature which are driven by philosophical distinctions in the first periods (i.e. ancient Greek and Renaissance) and then by mostly scientific ones in the last period (i.e. modernity). While it might be easy to dismiss his assessment of the modern conception of nature as outdated by virtue of the changes

¹³ Mary Midgley, *Ethical Primate: Humans, Freedom and Morality*, London, Routledge, 1994, and Stephen Jay Gould, 'Darwinian Fundamentalism,' *The New York Review of Books*, June 12, 1997, available at <http://www.nybooks.com/articles/archives/1997/jun/12/darwinian-fundamentalism/?pagination=false>.

¹⁴ Cf. Bruce Foltz, *Inhabiting the Earth: Heidegger, Environmental Ethics, and the Metaphysics of Nature*, Amherst, Humanity Books, 1995, p. 9.

that have taken place within the scientific communities since 1945,¹⁵ to do so would be a mistake in at least two respects. First, his historical delineations are deliberately ambiguous, not for lack of scrutiny, but for his emphasis on what he views to be significant conceptual shifts determining how we interpret our relation to reality, or what he calls cosmology.¹⁶ Indeed, Collingwood understands the priority of concepts as producing a strain in which these concepts are never settled or at rest but dynamically moving history.¹⁷ These conceptual shifts do not square easily with typical historical demarcations of periods, which may not necessarily see conceptions of nature as constituting the uniqueness of an era. So even if historical demarcations complement Collingwood's analysis, he will have different reasons for noting distinctions between periods. For example, he argues that one significant difference articulating a cosmological shift is how the Greeks saw nature as intelligent whereas Renaissance thinkers saw this intelligence as being owed to something other than nature, that is, as super-natural.¹⁸ Second, as I intend to argue shortly, Collingwood's description of the modern scientific conception of nature as one of 'substance resolved into function' is still accurate.¹⁹ Demonstrating the second point will go a long way in vindicating the first, and this is because it will mean that Collingwood's intention to understand history as conceptually driven cannot be dismissed for the specificity of its historical authorship. We exist still in an era dominated by function.

So what, then, does Collingwood mean when he says the modern conception of nature involves a vocabulary 'such that all words and phrases descriptive of substance or structure shall be replaced by words and phrases descriptive of function' and '[t]he tendency of all modern science of nature is to resolve substance into function'?²⁰ He does not simply mean that nature is viewed as a mechanism. In fact, he sees the mechanistic representation to be typical of the Cartesian pre-modern era (in Collingwood's delineation of periods). Furthermore, mechanism is inconsistent with

¹⁵ Margaret Schabas, *The Natural Origins of Economics*, Chicago, University of Chicago, 2005, pp. 8, 142 and A. W. Moore, *The Evolution of Modern Metaphysics: Making Sense of Things*, Cambridge, Cambridge University, 2012, pp. 493–511. Moore's criticism of Collingwood relates here only indirectly. He charges Collingwood's conception of metaphysics with being conservative, descriptive and unable to initiate historical change through analysis.

¹⁶ Collingwood, *The Idea of Nature*, p. 4.

¹⁷ Collingwood, *An Essay on Metaphysics*, Revised Edition, Oxford, Clarendon, 1940, p. 74.

¹⁸ Collingwood, *The Idea of Nature*, p. 5. On its medieval antecedents, see Louis Dupré, *Passage to Modernity: An Essay in the Hermeneutics of Nature and Culture*, New Haven, Yale University, pp. 174–81.

¹⁹ Dupré, *Passage to Modernity*, p. 10. Cf. the role of function in current debates in philosophy of science; Steve French and James Ladyman, 'In Defence of Ontic Structural Realism,' in Peter Bokulich and Alisa Bokulich (eds.), *Structural Realism*, Dordrecht, Springer, 2011, pp. 25–42.

²⁰ Collingwood, *The Idea of Nature*, pp. 22–23 and 16, respectively.

the modern view. This distinction cannot be overlooked. While the structure of any given machine involves its various parts, its operation requires the overall unity of these parts working together in rhythm. These parts, nonetheless, are independent of the machine; and it is this independence that separates substance from function.

Let us see this argument in more detail. Collingwood takes the substance of parts to be their structural properties—e.g. ‘size, shape, weight, hardness, and so forth.’²¹ In contradistinction to the traditional notion of substance as a hidden substrate, substance can here be understood in a general Aristotelian sense as the beingness (*ousia*) of the part, that is, what makes the part appropriate for its respective machine. Hence Collingwood states that ‘[u]nless the piece of steel has the right shape, hardness, &c., it will not serve [for example] as a bearing.’²² The structural properties of a bearing are in fact those things which, when taken together, constitute *this* bearing appropriate for its respective machine. Seen in this way, the substance of the part is independent of the machine; and even more to the point, we find upon closer consideration that the machine presupposes the substance of its parts precisely because the machine cannot function without the specific structural properties of the parts. A bicycle cassette cannot function without the bearings; a hard drive is not a hard drive without its circular cobalt alloyed platter. Thus, we can make a distinction between the properties associated with a machinic function and the properties associated with the structure of the parts. Collingwood concludes, ‘structural properties belonging to a given part of a given machine [. . .] are the foundation and pre-requisite of its functional properties.’²³ One need only consider so-called simple machines in which the composition of a screw, for example, contains a range of possible and distinct functions—e.g. for driving into wood, metal, or mortar.

