

4 Responsibility

Hans Jonas

The discussion of the philosophical work of Hans Jonas has the apparent shortcoming that there is little in his work that we can describe as fundamentally social or explicitly sociological. To the extent that social relations figure in his writings, they remain subordinated to his primary philosophical concerns with ideas of ‘being’ and ‘nature’ – not least human nature. The strictly ‘intersubjective’ dimension of human life, as it emerges in his writing through such questions as reflexivity, science and obligation, are always dependent on arguments that go back to humanity’s biological grounding in the natural environment. And when social relations do figure in his argument, they do so in the context of the political side of his thinking on technology and democracy; namely, how are we to create the social conditions that make possible the *imperative of responsibility* that current citizens of world society have towards future generations. But these issues are explicitly introduced as part of his *applied ethics*, whose philosophical status is secondary vis-à-vis the foundational questions he addressed more systematically. Jonas thought that his main philosophical contribution lay in the development of a *philosophical biology* as a chapter in the development of a new metaphysics rather than in the potential *practical* contribution of any such philosophy: ‘any discussion of my philosophy should begin . . . with my efforts to establish a philosophical biology’ (Jonas 2008: 65). To that extent, his work is unique among those I am using in this book to develop a philosophical sociology: instead of having a more or less fully developed theory of society that depends on a fairly unarticulated idea of the human, Jonas’s work focuses mostly on the latter and pays little attention to the former.¹

This apparent lack of interest in the question of ‘what is the social’ is relevant for my project of a philosophical sociology because Jonas

¹ Jonas even complained, although half-heartedly, that the public success of his *Imperative of Responsibility* (1984) had more to do with circumstances and context – global warming and the rise of Green politics in Germany in the 1970s – than with any serious consideration of what he thought was his most original contribution; namely, the ontological arguments that give rise to his ethical naturalism (2008: 205).

contends that, in order to understand the normative we must explore the *non-social* foundations of social life. One way of looking at his work would be to claim that he turned the relationships between sociology and philosophy upside down: while from a conventional sociological perspective the social is an explicit concern and human nature is treated as a residual category that is defined mostly negatively, the opposite is the case for Jonas: the human now takes centre stage and the social becomes the ‘transcendental’ background within which ideas of human nature become explicitly articulated. He is interested in humanity’s relationship to nature and these reflections are made without explicitly conceptualising society as the medium through which humanity interacts with nature. Society remains that unnamed space that makes possible the realisation of human nature, including the human ability to reflect on human nature, but its key features are not subject to formal conceptualisation. It is this counter-intuitive aspect of Jonas’s work that warrants his inclusion in this book.

I

While ethical naturalism would be a straightforward way of characterising Jonas’s position, his work has also been described as seeking to offer an *existential interpretation of biological facts* (Vogel 2001: xi). As we mentioned in Chapter 1, much of Jonas’s philosophical arguments are explicitly informed by a critique of his mentor, Martin Heidegger. At a personal level, Jonas was deeply disappointed and never forgave Heidegger’s endorsement of Nazism; indeed, it is the continuous lack of remorse that troubled him the most. But it is philosophically, however, that Heidegger’s *political* failures to understand the true colours of Nazism become more consequential. Jonas contends that this radically challenges the purpose of philosophy as a whole: what is really the point of philosophical knowledge, personal genius and intellectual originality when the most basic moral and political intuitions abandon the philosopher as a person? (2001: 247–9).² There is then one normative sense in which Jonas’s work is not only critical but directly opposed to the historicist, irrationalist and indeed elitist implications of the ‘existential philosophy’ as advanced by Heidegger. As it comes out of his own historical–philosophical research on the origins of Gnosticism since the fourth century BC, Jonas (1963) contends that the gravest category mistake of twentieth-century existential philosophy lies in the centrality it gives to ‘nothingness’; that is, in how it relishes in the notion that life

² See Wiese (2010: 87–98) and Wolin (2001: 101–33) for further discussion of the relationships between Jonas and Heidegger.

has no ultimate purpose or meaning.³ The main consequence of this distorted view of the cosmos, Jonas contends, lies in human beings' belief that they themselves lack any significant relation with the world that surrounds them. Jonas sees this insistence in nothingness as little more than a dogmatic presupposition that 'springs from the denial of "essence" which blocked the recourse to an ideal "nature" of man, once offered in his classical definition by reason . . . or in the Biblical one by creation in the image of God' (2001: 47). By denying the *possibility* of making meaningful connections between personal existence and the world around us, between humanity and nature; indeed, by dogmatically asserting that any philosophy that entertains this as a possibility has already discredited itself as a *viable* philosophy, Heidegger's existentialism shows above all its own reductionism and lack of genuine philosophical openness.

Existentialism is not however exhausted in Heidegger's version and we have seen that, in his polemics with Sartre, Heidegger disowns the term altogether. Existentialism can be retained however if we allow for an interpretation that focuses instead on the possibility of establishing a *positive* relationship between human and other forms of life. Jonas's existentialism then focuses on the ways in which the particularity of our human experiences of the world is grounded in our organic belonging in nature. This organic constitution is something that we share with other human beings but also, and more generally, with *all other forms of life*. Nature and life then become the fundamental categories that name both existence in general and our particularly human relationships with the world. Nature means life and life is the common form of being that humans share with all other creatures: nature *is* the transcendental framework within which all creatures experience the world.

