After life

De anima and unhuman politics

Eugene Thacker

Since the 1960s, the NASA programme has supported research into the exploration of life on other planets. Currently, their astrobiology programme involves multiple institutions and research programmes, including the NASA Astrobiology Institute. Its mission statement defines astrobiology as 'the study of the origins, evolution, distribution, and future of life in the universe. It requires fundamental concepts of life and habitable environments that will help us to recognize biospheres that might be quite different from our own.'1

The questions posed by astrobiology appear straightforward - 'Is there life beyond Earth?' 'What is the future of life on Earth and in the universe?' From the scientific perspective, answering such questions requires leveraging current biological epistemologies towards unknown, alien environments. But the question astrobiology does not, or cannot, pose is whether there is a stable and coherent concept of 'life' on Earth to begin with. The question 'Is there life in the universe?' itself presupposes a concept of 'life' that is not only universal for all terrestrial life, but for all life generally - be it extraterrestrial life, cosmic life, or even life in other dimensions. Here a claim of universality, that something identifiable as 'life' can exist across disparate environments, is linked to a claim of singularity, that 'life' is contingent upon environmental conditions. Thus the notion that there is life in the universe presumes that life is universal - and astrobiology must presume what it sets out to discover. It lays out the criteria for life in outer space, but life-in-outer-space also implicitly throws into abeyance the concept of 'life' itself.² In short, there must be an a priori of life such that the question concerning life – be it terrestrial or cosmic - may be posed at all.

A priori of astrobiology

Astrobiology is exemplary of our thinking about 'life' today – the concept is mobilized across disciplines with an amazing degree of plasticity. This variability can be witnessed in the neo-essentialist concept of 'life itself' as information, in the twofold approach to life

as at once scientific and mystical, and in the pervasive politicization of life. In this, what characterizes the concept of 'life' today is its contradictions.

In an era of global biopolitics, it seems that life is everywhere at stake, and yet it is nowhere the same. The question of how and whether to value life is at the core of contemporary concerns over biodefence, medical surveillance and the political economy of health care. At another level, in our technoscientific world-view, it seems that life is claimed of everything, and yet life in itself is nothing. While ongoing debates over genetically modified foods and animals continue to put the concept of 'life' in question, new fields such as synthetic biology literally rewrite life at the molecular level, deconstructing the idea that life is exclusively natural or biological. We also live in a time in which events at the micro-level are also events at the macro-level: the increasing frequency of global pandemics and the prevalence of disasters signal events that are at once local and global, molecular and planetary. While human beings or human groups are obviously involved in such events, there is also a sense in which these are seen to be beyond the pale of human action. In short, life is human-centred and yet unhuman-oriented.

In this situation, what determines the concept of 'life' is that it often functions without ever coming under question.³ The pragmatics of life lies precisely in this embracing of all variation at the same time that it is irreducible – when questioned, the vague concepts of 'experience', 'rights' or the 'human' provisionally fill in that void. In each of these instances 'life' is at stake and yet, if it is not immediately to become reduced to biological life or sublimated into the life of the people, this 'life' that is at stake becomes the most difficult category for political thought. The moment it is examined it recedes beyond a fog of intelligibility - either a reductio ad absurdum (e.g. does a cell have a right to life?) or a sublimation into an abstraction (the 'good life', the life worth living). The concept of 'life' appears to depend on an ontology that can never

be explicitly stated as such; 'life' appears as ontologically empty while it remains politically operative.

Is the response to give 'life' the positive ontological content that it otherwise lacks, or is it to assert even more strongly the anti-ontological and purely functional politics of life? Does the problem lie in discovering a politics adequate to 'life', or does the problem lie in something more basic – the very conditions for its intelligibility, the *a priori* of 'life'? Whatever the case, this elusive concept of 'life' appears to be, in many cases, the horizon of the political itself.

Consider the three major modes in the philosophical engagement with 'life' today: the affective-phenomenological, the biopolitical and the politico-

theological. In the first case, there has been a steady loosening of the concept of life in the 'new vitalisms' of affect, process and becoming. Phenomenology descended from Merleau-Ponty has reframed life less in terms of science and more in terms of its phenomenality, its embodiment, its affective epoché. Despite their incommensurability with phenomenology, philosophies inspired by Deleuze and Bergson have pointed to a concept of life that is defined by its immanently dynamic, self-organizing and germinal qualities. The central problematic for Deleuzianism is in this relation between immanence and life. Life is in this case neither a quality that a body has, nor a vital force separate from a body, but the priority of immanence in itself - a network of affects (in Michel Henry's terms, 'auto-affection') in which individuated subjects are more effects than causes.