There is one more point to note relating to the meaning of nature. Conceived as a machine, nature is not self-moving but moved from without, just as a person might wind a clock or switch on the power. And consistent with the points above, its functioning presupposes the independent structural reality of the parts. As moved from without, this means effectively that as a mechanism, nature has no inherent meaning: Its activation lies outside it, and its functioning is possible only because of its constituent parts. Collingwood labels this conception loosely as Renaissance, and though he does not provide a definite historical range, it includes the likes of

²¹ Collingwood, *The Idea of Nature*, p. 16.

²² Collingwood, *The Idea of Nature*, p. 16.

²³ Collingwood, *The Idea of Nature*, p. 16.

Copernicus (1473–1543), Bruno (1508–1588), Descartes (1596–1650), Kant (1724–1804), and Hegel (1770–1831).²⁴

In the instance of the modern conception, substance and function are conflated, not due to a category mistake but a shift in how nature is linked to an end innate to itself and no longer outside it. Collingwood notes this as the reintroduction of teleology. Whatever the case may be, the designation of an end or aim which nature obeys means in turn that its parts obey the same laws, as it were. In this respect, the parts are not really distinct since they have their meaning, or substance, only as they conform or contribute to the teleological process. Natural processes and the various parts involved are seen as moving towards or conforming to an end given in nature itself. In other words, natural processes are viewed with a *telos*, which in turn colors the vocabulary of descriptions of nature to the extent that these descriptions effectively omit any real distinction between substance (or structure) and parts. At one level, the claim is quite basic: Given the presence of a *telos* which orders a process toward itself, everything involved in the process is itself caused to obey this end. At another level, instead of referring explicitly to a final, causal end, the language of modern science notes this relation passively. Instead of a final cause determining the process, the parts of nature *behave* in a certain way as if intending towards this end. Collingwood observes that the structural property of the hardness of steel is, for example, ‘the name for a way in which it [steel] *behaves* . . . the name for a rapid movement of the particles composing it, whereby these violently bombard anything that is brought into contact with it.’²⁵

Collingwood also sees this reduction as drawing on a conception of history as progress in which natural incidents are defined by an end in view. Incidents are thus not merely incidental; they are events actualizing an end, or what is to come.²⁶ On this historical conception, there is no pure instant in nature but instead a narrative of events defined in relation to the end of whatever narrative a scientific theory offers. A. N. Whitehead provides perhaps the most genial example of the emphasis on events when rejecting a simple linear representation of time in favor of the theory of relativity. On first glance, relativity might seem to indicate a non-resolvable field of complex time relations, of which Whitehead speaks in terms of co-presence and non-co-presence. Yet despite this, he still envisions a ‘creative *advance*’ by which the bundle

²⁴ For all his talk of dialectic and the reconciliation of spirit and matter, Hegel’s view of nature was that it was cyclical but non-developmental. G. W. F. Hegel, *Hegel’s Philosophy of Nature: Part Two of the Encyclopaedia of the Philosophical Sciences* (1830), trans. A. V. Miller, Oxford, Oxford University, 2004, p. 20, §249.

²⁵ Collingwood, *The Idea of Nature*, p. 17; my emphasis.

²⁶ Collingwood, *The Idea of Nature*, pp. 25–26.

of time relations can be understood.²⁷ Creativity has a *telos* inherent to the natural processes of time which allows us to make sense of complex time relations. Indeed, whatever configuration we opt for when discussing time relations, the events comprising the measurement of any particular configuration are not only essential to the identity of this configuration but also are not really singular by themselves. The historical element arises in how a human point of view makes sense of relativity in terms of an advance towards an end. Moreover, this advance tends to be represented in terms of a field because a field accounts for both a plurality of possibilities and an overall complex arrangement of those possibilities which affect the bodies within it. In other words, a field helps us to determine how a body will *behave* as if directed by something, some end.²⁸