Jonas's ontological starting point is that, however incipiently, all living organisms have an identity that results from their active 'self-integration'. Regardless of their degree of complexity, as long as they remain alive, and because they are alive, organisms look after themselves and pursue the maintenance of their existence as their own 'continuous achievement' (2001: 80). Organic life is thus understood as 'the first form of freedom' and it is *this* freedom that strives for continuous existence, the one Jonas

³ Hans Blumenberg (1987: 25–6) captures this as, following Jonas, he perceptively defines Gnosticism as a 'radical anthropocentrism combined with a *negative* characterization of man's position in the cosmos' (my italics). Eric Voegelin (2000) offers a comprehensive discussion of Gnosticism as the defining feature of modern times: the treatment of all transcendental speculation as illegitimate because the existence of the transcendental itself is negated. Further discussion of Gnosticism is available in Chernilo (2013a: 59–69) and Lazier (2003).

defines as the essential form of identity that constitutes life itself (2001: 3). In an inversion of the conventional Kantian proposition that freedom and necessity oppose one another, Jonas contends that freedom requires necessity and only as we see the two in their relationships are we also able to appreciate what it means for an organism to *be* alive. Life is then defined as that *active principle* that ‘stands in a dialectical relation of *needful freedom to matter*’; life comprises freedom as the organism’s capacity ‘to change its matter’ while, at the same time, it includes ‘the irresistible necessity for it to do so’ (2001: 80 and 83).

This quasi-transcendental position of nature and life in Jonas’s philosophy finds further expression in the paradox that lies at the centre of the metabolic constitution of all creatures: organisms employ various means to remain alive, but living creatures modify their ends because the means themselves become central to the continuation of life as their own ultimate goal (2001: 106). At its most basic level, therefore, human nature is not qualitatively different from any other type of organic life – however simple. Indeed, even human ‘sociality’, the fact that the realisation of the organic potentials of some species requires the company of and association with others, is not specifically human. The actualisation of an organic potential may well require that certain species live within a collective environment, and this sociality remains something that organisms ought to do *because it is in their nature*: even as they have a natural impulse to sociality and their inner impulses are forcefully directed to sociality – as in the case of bees and ants – the source of these tendencies are previous to it.

Through this emphasis on the self-organisation of life, the reciprocity between freedom and necessity, and also the pre-social sources of all forms of sociality, some family resemblance seems to emerge between Jonas’s ethical naturalism and such approaches as cybernetics and functionalism (see Chapter 3). At one level, this may be inevitable because Jonas is explicit in his contention that, for his philosophical thinking on nature to be plausible, it must remain up to date with the most recent developments in the natural sciences and its epistemological debates. But the similarities end there, because Jonas is highly critical of how modern cybernetics understands nature as an inert order and explicitly extracts out of it all possible metaphysical or existential implications (2001: 108–34).

According to Jonas, modern science is based on two major intellectual traditions that, quite rightly, *ground* human existence in nature in a way that is analogous to other living species. Materialism and evolutionism both share a number of features in how they understand nature; they see it as *self-contained* (only nature creates nature), *lifeless* (organic matter produces life but matter itself is inert) and *purposeless* (nature responds to no

teleological plan). There is no question that materialism and evolutionism are here to stay and that there will be no regression to 'pre-scientific' forms of treating nature. Nature *is* a valuable resource, it has no ultimate purpose and all forms of life possess some degree of organic continuity. But Jonas also contends that the *success* of this general ontology of nature is pragmatic rather than philosophical; that is, modern societies hold onto it above all because of the technological success of modern science. But together with praising science's *practical* strength, Jonas contends that, as a form of metaphysics, the scientific representation of nature bears a fundamental contradiction. Another implication of Jonas's *existential* understanding of biological facts becomes fully apparent now: what makes materialism and evolutionism *metaphysically* deficient is the claim that the cosmos is wholly inert; rather, we need to understand nature as populated by beings whose continued existence *is valuable for themselves*. This does not mean that we need a discernible cosmic plan for nature, but his argument does reject any notion that nature as a whole, and different forms of life within nature, are there for humanity's sake. To the extent that self-preservation is an end for each individual living being, they are all ends in themselves. Indeed, Jonas treats all living organisms as *individuals* in this strong sense (1980b: 187). Because they exist and in so far as they continue to exist, all forms of organic life are open to a principle of individuation and identity that takes itself as its own foundation and thus becomes its own value. The continuation of life has a subjective value because it is the primary concern for living beings themselves (2001: 61). This is a type of subjective relevance that is *independent from human subjectivity* and it is this very independence that makes it truly general. Because it is general, this subjectivity becomes objective and the continuation of life is now to be seen as a self-positing objective value. At the most general level of his philosophical project, therefore, Jonas has positioned himself against any version of anthropocentrism.

As a different ontological understanding of nature, and of organic life within nature, begins to emerge, this alters also our normative understanding of nature. If the pragmatic grounds for modern science to have adopted the interpretation of inert nature are understandable in terms of instrumental success, this interpretation has already proved philosophically unsound. As self-preservation is key to all living creatures, and their continued existence is what they themselves prefer, the question we now need to raise is the purposiveness of life itself; in other words, we ought to seriously reconsider the '*capacity to have* any purposes at all as a good-in-itself'. But unless we want to affirm 'the paradox of a purpose-denying purpose, [...we...]' must concur with the proposition that purpose as such is its own accreditation within being, and must postulate this as an

ontological axiom'. This view, Jonas contends, is 'infinitely superior to any purposelessness of being' (1984: 80). Philosophically, this offers a more consistent approach to nature because it acknowledges that nature is populated by all kinds of living organisms; normatively, this allows for a standard that can be used to critically assess the anthropocentric belief that we humans have an unrestrained right to use nature as if it were wholly devoid of value and even life itself.