In the second case, the biopolitical, life does not express itself in any positivity, but is always embedded in a Foucauldian *dispositif* that in fact produces something called 'life itself'. Here 'life' is politically at stake in Giorgio Agamben's notions of 'bare life' and 'form-of-life', creating a state of exception in which, as Antonio Negri notes, 'all politics is biopolitics'. More specifically, the so-called post-9/11 era has reinvigorated the figure of the body politic and what Derrida has called its 'autoimmunitary disorders', in which every instance of community is doubled



by immunity, or by what Roberto Esposito calls an 'immunization paradigm' of boundaries and boundary management. The later work of Foucault is, of course, central for the biopolitical strand, in which 'life' is incessantly stratified, from the anatomo-politics of individuated bodies to the biopolitics of the population. The publication and translation of Foucault's lectures at the Collège de France has prompted new views on biopolitics, foregrounding the role that liberalism, security and technoscience have had on the concept of 'life'.

But the concept of 'life' is not simply about this ambivalent conjunction of biology and politics – today it is also being extended across broad swathes of social, economic and cultural existence. Building on the prior work on religion by Heidegger and Derrida, philosophers as wide-ranging as Mark C. Taylor, Luc Ferry, and Hent de Vries have each noted the ambivalent relations between the qualified social life of bios and the religious or spiritual life, be it of the individuated subject or of a community - real, imaginary or to come. Furthermore, 'life' is first and foremost the experience of living, and this life-experience – once the hallmark of modernity and its existentialist preoccupations with authenticity - is still the centre of life-experience today, mediated, simulated and virtualized in a range of ways, culminating in the metastability of what Zygmunt Bauman calls 'liquid life'.

In these approaches 'life' is mobilized in a range of contexts at the same time that it remains a horizon for philosophical thought itself. Something is always happening to 'life', as that which is already expressed, already operative, already qualified. That somethinghappening-to-life then tends to displace the prior - but unexamined - concept of 'life', until it stands in for it completely. For the affective-phenomenological, the something-happening-to-life concerns time and temporality, flux and flow, 'life' conceived in terms of generosity. For the biopolitical, it is 'life' conceived in terms of form, creation and production, 'life' shaped within the mould of the body and bodies. For the theologico-political, it is 'life' as that immaterial substrate which is distributed across the social field, that which is common to community. For each approach, 'life' serves as the necessary but unexamined decision point for philosophical reflection on life. In each case, life is thought in terms of something-other-than-life, at the same moment that 'life' is foregrounded as a problem distinct from the metaphysical categories of being: life-as-time, life-asform, life-as-spirit.

Let us suppose that 'life' actually has very little to do with the presumed self-evident nature of the living. Let us also suppose that the very concept of 'life', once it becomes amenable to philosophical questioning, itself begins to dissolve and dissipate, while still remaining in use and in circulation. Against this backdrop one can pose a number of questions: if the problem lies not in this or that particular theory of life, but in the ontology of life per se, what would be required for a *critique of life*? In short, what is the *a priori* of life that at once enables its deployment but also obfuscates its philosophical interrogation?

Life versus the living

Given this, it is worth re-examining one of the foundational texts on the ontology of life – Aristotle's *De anima*.⁴ But let us be clear: the aim would not be to devise a new or alternative theory of life. Instead, we can extract from the *De anima* a conceptual framework that is as powerful as it is simple. This framework is still with us today, despite the numerous contemporary attempts to rethink the relations between philosophy, politics and life.

The core problematic in the *De anima* is that Aristotle must presuppose that which he sets out to discover – the astrobiological *a priori*. In approaching the diversity of the natural world, Aristotle observes a set of characteristics unique to what he calls life. They include life as defined by its temporality (move-

ment, change, alteration), life as defined by its forms (causality, creation, production), and life as defined by a spiritual aspect (that immaterial essence common to all life).

In spite of – or because of – these characteristics, Aristotle's challenge is to articulate a concept that is adequate to the diversity of 'life'. Such a concept must account for the conditions in which life is possible at all, as well as for its ends (*entelechia*). But this means that such a concept cannot itself be one among many instances of life, for otherwise this simply begs the question. Hence any concept of life must account for the principal characteristics of life, without itself being part of them. Furthermore, any concept of life must be inseparable from actual instances of life – while not being determined by them.

In the De anima Aristotle attempts to resolve this through two operations that are crucial for his ontology of life. The first is a reworking of the Greek term psukhē such that it can function as the concept of 'life itself'. Aristotle does give generic definitions for 'life'. In such passages Aristotle's term for 'life' is $zo\bar{e}$, which conventionally denotes the bare fact of living akin to animal life. But for Aristotle it is precisely this sort of descriptive definition that must itself be explained. Neither of the terms $zo\bar{e}$ or bios – the qualified, 'good' life - is adequate here, for both rely upon a more basic concept that conditions them. Aristotle reiterates this equation between psukhē and 'life' throughout the De anima: 'The soul [$psukh\bar{e}$] is the cause, the first principle of the living body.'5 And again: 'that which has soul [empsukhon] is distinguished from that which has not by living.'6 Aristotle takes up the way that the concept of psukhē explains not simply the facticity of living beings, but that by which such a facticity is possible. For Aristotle, $psukh\bar{e}$ is the principle $(arch\bar{e})$ of life, or the life that is common across every instance of life. This raising up of psukhē means that any ontology of life will have to articulate a principle-of-life, or that which conditions the intelligibility of 'life itself' - even, and especially, if this principle remains empty or unexamined.