INSTANCES OF THE REDUCTION: DAWKINS, DENNETT, AND BECKER

In this section I want to discuss briefly three modern texts which substantiate Collingwood's diagnosis and which bear a strong relation to how we represent ourselves and our relation to nature. These instances have been selected based upon their influence on our everyday understanding. In the cases of Richard Dawkins and Daniel Dennett, nature is represented as a loosely organized arena in which organisms vie for survival and which often motivates popular social applications of 'survival of the fittest.' In the case of Gary Becker, the field of human choice and action, or human nature, is described according to preference and maximum individual benefit which reinforces the liberal conception of the individual being prior in importance to society as well as the idea that the economy is an autonomous sphere having authority over other social relations. I should note here, however, that due to the limitations of this essay, I will not discuss the ways in which we can speak specifically of the influence of science translating into our everyday understanding. Instead I will assume the validity of this influence and comment only generally that many philosophers have discussed how scientific theory involves a kind of modelling which is imaginative and metaphorical. As such, and as its theories become dominant in the cultural imaginary, they tend to redescribe our relation to nature and to others. Edmund Husserl, for example, speaks of a general skepticism deriving from positivistic science which favours a certain mode of experience [*Erfahrung*] that excludes the specifically human.²⁹

²⁷ A. N. Whitehead, *The Concept of Nature*, Cambridge, Cambridge University, 1920, pp. 177–78; my emphasis.

²⁸ Whitehead, *The Concept of Nature*, p. 181. Cf. Whitehead, *Process and Reality*, David Ray Griffin and Donald W. Sherburne (eds.), New York, The Free Press, 1978, pp. 34–36, 99–100.

²⁹ Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology*, trans. David Carr, Evanston, Northwestern University, 1970, pp. 13, 5–7.

Paul Ricoeur extends the figurative function of narrative to scientific models when observing their heuristic purpose for construing meaning in the world.³⁰ This purpose is discussed in remarkable detail by Mary Morgan when speaking of the ‘artefactual’ functioning of scientific models which

express accounts of life in an exact, short form, using languages that may easily abstract or analogue, and involve imaginative choices and even a certain degree of playfulness in expression, all within a structure that follows certain rules.³¹

On these views, the scientific endeavor to explain life and its imaginative modelling combine to blur the lines between fact and evaluation, between scientific model and expressions of how to exist.

Taking the first instances of Dawkins and Dennett, one finds a prevalence given to the *telos* of the survival of a species. But this is not all. In contrast to the theory of evolution proposed in Charles Darwin’s *On the Origin of Species* (1859), survival is designated as an over-arching goal determining the minutest of details. This determination is exactly what Collingwood envisages when speaking of substance resolving into function. We can try to make sense of the parts within nature or an organism, but if life is in a constant struggle of adapting to its surroundings, then these parts really have no independent substance apart from this struggle. They exist *for* survival. So when Dawkins speaks of ‘survival machines,’ he does not mean machine in Collingwood’s sense (i.e. Renaissance) since the parts of the machine are conceived as explainable only by the ability to survive. Thus, genes are selfish by virtue of being a biological part motivated by its survival, and Dawkins is being perfectly consistent when viewing the feeling of our own subjectivity as a development of these parts (i.e. genes):

Colonies of genes they may be but, in their behaviour, bodies have undeniably acquired an individuality of their own. An animal moves as a coordinated whole, as a unit. Subjectively I feel like a unit, not a colony. This is to be expected. Selection has favoured genes that cooperate with others. In the fierce competition for scarce resources, in the relentless struggle to eat other survival machines, and to avoid being eaten, there must have been a premium on central coordination rather than anarchy within the communal body.³²

³⁰ Paul Ricoeur, ‘The Function of Fiction in Shaping Reality,’ in Mario J. Valdés (ed.), *A Ricoeur Reader: Reflection and Imagination*, New York, Shearwater, 1991, p. 135.

³¹ Mary Morgan, *The World in the Model: How Economists Work and Think*, Cambridge, Cambridge University, 2012, p. 386.

³² Richard Dawkins, *The Selfish Gene*, Oxford, Oxford University, 1989, pp. 46–47.

In effect, whatever distinctions we can observe of ourselves and other organisms, the parts that make biological wholes (survival machines), and more circumspectively the panorama of life itself, is reducible to the function of survival. That is to say, the particularity of any being is best understood as a function of its survival.

While agreeing with the pre-eminence of survival, Daniel Dennett offers a slightly different case. One can say that survival is so entirely identical with nature that it does not even act as a purpose, but simply the state of affairs, or what he refers to as a simple ordering of nature and not an intelligent design.³³ In this state, adaptation of an organism is not a choice of the organism or a selection made by nature. Words pertaining to agency simply reflect how things appear from our human points of view (which no doubt had been selected at some point):

While it can never be stressed enough that natural selection operates with no foresight and no purpose, we should also not lose sight of the fact that the process of natural selection has proved itself to be exquisitely sensitive to rationales, making myriads of discriminating ‘choices’ and ‘recognizing’ and ‘appreciating’ many subtle relationships. To put it even more provocatively, when natural selection selects, it can ‘choose’ a particular design for one reason rather than another, without ever consciously—or unconsciously!—‘representing’ either the choice or the reasons. Hearts were ‘chosen’ for their excellence as blood-circulating pumps, not for the captivating rhythm of their beating, though that might have been the reason some other thing was ‘chosen’ by natural selection.³⁴