Jonas speaks of self-preservation as a natural feature that applies to all living creatures but qualifies this by claiming that, for most living species, self-preservation has other members of their species as a primary and even exclusive locus. In the case of humans, grasping the uniqueness of our own life in the form of self-preservation requires the human ability to *transcend* a self-centred perspective; more precisely, humans are themselves organically pre-programmed so that they are able to adopt the perspectives of others – both within and outside our own species. Life's concern with its own continuation means that it 'is facing forward as well as outward and extends "beyond" its own immediacy in both directions at once' (2001: 85). A theme that we have seen appear also in Chapter 2, Jonas contends that the immanence of human life is constituted through its continuous attempts, indeed the need, to transcend the here and now of biological grounding. The organic basis of metabolic existence, its *terminus a quo*, has always and necessarily to do with basic needs – e.g. the postponement of immediate gratification and the ability to plan for their long-term procurement – but its goal, its *terminus ad quem*, has much more to do with the co-presence of various other beings with whom we share a physical environment. But if humans share with most living creatures this tension between a self-centred organism and their need for the presence of other members of their own species, Jonas contends that only humans have the ability to turn organic 'self-centrism' into a *systematic ability for decentring*. From the family to the state, from law to science, social institutions develop as a way to protect and foster life as a whole. As we will see below, moreover, it is this ability that requires humans to take a particular kind of responsibility.⁴ Not dissimilar to Karl

⁴ Richard Wolin's (2001: 115–16) remarks that Jonas's focus on self-preservation turns his work into a form of neo-Hobbesianism is therefore wholly off the mark. First, because self-preservation has a fundamental existential justification that is alien to Hobbes's mechanistic individual psychology; second, because Jonas's notion of self-preservation does not translate into competition or domination and, depending on the specificities of various living creatures, it may equally centre on collaboration and cooperation and, third, because it is wrong to claim that Hobbes's own metaphysics centre *only* on self-preservation (Chernilo 2013a: 97–107). In fact, because the ultimate orientation of his work depends on the co-constitution between being and purpose, it is more adequate to locate Jonas's philosophy within an Aristotelian tradition. Indeed, references to Aristotle

Löwith's (1964) thesis on the religious roots of most secular and scientific concepts, Jonas critically remarks on the ideas of the human that we moderns have inherited. But in Jonas's case he emphasises the implicit anthropocentrism that characterises the normative underpinnings of modern societies: '[t]he *deus absconditus* [hidden god], of whom nothing but will and power can be predicated, leaves behind as his legacy, upon departing the scene, the *homo absconditus*, a concept of man characterized solely by will and power – the will for power, the will to will' (2001: 216). Indeed, not only man's relation to nature is conceived of as one of power but, as we have seen, 'nature herself is conceived in terms of power' (2001: 193). *Homo faber*, modernity's most prodigal son, seeks to take control of the world – including control over human nature. The instrumental aspect of modern technology has then been wrongly turned into the key anthropological feature that characterises our relationship with both external nature and other humans (1984: 9, 168).⁵

The *pragmatic* strength of modern science on the basis of its predictive capacity and the instrumental success of technology have completely taken over questions of epistemological and indeed ontological consistency, which were of exclusive philosophical resort up to Hegel's time (Schnädelbach 1984). Jonas confronts this diminished status of philosophical knowledge by returning ever more decidedly to metaphysical questions; his is an attempt at the renovation of a first philosophy that redefines our very conceptions of nature and humanity. There is a sense in which, while traditional and modern images of the human being have dissimilar ontological groundings, they are equally faced by the challenge of having to become compatible with the wider ontologies that frame all realms of human experience: the natural, the social, the individual and even the divine or transcendental. Indeed, the clashes between these metaphysical presuppositions at various levels have been a major mover in both philosophical and scientific innovations – the development of a new 'metaphysical point of view is not only the effect but also the cause of a scientific development' (2001: 70). In Jonas's argument, the required revisions to ontologies of inert nature will allow us to see nature, instead, as a source of value in its own right because *living creatures themselves prefer their own continuation*. If this is the case, we are now also able to recast the relationships between ontology and axiology – which are the old terms for what we, in the social sciences, discuss under the banner of 'facts' and 'values' or 'description' and 'normativity'.

are constantly found in his work (1984: 69, 204; 2001: 2, 86) even if, in fairness, Jonas did object to his work being depicted as neo-Aristotelian (2008: 204).

⁵ See, in the Introduction and Chapter 8, a similar critique for the case of Pierre Bourdieu. See also (Chernilo 2014).

II

Jonas claims that there are *objective grounds* (i.e. ontological reasons) for normatively preferring being over non-being: ‘existence per se, no matter of what kind, “ought” to be in preference to nothingness’; there is both ‘pre-eminence’ and ‘obligation in favor of being’ (1984: 46). If this is the case, we can break the modernist taboo that radically separates the is from the ought as the cornerstones of modern philosophy: ‘the good or valuable . . . is by its very concept a thing whose being possible entails the demand for its being or becoming actual and thus turns into an “ought”’ (1984: 79). Values exist both objectively – they derive from the autonomous existence of beings who *are*, that is, whose ontology is a fact of nature – as well as subjectively – these are beings for whom their very existence requires them to treat their own lives as a value. Because they exist, and their existence is a value for themselves, living organisms ought also to exist: a normative principle does follow from a primary statement of fact. Jonas changes the way in which we connect description and normativity so that the normative is now pursued on the basis of a reconsideration of the objectivity that is founded in *our organic belonging in nature*. Not only this, Jonas contends that, after various critiques of ideas of historical progress, revealed religion and even racial purity, this naturalistic argument remains the only available option for thinking about binding normative propositions. What started as a general enquiry into the relationships between ontology and ethics has now a direct bearing in the way we redefine the normative underpinnings of any possible principle of humanity: ‘our ethical-metaphysical query about an ought-to-be of man himself in a world that ought to be, turns into the more specific and much less speculative question of the logical and ontological status of values as such’ (1984: 50).