This leads us to the second operation Aristotle performs. The concept of *psukhē* must perform contradictory functions – it must account for life without itself being life, and yet it cannot be separate from life. It must be at once external and internal to life. There remains the basic problem of the relation between *psukhē* as this 'life-in-itself' and *psukhē* as manifested concretely in physical, biological, living beings. Aristotle smooths over this problem by putting forth a key distinction. After stating that 'the soul [*psukhē*]

is in some sense the principle of animal life', he notes that such an inquiry must be split in two parts, 'first its essential nature, and secondly its properties'. Of these, 'some are thought to be affections proper to the soul itself, while others are considered to attach to the animal owing to the presence within it of soul.' Aristotle here asserts that a single principle of life can only encompass all the particular instances of life if that concept is internally split, and that split will be between *psukhē* as a life principle and *psukhē* as a manifestation in living beings.

This means that, while the very idea of *psukhē* may be necessary for Aristotle in order to think 'life' at all, it appears to be unthinkable except in its manifestations. And, in so far as *psukhē* only exists in particular instantiations, it also moves outside the individuated living being, cutting across and exteriorizing the living being. In short, Aristotle bifurcates the concept of *psukhē* into *that-by-which-the-living-is-living* and *that-which-is-living*. We can use less verbose terms, and say that Aristotle's ontology of life depends on a split within the concept of *psukhē*, and that split is one between *Life* and *the living*.

What results is not just a problem *of* philosophy – in which 'life' is an object of inquiry for, say, the philosophy of biology. What results is also a problem *for* philosophy. Aristotle utilizes metaphysical concepts to describe an internal differentiation within *psukhē*. There is the 'being' of life, as it were – the *ousia* of *psukhē*. But this also presupposes an ontology of life that is not simply identical to ontology per se. This involves the basic presupposition that every ontology of life presumes a primary distinction between 'life' and 'being' – but only in so far as it can think of life only in terms of being.

The principle-of-life ($psukh\bar{e}$) and the boundary-ofarticulation (Life versus the living) appear to at once provide a ground for an ontology of life, and also the ground for dissolving the concept altogether. To this end, the De anima presents the concept of psukhē as an always-receding horizon - on further examination, 'life' simply becomes isomorphic with time and temporality, with form and causality, or with spirit and the common. In the *De anima*, the life principle psukhē is at once ontologically necessary and yet that which cannot be thought in itself, and the *De anima* is, early on, already insinuating the necessary and yet unexamined void at the heart of philosophical questioning of 'life' today: To what extent are all ontologies of life determined within the twofold framework of a principle-of-life, and the bifurcation between Life and the living?

Non-life

The Aristotelian split between Life and the living also evokes a more familiar split – that of the ontological difference between Being and beings foregrounded by Heidegger. This distinction is crucial for Heidegger, as it comes to form the basis for any ontological query at all. Heidegger's lecture courses often turn to Aristotle in talking not only about ontological difference, but the pulling-apart of metaphysics from physics. As he notes, it is this latter term *phusis* that encompasses not only 'nature' but a whole host of questions concerning the ontology of life: 'Questions are asked concerning what life itself is, what the soul is, what arising and passing away are ... what the emptiness is in which that which moved moves.'⁸

The obvious question here is whether the Aristotelian Life-living split is simply a variant on the Heideggerian one between Being and beings, itself indebted to Aristotle's metaphysical categories. This is a complicated question, to be sure, since it invites us to examine in greater depth the influence of Aristotle on the early Heidegger. Interestingly, Heidegger argues that this broad usage of phusis - covering as it does 'life itself' as well as modality, movement and causality - undergoes a pulling-apart process in Aristotle, in which physics, as the Being of beings, detaches itself from metaphysics, as Being in itself: 'We thereby have two meanings of φυσις [phusis] that are found together in Aristotelian philosophy: firstly φυσις as beings as a whole, and secondly φυσις in the sense of ουσια [ousia], the essentiality of beings as such.'9

For our purposes here, we can note a few things. First, for Heidegger, the question of Being (and beings) always supersedes the question of Life (and the living), just as the disciplines of biology, psychology and anthropology must presuppose a more basic set of ontological commitments concerning their objects of study. In Heidegger's early lectures on Aristotle, the 'ontological character of "life" can only be posed in the form of pure ontology: 'The Being of life as its "facticity".'10 A philosophy of life that cannot question the being of life runs in circles - it is, for Heidegger, no more helpful than saying 'the botany of plants'. 'What strikes us first of all in such a philosophy (and this is its fundamental lack) is that "life" itself as a kind of being does not become a problem ontologically.'11 So if the Life-living split is a variant of ontological difference, this is less because it is retroactively derived from Heidegger, and more because it is a part of Aristotle's metaphysics itself. In the Metaphysica, Aristotle is relatively clear on the question of being in itself and its distinction from particular instances or types of beings. What is lacking, of course, is a privileging of the phenomenal life-world of the subject as the ground, or, in Heidegger's term, the 'wavering' between these two senses of being.