What interests me in this passage is precisely how a so-called substance of agency is reduced to the state of affairs of survival. In other words, the relation between the occurrences of adaptation and survival are so originally linked that everything we can perceive from a human point of view is essentially the functioning of this state of affairs (i.e. survival). As Michela Massimi explains more broadly in relation to the scientific reduction of substance to function,

entities no longer constitute the self-evident starting point, but the final point of scientific inquiry. The starting point is instead the concept of ‘function’ as it emerges in mathematical physics. The world is a world of functional relations encoded by laws of nature, through which we only have epistemic access to scientific entities.³⁵

³³ Daniel Dennett, ‘Atheism and Evolution,’ in Michael Martin (ed.), *The Cambridge Companion to Atheism*, Cambridge, Cambridge University, 2006, pp. 140–41.

³⁴ Dennett, *Intuition Pumps and Other Tools for Thinking*, New York, W. W. Norton & Company, 2013, pp. 172–73.

³⁵ Michela Massimi, ‘Structural Realism: A Neo-Kantian Perspective,’ Peter Bokulich and Alisa Bokulich (eds.), *Structural Realism*, Dordrecht, Springer, 2011, p. 5.

Yet the predominance of function is not only involved in the natural sciences, but as well those disciplines purporting to be scientific in their investigations and conclusions.

For economics, understanding the state of affairs is limited to the domain of human behavior, which has been for the most part defined since the 1870s in the language of preference for utility maximization. And just as the evolutionary biologist might want to define nature according to survival, so the neo-classical economist might want to speak of nature as the competitive market. Exercising preferences in this market is a rational activity of choosing utility in view of the alternatives rejected and perhaps ranking the options from most preferred/utile to least. In this respect, the exercise of preference assumes the role that survival does for Dawkins and Dennett. Preference is that towards which economic activity is geared, that is, subsumed. Similarly, where a theory of evolution will speak of the conditions of the environment selecting for change, a theory of preference will speak of the limiting conditions of the competitive market which enable and restrict choice. Taken in this way, the application of economic theory predicated on preference can be applied to any field involving human choice. If you thought marriage was primarily motivated by love, think again. Becker infamously argues that preference cannot only explain marriage but does so successfully across cultural variation. His central thesis:

Two simple principles form the heart of the analysis. The first is that, since marriage is practically always voluntary, either by the persons marrying or their parents, the theory of preferences can be readily applied, and persons marrying (or their parents) can be assumed to expect to raise their utility level above what it would be were they to remain single. The second is that, since many men and women compete as they seek mates, a market in marriages can be presumed to exist. Each person tries to find the best mate, subject to the restrictions imposed by market conditions.³⁶

Substance on this economic account is essentially the fulfilment of the function of utility. We might be able to explain different ways of accounting for various actions we undertake, but the measurements arising from the analysis of preference provide a least common denominator which therefore seems to be what really matters.

But if Dawkins, Dennett, and Becker provide us with genuine cases of the reduction of substance into function, is there something inherently problematic about this reduction? Or, am I confusing a dislike for the conclusions of their theories with the reduction itself? It is true that I find their respective conclusions distasteful. However, notwithstanding this critical bias, I think germane to the reduction is how it

³⁶ Gary Becker, 'A Theory of Marriage,' in Theodore W. Schultz (ed.), *Economics of the Family: Marriage, Children, and Human Capital*, Cambridge, MA, National Bureau of Economic Research, 1974, p. 300.

encourages a misrelation to nature, despite any specific conclusion. Why this more basic claim? Because the loss of the distinction between substance and function involves a methodological enclosure which not only discounts other theories or values, but discounts expressly those meanings we encounter outside any particular methodology by virtue of merely existing within nature. To reiterate an introductory point, if this type of understanding is marginalized or dismissed, scientific models subsequently make prescriptions for our existence on the authority of the practitioners within a science. This tension, which Till D ppe describes as deriving from the quest for authority, is one that science, economics in particular, successfully hid ‘in a garb of formal expressions.’³⁷ Hans-Georg Gadamer refers to this as ‘the unassailable and anonymous authority’ of science.³⁸

THROWNNES AND *PHUSIS*

I employ the concepts of thrownness [*Geworfenheit*] and *phusis* heuristically and not within a claim to presenting a specific thesis on the substance of Heidegger’s thought. So what do I mean by heuristically? Simply that the two concepts enable us to view our relation to nature in a radically different way than the scientific worldview presented above. Given the dominance of scientific representation, they are helpful in liberating us into new ways of thinking. The concept of thrownness frees us *from* the illusion that we are the masters of nature by undermining any secure foundation upon which we might claim a position of certainty and authority. The concept of *phusis* frees us *into* a relation with nature where we are beholden to it by virtue of its original power, so to speak.