We can see here that Jonas’s ontology stands in opposition to the nihilism that in his view underpins Heidegger’s philosophy. In Heidegger, human worthiness is fundamentally passive and derivative, as it is fundamentally a response to the external and indeed superior calls of being, whereas any kind of anthropology is inadequate because it bases a claim to knowledge on humanity’s organic features. Jonas has effectively turned Heidegger on his head. There is nothing mysterious or elitist in his idea of being, which is on the contrary based on the radical egalitarianism of organic life. Jonas reclaims a value for nature and, in so doing, explicitly seeks to close the gap between subjective and objective axiological claims. Nature is a source of objective normative value that can help us transcend both the subjectivity of values as mere preferences and an instrumental conception of value as means to an end. To Jonas, this form of ethical naturalism becomes the only normative position that remains available in modernity because it is

based on the objective self-positing of organic life that is also credited subjectively. Organic life is the only fact of nature we know with certainty; it is, therefore, the only one that we can posit in terms of an unconditional normative obligation because we are equally aware of it from the inside and the outside. Even if it has not been fully justified yet, Jonas's fundamental argument has at least been made: his project of a *philosophical biology* is designed to help us reconnect facts and values because nature has unique authority in sanctioning values objectively as well as subjectively:

Ontology may yet to relocate the foundation of "ought" from the ego of man, to which it has been relegated, *to the nature of being in general*. It may have been premature despair which denied the doctrine of being the power to yield a ground of obligation – for beings, of course, that are previous to obligations, and who must be there so that obligation can find its respondent. (2001: 283)

We have said that no return to a pre-scientific metaphysics of nature is acceptable for Jonas, so his challenge to the ontological commitments of modern science must itself remain scientifically current: whatever else philosophy may be able to criticise science for, scientific developments will not stand still or wait for philosophy's authorisation (2001: 209). The development of this new outlook requires a dual move. First, modern *social* scientists need to accept the centrality of an idea of nature that radically questions the proposition that social and cultural reality is *only* socially and culturally construed. For obligatoriness to be truly obligatory, contends Jonas, it cannot be just socially constituted: '[t]hat which has no nature has no norm' (2001: 228). As traditional forms of authority have been eroded, and because not everyone has subjective access to divine authority, then only nature remains available to take that normative place. Second, natural science will have to be accommodated within a wider philosophical perspective that, among other things, is able to explain science itself: 'as an occurrence within the universe which undertakes to explain, [science] is forever excluded from what *it* can explain. Its own existence is indeed its own best corrective' (1984: 72).⁶ What is missing in the scientific account of nature, and indeed from a scientific understanding of scientific knowledge itself, is for Jonas the *subjective impulse* that makes science a *human* project: the motivation that leads individual scientists to pursue science, the inner drive that pushes human beings to pursue projects that are purposeless vis-à-vis their physical adaptation to the world and are also endless vis-à-vis any sense of definitive accomplishment. For scientists, the very rationality of their pursuits requires them to accept that there is some autonomy in their

⁶ See also Habermas's discussion in Chapter 5.

thinking so that they are able to discern between competing theories or contradictory empirical evidence (1984: 70). The price we pay in denying this possibility is that reason itself becomes an ‘irrational entity’ and ‘intelligence’ becomes ‘entirely unintelligible within the intellectual scheme of the scientifically knowable’ (2001: 73–4). The commitments to freedom, truth or beauty that are an essential component of the modern scientific imagination are themselves extra-scientific; they cannot be apprehended by reducing them to causal relations between, or the organic properties of, inert nature.

This concern with the position and main features of modern science in society was of course central to Jonas’s own philosophical education. On the one hand, the positive assessment of science as the model to which a true objective philosophy must duly aspire – a position that, all their differences notwithstanding, was shared in the first part of the last century by Husserl’s (1970) phenomenology and the neo-Kantian movement that was represented, for instance, in Ernst Cassirer’s (1972) work. On the other hand, there is the philosophical rejection of science on the grounds of its blockage to the authenticity of existence (Heidegger) and also because of the self-destructive potential of its technological application in terms of instrumental rationality (as in the critical tradition of Adorno, Fromm, Horkheimer or Marcuse). While highly critical of the shortcomings of scientific metaphysics and of the excesses of scientific civilisation itself, Jonas remains equally distant from these two opposite views about contemporary science. Also important is his scepticism concerning the idea that the human and social sciences are to be modelled upon the natural ones:

For a scientific theory of him to be possible, man, including his habits of valuation, has to be taken as determined by causal laws, as an instance and part of nature. The scientist does take him so – but not himself while he assumes and exercises his freedom of inquiry and his openness to reason, evidence and truth. Thus man-the-knower apprehends man-*qua*-lower-than-himself and in doing so achieves knowledge of man-*qua*-lower-than-himself-man, since all scientific theory is of things lower than man the knower ... man-lower-than-man explained by the human sciences – man reified – can by the instructions of these sciences be controlled (and even “engineered”) and thus used. (2001: 196)

The inconsistency Jonas points out in this quotation is central to my idea of philosophical sociology: as autonomy and creativity are being granted to the scientists as they pursue their work *as scientists*, they are however denied to the human beings who are the subjects of these scientific studies. Far from being objective, the kind of knowledge thus produced is then *inferior* vis-à-vis science’s own scientific standards: it appears to be adequate or even complete only because they are being assessed against too narrow a conception of what counts as genuinely *human* behaviour.