Another, more important, point is that it is not at all clear in the *De anima* whether the question of 'life' is an ontological one. While the Being-beings distinction is a question concerning ontology for Heidegger, and while the same basic distinction is also found in Aristotle's metaphysics, it remains unclear whether the Life-living distinction is an ontological distinction. This is a source of both frustration and interest in the *De anima*. In the opening passages of the treatise, Aristotle, as if to express his uncertainty on the topic, throws nearly every metaphysical term into the text - the question of life is discussed in terms of substance and accident, the actual and the potential, formal and final cause, definition and number, and so on. The real question for Aristotle - one that he admits in the opening and closing sections of the De anima - is what kind of a thing 'life' is for thought. Should it be considered as an object of metaphysical speculation, empirical verification or subjective phenomenality? The De anima contains bits of each of these, with 'life' being discussed in terms of geometrical systematicity, of natural philosophy, and of affect, imagination, and cognition.

This uncertainty is arguably what separates the Life-living distinction from that of ontological difference. Aristotle remains fuzzy about the degree to which the question of 'life' is reducible to the question of 'being'. For Heidegger, this is not a question at all, since there is no more fundamental question than that of being, and no more basic distinction than that between Being and beings.¹² Furthermore, this very distinction, for Heidegger, points to a special kind of being (Da-sein), one that inculcates a certain priority to the human being. What is at stake for this distinction between Being and beings is the way that the specifically human being hovers between these two terms: 'We consider beings as a whole, and thereby think being. Thus, in thinking, we move within the differentiation between beings and being.'13

Aristotle's fuzziness vis-à-vis the question of 'life' remains interesting, however. On the one hand, Aristotle appears simply to apply metaphysical concepts to the question of 'life', implying that the latter can in fact be adequately thought in terms of, and subordinate to, the question of 'being'. On the other hand, Aristotle repeatedly makes attempts to carve out a niche for the question of 'life' that is not reducible to that of pure metaphysics or to any sub-branch thereof. Yet, what

it is exactly that makes the question of 'life' unique proves to be elusive. Aristotle sometimes settles on a kind of final causality specific to living beings, entelecheia. But this turns in on itself, since what makes 'life' unique is entelechy, and entelechy is simply defined as the manifestation of final causality in the living. Elsewhere, Aristotle appears to accord human consciousness - as a manifestation of nous or Intellect - a special place as that which makes 'life' distinct from 'being'. But this runs into the problem of confusing the exemplar for the ideal form: the lifeprinciple psukhē does double duty, at once the most basic and fundamental aspect of life, and also the most developed or highest form of life. In short, Aristotle sets out for himself - and for nearly all ontologies of life that follow – a tautological problem: the De anima attempts to articulate that which makes the question of 'life' distinct from the question of 'being', but this can only be done through the framework of being. The concept of $psukh\bar{e}$ – as that which distinguishes 'life' from 'being', is also that which ontologically distinguishes life from being - but without positively articulating that distinction.

So crucial is this move that it can be said to be equivalent to the very possibility of any ontology of life. Aristotle's original problem is how to articulate a concept of life that accounts for its modality, its causality and its commonality – 'life' in terms of time, form and spirit. His solution is to develop a concept of a principle-of-life, encapsulated in the term <code>psukhē</code>. But this then requires the presupposition of a distinction between something called life-in-itself and the various and manifold instances of the life. The problematic then becomes that of explaining the relationship between these two, between Life and the living.

Logic and life

It would be possible, in this situation, either to dismiss or to recuperate the Aristotelian framework (*psukhē*, Life versus the living). One could easily dismiss it as outmoded and anachronistic, especially in an era of advanced technoscience. One could also recuperate the *De anima* within a fairly linear historical continuum. In this case Aristotle would be extended and corrected by Descartes, Buffon, Linneaus, Darwin and molecular biology ('Aristotle, the father of biology'...).

We can, however, suggest another approach, and that is to foreground the De anima as posing the question of 'life' as ontologically prior to the distinction between $zo\bar{e}$ and bios, as antecedent to the coupling of biology and politics. This would entail thinking about the

more general relationships between 'logic' and 'life' at which the *De anima* only hints. Such a thought would not simply be that of a conjunction between them (e.g. that Life is transcendent to or immanent in the living), but rather of their disjunction. If the concept of 'life' is fraught with contradictions, this is perhaps because the logic of contradiction is central to the concept itself – despite Aristotle's proclamations concerning non-contradiction.

One of the places to examine such contradictions is precisely in this relationship between Life and the living as it gets extended, developed and reinterpreted after Aristotle, in what we can call post-Aristotleian scholasticism. This is, certainly, a broad and uneven tradition in which the concept of 'life' is situated in a zone that is neither quite biology nor quite theology, with something called 'philosophy' often playing the role of mediator. We can briefly touch on three of these contradictions.