Thrownness describes a so-called fact of our existence by which we find ourselves without having made a decision to exist in the first place. The thrown condition of our being can therefore be taken in biological and social senses. We have no choice when being born (biological) into a particular family and heritage (social). While birth is itself an event, our thrownness is not. This is because one can never outgrow or overcome the original lack of choice as to whether or not one should be. Heidegger thus refers to thrownness as an essential condition, or facticity of our being.³⁹ More profoundly, this condition reveals a certain type of fragility of human existence: It is bound by a given historical structure of relations and meanings which enable and inhibit our

³⁷ Till D ppe, *The Making of the Economy: A Phenomenology of Economic Science*, Lanham, Lexington Books, 2011, p. 58.

³⁸ Hans-Georg Gadamer, ‘The Universality of the Hermeneutical Problem,’ in David E. Linge (ed.), *Philosophical Hermeneutics*, trans. David E. Linge, Berkeley, University of California, 1976, p. 3.

³⁹ Heidegger, *Being and Time*, p. 127/135.

understanding. This double relation makes problematic any claims to certain knowledge since by virtue of its claim to certainty it assumes it has transcended the original existential condition of being thrown. This is tantamount, on Heidegger's view, to saying that one is no longer existing; one in fact has assumed a God's eye view. Or more precisely, it is to say that one is living in a representational world in which one assumes a non-embodied, non-historical existence. The scientific emphasis on objectivity presupposes this type of representation. And while Heidegger is not saying that such forms of observation are false, their scope is not universally applicable or valid. They will be accurate within their respective field of science that has built its investigation on the observance of the behavior of its objects under specific conditions. The 'certainty of representing'⁴⁰ in science is internal to its respective field. If we assume that science is valid universally, then the kind of existential understanding made possible by our thrownness is both diminished and ignored. Heidegger therefore remarks that what appears to us in everyday experience (i.e. as a phenomenological intuition) 'is not a genuine ground of experience for natural science.'⁴¹ But so far, this only means that we have two competing forms of language and engagement. The strong proponent of science can still proclaim the superiority of its kind of knowledge.

Let us then bring out the contrast and show the priority (as opposed to superiority) of the existential form. It is precisely the condition of being thrown that allows us to have a range of possibilities for existence, even to be scientific. A desire for the kind of certainty for which science strives is, after all, not possible without a concern for the apparent flux of things into which one has been thrown. The limitation of being thrown is therefore a fundamental limit that is essentially creative. Sartre, of course, is famous for emphasizing this aspect when arguing that the very arbitrariness of our being thrown means we are not obliged to adhere to or respect the given structure of pre-existing historical relations to conventions and values. Thrownness only means we are radically free such that our action is what creates and defines us.⁴² Heidegger himself remarks, by virtue of being thrown into existence, one

⁴⁰ Heidegger, 'The Age of the World Picture,' *The Question Concerning Technology*, trans. William Lovitt, New York: Harper & Row, 1977, p. 127.

⁴¹ Heidegger, *Basic Problems of Phenomenology: Winter Semester 1919/20*, trans. Scott M. Campbell, London, Bloomsbury, 2013, p. 41.

⁴² Sartre, *Being and Nothingness*, pp. 17–18, 22–5.

has already got [oneself] into definite possibilities. As potentiality for being which [one] *is*, [one] has let some go by; [one] constantly adopts the possibilities of its being, grasps them, and goes astray.⁴³

So being thrown is not only to be thrown into a predetermined context but equally to be thrown into possibilities for one's own existence. But is there the kind of radicality of freedom in this condition that Sartre proposes?

Not on Heidegger's account. For Sartre, thrownness marks a break from any reliance or tie since the very act of being thrown means we have been delivered over to a situation of abandonment. Whatever has thrown us into existence has claimed no responsibility; we are left alone. In contrast, for Heidegger being lost and losing oneself has inauthentic and authentic modes. What Sartre describes in terms of freedom for oneself is arguably the inauthentic kind of action that Heidegger sees as being 'ensnared within [its] own striving.'⁴⁴ The ensnaring consists in relating the freedom to be to a specific object (as in an objective) such that one becomes oblivious of the relation to the object (e.g. I want lots of wealth). Heidegger points out that while it may seem that one might be in possession of this object, in fact one is held captive by it, that is, by the representation we have of it; a representation made possible only in the first place by a sense of radical freedom allowing one to believe one can create one's self. The wealthy man, as we often know, tends to be consumed by his identity of being rich, of seeing himself as rich and therefore striving evermore to be so. I will only add here that it is not clear if Sartre's account of bad faith can prevent this kind of enthrallment. Given the sincerity of one's determination to be free through a project for existence, which is predicated on a negation of pre-existing values, one wonders how a critical force that might cause one to revise one's project can be heard sincerely. It would seem that Sartre's radically free actor would be sceptical, if not hostile, to such interventions.