Similar to the criticism of *homo sociologicus* we discussed in the Introduction, Jonas's point here illustrates one additional dimension: the very scientists that produce these reductionist accounts of human action are, in their work as scientists, a refutation of the principles that they espouse. In terms of his critique of the social sciences, human originality is being eroded as part of the homogenising trends of mass society – again, the very trends that are being studied by 'positivistic' social science. In terms of his critique of the natural sciences, human originality cannot be accounted for as part of a mechanistic conception of nature.

Given its reductionist understanding of what may count as *human* in our lives, a purely scientific, pragmatic or hypothetical attitude is insufficient. A key part of the problem lies in the fact that the success of their theoretical models *as sciences* are based on the rejection of transcendence as a meaningful domain of intellectual enquiry; the possibility of 'objective transcendence lies today outside theory by its rules of evidence, whereas formerly it was the very life of theory' (2001: 185). Partly building on Kant, Jonas comments that transcendence 'implies objects higher than man, and about such was classical theory'; on the contrary, 'modern theory is about objects lower than man' (2001: 195). But then Jonas takes issue with the Kantian defeatism of rejecting the possibility of a rational metaphysics. In order to reascertain the possibility of metaphysics, however, we need to reconnect a principle of humanity with the ontological demands of naturalism as they emerge out of Jonas's position. The rationality of metaphysics, Jonas contends, can be reinstated on two grounds that we have already encountered in this discussion: on the one side, the anti-Heideggerian motif that the existence of 'anything at all' is in itself a reason to argue 'why a particular something ought to be' (1984: 43). On the other side, a theme that is equally constitutive of the whole tradition of philosophical anthropology: the problematic centrality of anthropocentrism in ethical thinking: '[o]nly the idea of Man, by telling us *why* there should be men, tells us *also* how they should be' (1984: 43). It is then one thing to contend, as materialism and evolutionism do, that human beings are simply yet another kind of living creature and quite another, Jonas suggests, that several of our *human* accomplishments represent a real upgrade on nature. A question that remains, however, is the extent to which Jonas's criticism of the modern scientific attitude takes his *own* ethical naturalism as an exception. Jonas's argument is that, because his philosophy of nature redefines life, no mechanicism is to be found within his work. But something rather naive, indeed troubling, remains in his direct appeal to the normative forces of *nature*.

III

The starting point of Jonas's critique of anthropocentrism is that human beings cannot be conceived anthropomorphically because they are little other than an accident of nature. It is the greatest paradox of that accident, however, that humans have developed the skills and institutions that make them able to reflect on their position in nature and, given these special features, also take responsibility over nature (2001: 233). In so far as his critique of anthropocentrism is concerned, Jonas is interested less in a conception of human being as a key object of concern for itself – we have seen that this is in fact the way in which all forms of life organise themselves – and more in the rejection of a conception of nature whose *only* value resides in its instrumental availability for human being: humans are an object of nature rather than their master. Humans are *not* the measure of all things but our particular species-centred perspective has the unique ability to *understand* the workings of nature. Consciousness is a specifically human accomplishment as humans make images and are then able to distinguish them from the real thing; humans have the 'ability to perceive likeness' and 'whoever can perceive a pictorial representation as such is the kind of being to whose nature the representational faculty belongs' (2001: 165). A key feature of the specific relationship between humans and nature lies in the former's ability to name things in the world; humans move beyond the animal kingdom by making things and then representing them symbolically (2001: 173).

These are the skills that delimit the specificity of the ethical imperative of human existence: only humans *can* take responsibility for the rest of nature because they have the power to do so. It is 'the scope and kind' of human powers that 'determine' the kind of responsibility they have on their shoulders and this remains a responsibility that falls *only* on humans (1984: 98, 128). Jonas's critique of anthropocentrism, the self-centred concern of our species *only with ourselves*, has to be made compatible with our equally unique anthropological capacity for transcendence. There is, however, a tension in this argument. We must, first, be prepared for 'a hesitant emergence of transcendence from the opaqueness of immanence' (2001: 275): the overcoming of narrow anthropocentrism is available to humans insofar as they raise general existential question. The relationships between ability and responsibility are now to take centre stage in Jonas's thinking, and we have seen that his redefinition of nature was expected to do the philosophical work in that direction. And yet, second, he himself raises doubts as to whether claims to fully transcend anthropocentrism are to remain an ideal at best: '[p]erhaps, rightly understood, man *is* after all the measure of all things – not indeed through the legislation

of his reason but through the exemplar of his psychophysical totality which represents the maximum of concrete ontological completeness known to us' (2001: 23).