To begin with, while we can point to numerous instances of the living, Life, in itself, is never existent as such. The only evidence of Life is precisely its manifestation in and as the living; Life, or that which conditions the living, is in itself non-existent. The opening of the *De anima* states this plainly – it will not do, for any philosophical inquiry into Life, to remain at the level of the living. And yet, in his emphasis on the hylomorphic conjunction of form and matter, Aristotle also notes that there is no such thing as Life in itself - only Life as it is manifested and actualized. Aristotle, though he may state his aim as being an inquiry into Life, can only begin by elaborating descriptions of the living. The only way to 'get at' Life, then, is through the living; the end point appears to be the only starting-point. But if the living cannot be thought without also thinking Life, Life is also not a thing in itself. In turn, this emptying-out of Life enables it to encompass the proliferation and fecundity of the living. Life is thought not only in terms of generosity, but in a subtractive mode as well; Life as an emptiness that accounts for the fullness of the living.

Following the Hellenistic reception of the *De anima*, the rich mixture of Neoplatonism and Aristotelianism provides one arena in which this contradiction is further developed. In the mystical theology tradition, this relation between Life and the living is translated into a question concerning the intelligibility of supernature over nature, of a Life beyond the living. This 'Life' is the Life of the divine, but it is still 'Life' because the divine is, in this case, rendered intelligible in terms of its temporality, its dynamism, its flowing forth. Plotinus, for instance, takes up the

concept of *psukhē* and ties it to notions of dynamic temporality: 'over against that higher Life there must be another life, known by the same name as the more veritable Life of the Soul (ψυχη).'¹⁴ Plotinus conceives of another type of life, one that not only conditions the living, but that is Life defined by generosity, a notion of Life-as-gift. This is the Life beyond the living, a *superlative Life*.

But what is this Life-beyond-the-living, if not the inaccessibility of the divine itself? Would not this sublimation of Life-beyond-the-living, with all its superlative connotations of flowing forth and emanation, also turn in on and negate itself, by virtue of this excess? Against Augustinian positive theology, there is also a negative theology ('God is not-x'), in which this inaccessibility of superlative Life to thought comes to define Life in itself. The Pseudo-Dionysius stresses this point: 'All life and living movement comes from a Life which is above every life and is beyond the source of life.'15 But he also notes that such a conception will, paradoxically, 'concern a denial in the sense of a superabundance'.16 The full impact of this negative concept of Life is felt in Eriugena's Periphyseon, where this superlative notion of Life is indissociable from a negative ontology of Life itself. Eriugena uses the term nihil to name this conjunction of excess and negation, the 'ineffable and incomprehensible and inaccessible' quality of this superlative Life, which, 'while it is contemplated in itself neither is nor was nor shall be, for it is understood to be in none of the things that exist because it surpasses all things.'17 Eriugena concludes that superlative Life can only be superlative negation, 'so long as it is understood to be incomprehensible by reason of its transcendence it is not unreasonably called "Nothing".'18

If this is the case, then we are led to another contradiction. What is common among the living is Life, but Life in itself has no properties or characteristics. If the previous contradiction deals with the distinction between Life and the living, here we are dealing with a relation between Life and the living - and in particular a relation based on form and forming, creation and production. In the *De anima* that relation is based on a certain asymmetrical, causal relation between form and matter, which scholastic philosophy would come to know as hylomorphism. Aristotle frequently uses the term entelecheia to describe this combination of formal and final cause. But while the living is characterized by processes of growth, development and decay, Life, never being present in itself, is at the same time void of any content, biological or otherwise. There is no preordained mould, and yet, as Aristotle notes, 'nature does nothing in vain'. While the *De anima* requires this distinction between Life and the living in order to think 'life' at all, Life is, in the formation of the living, emptied of any guiding properties or characteristics. If Life and the living are distinct in terms of their ontic temporality (Life as the 'nothing' that grounds the living), here Life and the living are related in terms of form and finality (Life as the production of emptiness in the living).

This is the central preoccupation of the scholastic debate over the status of the 'creature'. Following the dissemination of Aristotle's De anima into the medieval university, one debate that takes shape concerns the particular relation of creation or production between Life and the living, Creator and creature. The numerous scholastic commentaries on the De anima bear out the complexities of this debate. If there is indeed a distinction between Life and the living, is there also an absolute separation between them? If there is, then how can one account for the formal or causal relations between them? But what is more relevant than the endless debates about this is the question concerning the necessity of Life for thinking the living. Aquinas represents what would become the dominant interpretation, that of analogy: 'It is impossible that anything be predicated of God and creatures univocally ... with the result that what exists in the cause simply and in the same way exists in the effects in a divided and multiple way.'19

If this is the case, then the two 'heretical' interpretations of univocity and equivocity are also worth dwelling on. In the case of univocity, it is Duns Scotus who provides the most formalized argument: 'I designate that concept univocal which possesses sufficient unity in itself, so that to affirm and deny it of one and the same thing would be a contradiction.'20 For Scotus, any relation of analogy between two terms must itself presuppose a broader univocity that is immanent to both terms. The question, then, is to what extent Life can be said to persist in the living - to what extent supernature persists in nature. While Scotus stops short of advocating an absolutely univocal notion of Life in the living, the Averroist thread that culminates in Siger of Brabant, will, for a moment, push this logic further - a Life completely univocal with respect to the living, in which hylomorphism is always automorphism, and each instance of the living is always a paradoxical univocal creature.