Opposed to a notion of radical freedom, Heidegger sees an authentic relation to the object of one's projects as involving an awareness of one's relation to being. So, in effect, thrownness and abandonment describe conditions of our existence according to which we can at once posit a possibility for being and recall how this possibility is predicated on a relationship to being itself. It cannot realize the former without paying heed to the latter. Thus, exercising choice, decision, or the execution of a project is

⁴³ Heidegger, *Being and Time*, p. 135/144. In brackets, I have replaced references to Dasein (being-there) with the indefinite third person 'one.'

⁴⁴ Heidegger, *The Essence of Truth: On Plato's Cave Allegory and Theaetetus*, trans. Ted Sadler, New York, Continuum, 2002, p. 154. The brackets replace the word 'his' for grammatical consistency.

authentic ‘only if we understand being.’⁴⁵ This rejection of Sartre is famously expressed in 1946-47 when Heidegger responds in his ‘Letter on Humanism’ to Jean Beaufret. Where reality means only a human reality for Sartre, Heidegger refers to the pre-eminence of being: ‘But where does *le plan* [a human project] come from and what is it? *L’Être* [being] *et le plan* are the same.’⁴⁶ That is to say, to speak of projects, one must heed being. But what, then, does this mean?

We can grasp this dependence on being in more concrete terms when seeing how, in his later thought, Heidegger refers to a bond to nature. It seems with this conceptual shift, the possibility to be through our actions and choices requires in some sense recognizing the primacy of nature. We cannot simply use nature as a resource for our own development. Rather, nature is the source that makes this development possible. Heidegger refers to this in terms of how human action is itself derivative of and therefore beholden to the original activity of nature as an ‘emerging and rising in itself and in all things.’⁴⁷ To emphasize this meaning, Heidegger returns to the ancient Greek term *phusis*.

PHUSIS AND OUR EXISTENTIAL BOND

The translation of the Greek notion of *phusis* by the English term ‘nature’ is not without significant problems. Much of the difficulty, as Bruce Foltz explains, lies in our *de facto* representation of nature as a background and resource.⁴⁸ As a background it is unsubstantial in constituting what it means for us to dwell. As resource, its only significant feature is its provision for our biological metabolism or our entertainment. Foltz also notes the various dimensions of meaning residing in the Greek term and Heidegger’s attempt to elucidate their ontological implications. In this section, I want to focus solely on what Foltz, when interpreting Heidegger, refers to as nature as ‘intensified self-emergence’⁴⁹ and how as self-emergent it follows that human existence is derivative of nature in such a way that it is called to heed it as source. The qualifier of ‘intensified’ has primarily to do with the intensification of nature as it emerges in and as human existence. In short, the processes of nature are augmented in human existence, and this occurs primarily through the thought we give to creative activities.

⁴⁵ Heidegger, *The Essence of Truth*, p. 155.

⁴⁶ Heidegger, ‘Letter on Humanism,’ in David Farrell Krell (ed.), *Basic Writings*, New York, HarperCollins, 1993, pp. 237–38.

⁴⁷ Heidegger, ‘The Origin of the Work of Art,’ *Poetry, Language, Thought*, trans. Albert Hofstadter, New York, Harper & Row, 1971, p. 42.

⁴⁸ Foltz, *Inhabiting the Earth*, pp. 12–14, 32.

⁴⁹ Foltz, *Inhabiting the Earth*, p. 130.

Nature is the original creative source, and humans have a unique, even if derivative, creativity which re-orders or re-creates what is naturally given. The ways in which we draw upon nature, through excavation and landscaping for example, are instances of this augmentation in terms of refiguring nature by building.

In contrast to nature as resource, Heidegger comments that the Greek notion of *phusis* names a source from which we cannot separate ourselves existentially. He writes,

We shall now translate *phusis* more clearly and closer to the originally intended sense not so much by growth, but by the 'self-forming prevailing of beings as a whole.'⁵⁰

As self-forming, nature is the original source of whatever emerges in nature (i.e. beings). Distinct to the modern understanding, this dependency is not simply biological. Put more strongly, there is a bond to one's origin. There are two meanings I want to highlight in my use of bond. It denotes, first, a broad ethical responsibility to the origin, and second, our inability to separate ourselves existentially from this origin. The second sense does not mean we cannot achieve any type of separation since through our forgetting or ignoring nature as origin, we can theoretically distance ourselves from it. For instance, in a mechanistic understanding of natural processes we are merely disengaged onlookers who see ourselves as manipulators of a process from which we are separate. Or practically, we can ignore a causal connection between certain habits and their detrimental effects on non-human species. It is therefore important to see two drives in Heidegger's analysis. On the one hand, we can easily 'fall away' from understanding our bond to nature. On the other hand, any misrelation to nature can be remedied by understanding the first sense of the bond as ethical. So what, then, is involved in this understanding?