Normative intuitions that refer to what we treat as intrinsically valuable, good, true, beautiful or just are central to how humans imagine, justify, assess and criticise the variety of ideas, practices and institutions that they themselves create even as they confront them as external. Stated positively, the claim is that the ontological grounding of ethics refers back to images of the human (1984: x) but, stated negatively, it becomes the methodological suggestion that by anticipating the 'distortions' in our conceptions of the human we can detect the normative challenges we are about to face: 'we need the *threat* to the image of man – and rather specific kinds of threat – to assure ourselves of his true image by the very recoil from these threats' (1984: 26–7). The normative strength of various normative ideas derives from their answers to the question of what makes human beings human:

Man models, experiences, and judges his own inner state and outward conduct after the image of what is man's. Willingly or not he lives the idea of man – in agreement or in conflict, in acceptance or in defiance, in compliance or in repudiation, with good or with bad consciousness. *The image of man never leaves him, however much he may wish at times to revert to the bliss of animality.* To be created in the image of God means to have to live with the image of man. That image is worked out and entertained in the verbal communication of society. (2001: 185–6, my italics)⁷

At one fundamental level, all modern sciences are in a similar position to previous (religious, mystical) forms of human thought in terms of their being sustained upon implicit, inconsistent and even reductionist images of the human being. In science, these are now referred to as ideas of 'human nature' and the full development of the different implications of *a new metaphysics of nature and man* is the ultimate goal of Jonas's philosophical biology. The very notion *philosophical biology* is surely inspired by that of philosophical anthropology: first, because of the way in which Jonas engages with both the organic and spiritual aspects of human life; second, as a rejoinder to Heidegger's rejection of the idea of looking at the human from the standpoint of their organic dimensions. But we have seen that Jonas also tries to break free from one of philosophical anthropology's key presuppositions; namely, the reductionist aspects of modern anthropocentrism. Philosophical *biology* picks up the problems philosophical anthropology has left for us by taking seriously

⁷ Through this reference to the idea of 'the image of god', the extent to which Jonas's philosophy emphatically presupposes a conception of the divine becomes apparent. I come back to this at the end of the chapter.

the centrality of humans for humans themselves but, at the same time, it turns *that* centrality into an ontological or indeed normative principle. Neither philosophy nor science can, on its own, give a full account of the human being, not least because we are at pains to understand how exactly we are going to be able to combine their different knowledge-claims: it is just futile, argues Jonas, that we merely have ‘a philosophy of man on the one hand and a philosophy of nature on the other’ (2001: 92). Philosophical biology seeks the ontological *reintegration* of an idea of nature that is consistent with developments in natural science and can thus aspire to account for both continuities and discontinuities between human life and life in general: ‘[i]t is the task of a philosophical biology to follow the unfolding of this germinal freedom in the ascending levels of organic evolution’ (2001: 83). Philosophical biology is expected to ‘deal with the organic facts of life, and also with the *self-interpretation of life in man*’ (2001: 6, my italics). All his arguments for organic egalitarianism notwithstanding, humans remain the most accomplished living creatures.⁸

Building on his previous argument on the ontological and normative priority of being over non-being, Jonas will now claim that the continuation of human *existence* in the planet, alongside the continuation of a planet in which human life remains itself possible, are ethical questions that need to be treated together. Now it is human life rather than life in general that is at stake, and here Jonas has moved, from general axiology and first philosophy, to the narrower field of applied ethics. The argument is that human beings have normative challenges not because of anything particular that they do in the world, nor on the grounds of an external (e.g. divine) imposition: normative questions are an immanent result of their human existence in the world. More concretely, he argues that although for much of human history nature’s continuous life could be taken as ‘unquestionable given’ we now live in an age in which its continuation has ‘become an *object* of obligation’ (1984: 10). If existence is the self-imposed normative goal of all living creatures in relation to themselves, for humans this now applies to their *responsibility towards the planet as a whole*. We have seen that the sources of this obligatoriness are not intrinsically modern; they are a metaphysical demand that derives from human existence itself. But given the scale of technological innovations and environmental challenges that are a direct result of human intervention, this responsibility has now dramatically intensified and become the major social question of our times.⁹ The impact of technological changes

⁸ Further critical discussion of Jonas’s idea of philosophical biology is available in Mitcham (2010) and Wolters (2001).

⁹ I have applied Jonas’s arguments to recent debates on the Anthropocene in Chernilo (2017).

has reached the whole globe and their consequences are to be felt for the foreseeable future; indeed, they are to be felt well beyond the lifespan of those currently alive (1984: 6–8). There is now a clear possibility that we are ruining the natural environment not only in relation to other species in the present but also for future humanity: at stake here is the question of the continuation of all forms of life on earth. But if the temporal extension of the effects of modern technology has changed our way of inhabiting the world, our ethical thinking is yet to change accordingly (1980a). For all his effort in trying to justify the *philosophical* foundations of his position, Jonas contends that it is above all the *pragmatic* urgency of environmental challenges that makes them relevant. Even if we fail to agree on such foundational questions as a common conception of the human, nature or life, these polemics are secondary to the practical and political demands of the world we live in:

we find ourselves thrown back from the ever-open *question*, *what* man ought to be (the answer to which is changeable), to the first *commandment* tacitly always underlying it, but never before in need of enunciation: *that* he should be – indeed, *as* a human being . . . what now matters most is not to perpetuate or bring about a particular image of man but first of all to keep open the horizon of *possibilities* which in the case of man is given with the existence of the species as such and [which] will always offer a new chance to the human essence. (1984: 139–40)

Jonas's *imperative of responsibility* then states that our actions in the present ought to secure the continuation of human life in the future. We have the duty to leave the planet in a state that is worthy of human habitation, a planet that allows future human beings to lead a fully human life. More precisely, we owe future generations the conditions that make possible human life as a self-legislating experience: conventional ideas of self-preservation now need to be widened in order to include the future existence of human beings. Jonas's argument seems to go back to the same kind of anthropocentrism that he had rejected, but it is important to remember that he is no longer arguing at an ontological or axiological level. As an argument of applied ethics, his position is that the better we are able to look after the future of humanity, the better will humans also be able to look after nature itself. Formulated as a moral law, Jonas introduces his imperative of responsibility thus: 'there *ought* to be through all future time such a world fit for human habitation, and . . . it ought on all future time to be inhabited by a mankind worthy of the human name' (Jonas 1984: 10).¹⁰