Although these contradictions appear to point to incommensurability between Life and the living, it is important to note that, for Aristotle, they form an indissociable pair. This is really a question about the intelligibility of 'life' at all – put simply, to what degree the thought of life must presuppose the life of



thought. And this constitutes a third contradiction: One cannot think Life without also thinking the living; but one cannot think Life while also at the same time thinking the living. On the one hand, Aristotle presents two distinct terms, each with different functions that describe different aspects of life – while Life accounts for what is common among all the instances of the living, the living manifests the differentiations that are also part and parcel of the world. But, as we've seen, it becomes difficult to think the relation of Life and the living at all ... except in terms of contradiction.

In the context of post-Aristotelian scholastic thinking, this is a question concerning the continuity between nature and supernature, or, simply, the divine nature. In modern terms, we might say that the discourse on the divine nature is an attempt to think a concept of 'life' in terms of immanence. Whereas the former is dynamic and contingent, the latter denotes an absolute fullness, even when thought of in terms of dynamic emanation. The claim that they are in some sense equivalent encapsulates the claim of pantheism, in thinkers from Cusa to Spinoza. But there are several kinds of immanence to consider: the immanence of Life to the living, and the immanence of the living to the living. Eriugena, for instance, will refer to these respectively as 'Universal Soul' (universalissima anima) and 'common life' (commumem uitam), which culminate in Universal Life (generalissima uita).²¹

Pantheism pushed to its limit will render these two types of immanence (a 'vertical' and a 'horizontal' type) as isomorphic. Nicholas of Cusa utilizes the bibliophilic motif of 'folding' to describe this: 'God, therefore, is the enfolding of all in the sense that all are in God, and God is the unfolding of all in the sense that God is in all.'²² The implication is that 'life' is neither reducible to the living, nor fully sublimated within Life, resulting in a double negation – everywhere existent and nowhere manifest. If this is a pantheism, it would have to be a doubly negative or *dark pantheism*, in which immanence is the immanence of nothing-in-itself: 'In each creature, the universe is the creature, and each receives all things in such a way that in each thing all are contractedly this thing.'²³

If the *De anima* poses a basic question concerning Life and the living, then the variegated threads of post-Aristotelian thought develop and formalize this; in so doing they make a basic observation, which is that the Aristotelian ontology of life is predicated on the logically coherent and necessary contradictions between Life and the living. And the question posed by the *De anima* can be summarized in modern terms: *To what extent is it possible to formulate an ontology of*

life that is neither reducible to biology nor sublimated within theology?

Critique of life

Aristotle's framework finds its point of culmination in Kant, and it is in the latter that the contradictions inherent in the concept of 'life' are pushed to their limit. For Kant, the organism is unique in that it works against both the mechanistic analogue of the clock and the vitalist analogue of the divine soul. What Kant calls an 'organized being' is unique in that 'it has a self-propagating formative power, which cannot be explained through the capacity for movement alone.'24 The organism is that which is at once means and the end, and it is this, more than anything, that serves as the basis for Kant's distinctions between organic and inorganic, or living and non-living.

But the organized being is also the limit of our ability to think 'life' apart from the dichotomous split between reflective (subjective and experiential) and internal (objective and inaccessible) purposiveness. Specifying what this limit is proves difficult for Kant. The organism has a kind of purposiveness, but one that is not externally directed (be it in terms of the theological model of the soul, or the aesthetic model of art). The type of purposiveness of the organism becomes identical to the processes of the organism itself. Kant struggles to find an adequate conceptual figure for describing this, suggesting that 'perhaps one comes closer to this inscrutable property if one calls it an analogue of life.' The problem, however, is that one must still posit some principle of Life for the living, either in form or matter itself, or in 'an alien principle standing in communion with it (a soul)'.25

In positing a 'natural end' as unique to life, Kant finds himself obliged to confront the Aristotelian dilemma concerning life and logic – the *a priori* of astrobiology. But he is also led to the question of the intelligibility of life itself. Any principle-of-life, 'as it is possessed by those things that are possible only as natural ends and hence as organized beings, is not thinkable and explicable in accordance with any analogy to any physical, i.e., natural capacity that is known to us.'²⁶

Just as Kant begins to offer a positive concept of 'life', he retracts it, effectively transforming the organism and its natural end into a limit-concept. 'Life' is ambivalently positioned between self and world, at once a set of entities 'out there' and yet a continuum that connects the 'out there' to the 'in here'. However, Kant is adamant that any rationale for a finality of 'life' cannot adequately separate itself from that same