In Heidegger's parlance, ethics involves not a code of conduct but an *ethos*, or an orientation towards reality that is fitting or appropriate. We are not only natural beings, and therefore a part of nature; but more importantly, we partake in nature by bringing things into the fullness of life such that from this fullness emerges a new manner of relating to things. One is not just alive, biologically, but living in a way that one's own existence and one's world become discreet concerns integral to how we think we might live. One way in which Heidegger attempts to emphasize this:

Phusis means this whole prevailing that prevails through man himself, a prevailing that he does not have power over, but which precisely prevails through and around him.⁵¹

⁵⁰ Heidegger, *The Fundamental Concepts of Metaphysics*, trans. William McNeill and Nicholas Walker, Bloomington, Indiana University, 1995, p. 25. I have transliterated the ancient Greek for the sake of simplicity.

In this passage, the use of prevail achieves three meanings. First, it describes nature as original and prior to human being (i.e. ‘this whole prevailing’). Second, it notes how human beings have a special relation to nature such that as origin it in some way ‘prevails through’ us. Third, despite this special relation, we cannot control or master nature since we do not have ‘power over’ it (recall that our creativity is derivative of nature’s creativity). Taken together, the ethical sense of the bond to nature is one in which we have a unique relation that creatively participates in its ongoing processes yet at the same time should hold in view how our creative acts are responsible to nature.

Indeed, non-human organisms are also creative in the sense that they may build and procreate. Yet the specifically human magnitude of creativity which makes it categorically distinct is evident in how our creative acts have long-term and often detrimental implications for all of nature. Foltz explains this difference in part by the unique role of human language (*logos*). Agreeing with Heidegger, Foltz appeals to the way our language lets reality and nature lie before us—one does not just encounter a tree but, for example, something that can move one to tears of joy, as William Blake famously declared. The prevailing of nature, in this sense, intensifies through our speaking of and about nature; and furthermore, this reflexive capacity means we are in a position not only to think about nature but the significance of our bond to it. For Foltz, recognition of this bond means we are called to participate in nature in order ‘to preserve . . . and to protect.’⁵² While this may sound overly general, he draws out with some force that creative practices appropriate to nature would not preserve resources according to quantity, but rather use (and be with) them in such a way that the practices not only retain but keep safe how those entities naturally are.⁵³ Perhaps this might sound like ‘old hat’ given an increase in awareness of environmental concerns and the lack of effect such concerns have had. While this may be the case (though I do not think it is), it does not negate the importance of understanding how human creativity is responsible to nature. And it may be that this creativity is being called upon in new ways that past environmental actions and ideas never anticipated.⁵⁴ In other words, the apparent ineffectiveness of creative acts diminishes neither our responsibility nor their potential contribution. But perhaps most importantly, and

⁵¹ Heidegger, *The Fundamental Concepts of Metaphysics*, p. 26.

⁵² Foltz, *Inhabiting the Earth*, p. 134.

⁵³ Foltz, *Inhabiting the Earth*, p. 161.

⁵⁴ See, for example, Brian Treanor, ‘Turn Around and Step Forward: Environmentalism, Activism, and the Social Imagination,’ in Todd Mei and David Lewin (eds.), *From Ricoeur to Action: The Socio-Political Significance of Ricoeur’s Thinking*, London, Continuum, 2012, pp. 155–74.

keeping with the theme of this essay, Foltz highlights a philosophical way of understanding nature and the need to care for it that does not require scientific confirmation, which tends to impede a recognition of this care by focusing on conclusive evidence with respect to human-induced climate change. We do not require science to confirm an ethical relation to nature.

Thus, it is worthwhile reiterating that the recognition of this bond is not something for which one must be trained methodologically. And while it may not be easy to do by virtue of involving an attentive form of reflection, it is not the unique activity of a specialized group of practitioners. Heidegger thus comments that ‘however enigmatic and obscure,’ nature is that which we understand.⁵⁵ But if we grant this bond to the source, a difficult question arises. Beyond environmental concerns, what kinds of appropriate relations does this bond specify? Indeed, the kinds of practices emerging from this bond are debatable. While Heidegger is often associated with a nostalgic, anti-technological perspective (wrongly, in my view), his conception of *phusis* has also been used to rethink productively our relation to place, landscape, and even economics.⁵⁶ In the space remaining, instead of arguing for a specific practice that adheres to this bond, I want to provide a negative analysis showing how a current practice has a distorted relation to nature.