¹⁰ An alternative formulation is 'that no condition of future descendants of humankind should be permitted to arise which contradicts the reason why the existence of mankind is mandatory at all. *The imperative that there be a mankind is the first one, as far as man alone is concerned*' (1984: 43). Jonas is not alone in using the idea of responsibility to connect ethics and ontology. Emmanuel Levinas (2006: 55), for instance, argues thus: 'the responsibility that owes nothing to my freedom is my responsibility for the freedom of others'. But

Herein lies a first aspect of the universalistic orientation in Jonas's ethical theory, one that I think remains central to our own normative imagination: humans can be appealed to as *moral* agents. In this case, moreover, the appeal builds on rather than stands in opposition to how we experience our relationships with nature. This argument, contends Jonas, undermines the notion of progress as a central normative tenet of modern societies – not least the utopianism that is apparent in the idea of emancipation *from* nature (1984: 188–92); what we need instead is to 'unhook the demands of justice, charity, and reason from the bait of utopia' (1984: 201).¹¹ For all its scepticism towards teleological conceptions of nature, modern science does depend on the most teleological of modern ideas: the accumulative betterment of social life through sustained technological improvements. Kicking contemporary challenges into the long grass under the expectation that, because science and technology will continue to thrive, the future will look after itself, is no longer an option. On the contrary, argues Jonas, taking responsibility for one's actions now in the present offers the only possible foundation for a sound ethical position.

The obligatory force of the imperative of responsibility is not derived from its claim to logical consistency, nor can it be seen in a Kantian way as the pure act of a self-legislating will. Rather, what makes the imperative of responsibility binding is its *ontological* claim; we are now confronted with the requirement that humans continue to exist. The greatest contribution of Kant's moral theory, Jonas continues, was the idea that moral commandments need to be *rationally justified*. But this has proved also its greatest shortcoming because reason has not proved rational enough to canvass people's support for actual changes in behaviour. Jonas suggests that we change track, and so his ethical command is now introduced as an ontological statement: the continuous existence of humanity is commanded on the basis that humanity already exists *and this is a fact that requires no additional justification*:

Levinas and Jonas's positions stand apart on two grounds: first, Levinas (2006: 7) describes this responsibility as traumatic and even anarchic, whereas we have seen that Jonas's formulation still resonates with Kant's proceduralism. Second, Levinas sees this responsibility as defined in a fundamentally anthropological manner as it focuses on the *reciprocal* relationships between human beings (2006: 33, 55, 72–4). As we are about to see, Jonas's idea of responsibility is a command of nature that is built on the *lack* of reciprocity.

¹¹ Utopianism comes as a major theme critiqued in Jonas's work on the basis that utopian thinking depicts the future as an excuse to *neglect* the present. Jonas uses Ernst Bloch's *principle of hope* as paradigmatic of that position and contrasts it with his own *principle of responsibility*. It is worthy of note that although the German editions of both books speak of a *Prinzip* (of hope and of responsibility), in the English edition, whose translation Jonas supervised, the principle of responsibility is turned into an *imperative*.

Groundless itself (for there could be no commandment to invent such creatures [as humans, DC] in the first place), brought about with all the opaque contingency of brute fact, the ontological imperative institutes on its own authority the primordial “cause in the world” to which a mankind once in existence, even if initially by blind chance, is henceforth committed. (1984: 100)

We are in the presence of two different but intimately related propositions: there is the first, empirical, claim that humanity actually exists and this requires no further proof. It is a fact which, in its very transparency, remains ‘normally unexpressed’ even if it is ‘implicit in all further imperatives’ (1984: 100).¹² The second, *ethical* proposition, commands that humanity continues to exist according to the self-legislating powers that it currently enjoys. We have seen that Jonas is at pains to emphasise the fact that its binding character as an imperative does not derive from practical reason but is justified in ontological terms. Indeed, the ontological weight of Jonas’s imperative does not undermine the equally fundamental fact that humans remain free and are able *to turn away from their duties*; they can say no to a reasonable request, change their mind and default on their promises. But Jonas is aware of this and he is not committed to the kind of moral ontology of the good for which we will criticise Charles Taylor’s argument in Chapter 6: *evil is an objective aspect of human existence*. As the sources of ethical dissent can indeed be of various kinds, the key point for Jonas is that, as we search for legitimacy, the only authority that remains available for us lies in the ontological presence of humanity, which is ultimately a fact of nature (1984: 76–7). The fact that a human being ‘can *have* responsibility means also that he *must* have it . . . Here the mere capacity is the sufficient condition for the actuality’ (1984: 99). Humans must care about the environment because they *can* do something about it. In so far as this commanding ‘ought’ is ontological, the imperative of responsibility does not belong to conventional ethics as a doctrine of rational motivations.