'life' viewed in terms of human advantageousness. Such a means—ends logic merely demonstrates the impossibility of distinguishing a relative ('for us') from an objective ('in itself') purposiveness. In the end, 'life' can only be speculative: 'In things that one has no cause to regard as ends for themselves, an external relationship can be judged to be purposive only hypothetically.'²⁷

The conciliatory move that Kant makes is to regard the concepts of organized being and natural end as 'regulatory concepts', which suggests that the organized being or organism provides 'objective reality for the concept of an *end* that is not a practical end but an end of nature', a task which Kant allocates to natural science and the necessity of something like life 'in itself'. But then 'life', that which is above all lived, becomes something inaccessible or unintelligible, that is, noumenal. From the Kantian standpoint, either the emergence of life forms is explainable solely in terms of scientific-biological determinants, or else there is something that governs the emergence of life forms that is not manifest in the beings and relations that are so determined. The problem that Kant zeroes in on is that, even as 'life' presumes that which is already existent (as Heidegger notes), and even as 'life' presumes that which is already lived (as phenomenology asserts), 'life' always necessitates some additional, excessive positing if it is to be available to thought at all. Even regarded as a regulatory concept, the ontology of life is confronted with an antinomy, which is really an antinomy of Life: the notion that 'life' can be thought at once posits a continuum between thought and life, at the same time that it generates a gulf of inaccessibility between them.

But subtracting the human from the philosophical problematic of 'life' is tantamount to foreclosing the possibility of thinking 'life' at all. In a sense, the history of Western philosophy is this ongoing dilemma concerning the very possibility of 'living thought' itself. The human seems to be the very ground of the intelligibility of life, in so far as life presupposes a temporal, formal and spiritual dimension. This question is exhaustively explored by Kant, but it is already there in the *De anima*, where the question of *nous* ('Intellect'), as a privileged instance of *psukhē*, raises the question of the life that thinks itself. Is the life that thinks itself, itself living? In a sense, then, *what is at stake in the thought of life is the life of thought itself*.

However, from the lowliest beast to the darkest luminosity of the divine, from the 'worm in the blood' to the swarming chorus of spiritual creatures, there remains this question about the intelligibility of 'life' as something that may not be fundamentally or even incidentally rooted in the human. While the shape and contour of philosophical thinking change drastically after Aristotle and scholasticism, the triad of lifeas-time, life-as-form and life-as-spirit is remarkable in its persistence. Sometimes one finds them parsed out into distinct approaches, as when the question of experience (the question of the human par excellence) is couched in terms of time, temporality and an existential proximity to death. This emphasis on time and temporality takes on a different guise in process philosophy (Whitehead) and process theology (Chardin), where the human, all-too-human question of experience is dissolved in the background flux of prehensions and a nexus of relations. More often than not, however, this triad of time-form-spirit is found in some admixture. In the organicism of Hegel, temporality is tightly linked to the question of form, which is itself framed by the principle of an auto-generating Geist. A version of life-as-spirit profoundly marks Lebensphilosophie, often to such a degree that, as Schelling indicates, life can perfectly coincide with death along a continuum. Even in the well-worn dichotomy of mechanism and vitalism, we find a hidden commonality, which is a contestation over the relation between life-as-time and life-as-spirit - mechanism upholding the former while negating the latter, vitalism privileging the latter as the basis for the former. And it is perhaps because of this false dichotomy that we find an attempt at a synthesis in Bergson's Creative Evolution, with its emphasis on the superlative, inventive nature of an élan vital.

Principle-of-life (psukhē), boundary-of-articulation (Life vs the living), vitalist contradictions. In many ways we remain under the spell of this framework whenever the question of 'life' is raised. At the same time, the question of 'life' is hardly raised at all - perhaps because of the very plasticity of the concept itself. In this situation, the question 'What is life?' can only come across as politically naive - the stuff of pop-science or spiritual self-help. But it is worth reflecting on the impressive ambiguity that the concept of 'life' has had for philosophy - while some dismiss it altogether as a non-question, others tend to raise its ontological status beyond that of Being itself.²⁸ 'Life', as Michel Henry notes, 'has been notably absent from the Western philosophy inherited from Greece, which defines man with thought.'29 If the De anima is an exception to this, it is only in so far as it struggles to think 'life' in a way that is neither simply $zo\bar{e}$ nor bios. Perhaps Henry's comment should be modified: 'life'

is omnipresent in philosophy, precisely because in it philosophy finds only its own limits.

It is often noted that it is only human beings that worry about the definition of life - the rest of the world simply lives it. Life is, at least from Aristotle onwards, a concept that is highly stratified, the view down from on top of a pyramid of increasing complexity. At its limit, the notion of extraterrestrial life or of cosmic life challenges us to think the concept of 'life' within completely alien contexts, at the point where the very notion of life itself falls apart. This is perhaps the greatest lesson of 'weird fiction' or supernatural horror. The tales of H.P. Lovecraft are replete with attempts to imagine a cosmic life, one that so challenges all existing notions of life - biological or otherwise - that what results is what Lovecraft called 'cosmic horror', the absolute limit to all human thought. In stories such as 'The Shadow Out of Time', the notion of life in outer space is displaced by the more radical notion of life in other space, other dimensions; the motif of exteriority - not the romantic type, but an absolute exteriority - haunts nearly all of Lovecraft's works. If supernatural horror is the paradigm for thinking 'life' today, it is less because of the way it situates life vis-à-vis the monster and the law, and more because it raises the question of life, thought and the 'weird' relation between them.