NATURE AS THE SOURCE OF CONTINGENCY AND LIABILITY INSURANCE

Elsewhere I have gone into more detail about what I see to be the problematic subtleties of liability insurance.⁵⁷ In this section, I only want to note the way in which it relies on a form of scientific representation that affects our existential understanding of contingency. Although I make no claim to actuarial science representing nature as resource, I nonetheless argue that it misconstrues nature as the source of contingency when thinking it can resolve accidents through its science. Furthermore, this science allows the *function* of insurance settlement (or indemnification) to act as the *substance* of what is really at stake in loss, injury, and accident. This conflation, as I will argue, has detrimental effects in our ability to cope existentially with the contingent nature of existence itself. That is to say, while nature is itself the source of life, it is also the

⁵⁵ Heidegger, *The Fundamental Concepts of Metaphysics*, p. 26.

⁵⁶ Jeff Malpas, *Place and Experience: A Philosophical Topography*, Cambridge, Cambridge University; Malpas (ed.), *The Place of Landscape: Concepts, Contexts, Studies*, Cambridge, MA: MIT; Todd Mei, *The Given Economy: An Essay in the Hermeneutics and Phenomenology of Dwelling* (forthcoming).

⁵⁷ Todd Mei, ‘Insurance in Between: A Critique of Liability Insurance and Its Principles,’ *Literature and Theology*, vol. 21, no. 1, 2007, pp. 82–98.

source of contingency which threatens this life. A failure to grasp this means fundamentally that we have an incapacity to live in harmony with contingency.

It is well known, of course, that existentialism takes as its sounding board the finiteness of existence and its unpredictability and even inherent meaninglessness. The confrontation with questions of finitude serve a positive role of allowing us to rethink our existence in radically new ways, ways that break from what are often held to be illusory ideals with catastrophic results, evinced particularly by the two World Wars. Furthermore, this encounter with the finite is not unique in the sense that only a special type of person is open to it. Rather, we are all open to it because we are all finite; it may just be that we tend or choose to ignore the significance of these encounters.

Having said this, one way in which we address the contingent nature of things is to ensure that when someone suffers a loss, there is some form of compensation. In general insurance parlance, this means restoring the victim to his or her wholeness prior to the loss. Liability insurance deals with property damage and injury (bodily and mental), and herein I am concerned only with the latter. For, it is in injury caused to others that the institution of insurance, and thus society generally, believes in the legitimacy of correcting for injury by means of financial compensation. There are indeed significant problems with this corrective procedure which encourage a litigious mindset and, in turn, the escalation of monetary settlements, insurance premiums, and cost for medical treatments. More basic than these, however, is the root existential problem involving how contingency itself is represented scientifically through actuarial practices.

Actuarial science employs a form of statistical modeling enabling insurance companies to consider their exposure to risks in order to calculate premiums providing coverage for such risks. For example, assessment of liability in auto insurance will consider, among other things, the age, gender, and credit rating of a driver. So while an insurance company provides a qualified guarantee to compensate individuals who have suffered a loss, the subsequent effect occurs as a sort of transvaluation via the social imagination—namely, risk and loss themselves have financial value. Arguably, this model of transvaluation is not problematic with respect to loss of property which can be replaced by an equivalent of like, kind, and quality. With injury, however, there is no good reason to assume that financial payment can restore an injured individual to a state of wholeness. Loss of wages and medical expenses help to make such calculations, and we all know the common practice of plaintiff attorneys asking for three times the amount of these damages to address issues of pain and suffering. But it does not take a scientist of any kind to see the discordance between the different forms

of value—financial and existential. This is because injury, and in radical cases such as loss of limbs, affects our self-identity.⁵⁸

Given this mismatch, what then would be the consequence when this transvaluation is widespread? Not only will more people be seeking compensation in terms of financial value, but we will tend to see the contingent nature of reality as that which can be addressed adequately by this valuation. More severely, the instance might even arise when we are no longer capable of providing a form of compensation except financially. In other words, the existential question is neither no longer prominent in our reflective relation to nature nor seen to have much relevance given financial ways of addressing loss. One need only recall that a loss adjuster in insurance is there to make a financial settlement and not address the psychological, emotional, and philosophical problems resulting from the proximate cause of loss. Yet it may be the case that existentialist thoughts and concerns need not remain the domain of the philosophically-minded person. What if the science foundational to insurance was complemented by this existential approach? What if the insurance industry found a way to genuinely ask and engage with these questions not just in their literature but in their procedures of adjusting losses? We might find that financial value recedes to the background and what emerges are the efforts to restore victims according to a discussion addressing those things that really, existentially matter to a self no longer whole. The problem of the loss of wholeness would then be a human matter of restoring the victim through attention, care, and conversation. It seems in this sense insurance adjusting practices fall quite short since rarely do these practices call for or invite a basic action attempting to resolve incidents that are genuinely accidental—namely, the apology.

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⁵⁸ Havi Carel, 'Illness, Phenomenology and Philosophical Method,' *Theoretical Medical Bioethics*, vol. 34, 2013, pp. 347–50.