This is also the political challenge of cosmic horror, a variant on the astrobiological a priori. It suggests that there is neither simply a world in itself, nor a world destined for us - rather, there is a world that presents the very limits of our ability to comprehend it in such terms. But it is not only astrobiology that does this. If our global context of climate change, disasters, pandemics, or complex networks tells us anything, it is that political thought today demands a concept of life adequate to its anonymous, unhuman dimensions, an unhuman politics for unhuman life. This is, perhaps, a world 'without us', the life sans soi. The problem, of course, is how one should think this life-without-us politically. 'Life' - as the unexamined and empty principle - casts into question the inescapable anthropomorphism of the political, the exemplary instance of the life-for-us. The dilemma, then, is that if 'life' is as much a question of the unhuman as it is of the ethical, the social and the political, then to what degree is it possible to conceive of something like an unhuman politics?

Notes

- 1. http://astrobiology.arc.nasa.gov/roadmap.
- 2. A long tradition of science fiction poses this question,

- from Camille Flammarion's *Lumen* to Stanislaw Lem's *Solaris*.
- 3. Within the life sciences there is a tradition of 'What is life?' books, though these often remain rooted in a biological epistemology. For more on this, see my book *Biomedia* (University of Minnesota Press, Minneapolis 2004), pp. 37ff. as well as the important historical work of Lily Kay.
- 4. It should be noted that this reading of the *De anima* departs from the two dominant modern interpretations of the work: that of psychology and cognition, on the one hand, and that of the history of biology, on the other.
- Aristotle, On the Soul/Parva Naturalia/On Breath, trans. W.S. Hett, Harvard University Press, Cambridge MA, 2000, II.4.415b.
- 6. Ibid., II.2.413a.
- 7. On the Soul, trans. J.A. Smith, in *The Complete Works of Aristotle*, ed. Jonathan Barnes, Princeton University Press, Princeton NJ, 1984, I.1.402a.
- 8. Martin Heidegger, *The Fundamental Concepts of Metaphysics: World, Finitude, Solitude*, trans. William Mc-Neill and Nicholas Walker, Indiana University Press, Bloomington, 1995, §9, pp. 32–3.
- 9. Ibid., §9, p. 33.
- 10. Martin Heidegger, *Phenomenological Interpretations of Aristotle*, trans. Richard Rojcewicz, Indiana University Press, Bloomington, 2001, p. 85.
- 11. Martin Heidegger, *Being and Time*, trans. Joan Stambaugh, SUNY, Buffalo NY, 1996, \$10, p. 44.
- 12. As Heidegger notes, 'The being of beings "is" itself not a being' (ibid., §2, p. 5).
- Martin Heidegger, *Basic Concepts*, trans. Gary E. Aylesworth, Indiana University Press, Bloomington 1998, §7, p. 38.
- 14. Plotinus, *The Enneads*, trans. Stephen MacKenna, Penguin, New York, 1991, III.7.11.
- Pseudo-Dionysius, *The Divine Names*, trans. Colm Luibheid, in *The Complete Works*, Paulist Press, New York, 1987, VI.1.856B.
- 16. Ibid., II.3.640B.
- 17. Johannes Scottus Eriugena, *Periphyseon* IIII, trans. I.P. Sheldon Williams and Ludwig Bieler, Dublin Institute for Advanced Studies, Dublin, 1981, 680D-681A.
- 18. Ibid., 681A.
- Thomas Aquinas, Summa Theologiae, Vol. 3 (Ia, 12–13): Knowing and Naming God, ed. Herbert McCabe, Cambridge University Press, Cambridge, 2008, q. 13, a. 5., Reply.
- 20. John Duns Scotus, *Opus oxoniense*, in *Philosophical Writings*, ed. and trans. Allan Wolter, Hackett, Indianapolis, 1987, I., dist. III, q. i, p. 20.
- 21. Periphyseon, III 729A.
- 22. Nicholas of Cusa, *De docta ignorantia*, ed. and trans. H. Lawrence Bond, Paulist Press, New York, 1997, II.3.107.
- 23. Ibid., II.5.117.
- 24. Immanuel Kant, *Critique of the Power of Judgment*, ed. Paul Guyer, trans. Paul Guyer and Eric Matthews, Cambridge University Press, Cambridge, 2000, §65, p. 246.
- 25. Ibid., italics de-emphasized.
- 26. Ibid., p. 246-7.
- 27. Ibid., §67, p. 249.
- 28. If Heidegger represents the former position, then perhaps Deleuze represents the latter.
- 29. Michel Henry, 'Phenomenology of Life', trans. Nick Hanlon, *Angelaki*, vol. 8, no. 2, 2003, p. 105.