We now arrive at what I think is the most radical argument in the whole of Jonas’s philosophy: our ability to base ethical commands on firm ground is to be based on *nature* rather than on *principles*. As an ethical idea, responsibility can work in a way that no previous moral theory has before because it is modelled on what in his view is *the most basic fact of nature*: ‘the care of progeny, so spontaneous that *it needs no invoking the moral law*, is the primordial human case of the coincidence of objective responsibility and the subjective feeling of the same’ (1984: 90, my italics). Responsibility offers a unique form of ethical command because it is *not* based on reciprocity and comes to us instead from what *is unique and*

¹² A similar *ontological* command to continuous existence underpins, it seems to me, Marx’s early materialist position. See Chernilo (2013: 149–59).

particular in a being who has been placed under our custody. Responsibility towards one's children is the archetype of responsibility as such, Jonas contends, because it 'is the only class of fully selfless behavior supplied by nature . . . the archetype of all responsible action . . . fortunately requires no deduction from a principle, because *it is powerfully implanted in us by nature*' (1984: 39, my italics).¹³

The gap between the is and the ought that is central to all moral theories, continues Jonas, has so far only been bridged by divine or human fiat: if the former, the solution depends on whether the source of divine authority is open to challenge on the grounds of its existence being contested; if the latter, the problem lies in the fact that human authority alone does not carry enough binding power. Only the ontology of the continuation of existence can solve this problem and create a new kind of *ontological ought*: 'when asked for a single instance (one is enough to break the ontological dogma) where that coincidence of "is" and "ought" occurs, we can point at the most familiar sight: the newborn, whose mere breathing uncontradictably addresses an ought to the world around, namely, to take care of him' (1984: 131). Jonas's ethical naturalism bases its obligatoriness on a responsibility that is grounded biologically in our feelings of duty and care towards others who cannot fend for themselves. It is the fact that duty and care become genuinely intertwined that allows Jonas to contend that the ethical commands that are thus derived are grounded in nature even if they cannot be justified rationally: the 'right of the object is prior to the duty of the subject . . . all proofs of validity for moral prescriptions are ultimately reduced to obtaining evidence of an "ontological" ought' (1984: 130). It is this amalgamation of duty and care that, allegedly at least, allows Jonas to contend that he has overcome the motivational deficits of Kantianism; here, instead, there can be no gap between what I want and what I ought to do. Nature offers the ontological grounding for normative authority because it exists objectively, because purposive self-conservation is a value for life itself, because humans have the ability to take responsibility for nature and because human beings are part of nature.

In sum, Jonas's idea of responsibility matters to us because it emphasises two critical dimensions: First, responsibility is an idea that, as an anthropological capacity, precedes its social actualisation. Even if we want to eschew the contentious implications of its being grounded in us by nature, the substantive point that remains is that responsibility can and needs to be seen as a general anthropological feature that defines our

¹³ Compare this with what we will discuss in Chapter 8. There, Luc Boltanski argues that the idea of a *just* action lies in the fact that it is to be based on reciprocity, whereas interpersonal relations that are based on power or love do not follow this pattern.

humanity independent of society. Second, Jonas's idea of responsibility also allows us to reflect *normatively* on what is arguably one of the most important dimensions of *social* existence: social inequality. Human responsibility is conceptualised as that special kind of accountability that comes from the fact that we *can* do certain things: and we must because we can. Rather than reducing a sociological account of inequality to questions of power, Jonas creates a normative framework that helps us rethink the extent to which inequality leads to normative assessments and practical commitments.

IV

A connection can now be made between Jonas's arguments above and the principle of natality that we have seen is central to Arendt's conceptualisation of the human condition: both thinkers equally locate humanity's self-renewal at the centre of their normative insights. The open-ended condition of human life depends on the change and renovation that 'automatically' comes with every new generation. Indeed, as I mentioned briefly in Chapter 2, this interest in natality may have to be explored further vis-à-vis Heidegger's emphasis on death in *Being and Time* – it is a philosophy of those who had, quite literally, survived a destiny that called for their death and, in so doing, were able to forge a new life for themselves. But if in Arendt the principle of natality is fundamentally tied to ideas of creativity and originality, Jonas's *organic* conception of natality needs to restrict these in the present in order to make room for the humans of the future. This is an idea of natality that needs to respond to the, somewhat conservative, call of nature.

Jonas is critical of several aspects of Kantian ethics: the defeatism of its claim on the impossibility of a rational metaphysics, the excessive emphasis on logical consistence, the inability to account for the irrational outcomes of rational decisions and, last but not least, the fact that it cannot adequately motivate individuals to follow moral commands. But some of these charges seem exaggerated – or at least they apply also to Jonas himself: with regard to motivational deficits, for instance, Jonas's imperative cannot be said to be on much stronger grounds than Kantian morality. Nature's existence is in danger because of human action and the call of nature is yet to become truly audible. Crucially, the *form* of Jonas's imperative is procedural in a way that is indeed modelled on Kant's, and Jonas's substantive argument retains the need for individual human beings, and these now include *future* humans, to see themselves as a self-legislating body: our duty towards future generations is based on our duty to affording *them* the chance to become self-legislating beings. Similar to Kant's

argument, this self-legislating dimension is both subjective – only individuals can decide for themselves – and objective – it shall provide sound reasons for action. Even if not based on a teleological idea of progress, Jonas's imperative of responsibility appeals as much to future consequences as several other ethical theories (see also Chapter 6). The rule of 'general inclusion' that lies at the centre of the imperative of responsibility is something we have also grown familiar with throughout the twentieth century. The underlying principle that no one can be forced to accept decisions that would go against their best interests is also paramount for Jürgen Habermas (1990a) and John Rawls's (1999a) ethical theories. This commonality is yet another expression of the fact that Jonas's moral theory is closer to Kantianism than he would like to admit.¹⁴

Under this logic of inclusivity, the key test of sound moral reasoning is precisely that we give voice to all those who may potentially be affected. The same counterfactual logic that applies to Rawls's veil of ignorance and to Habermas's discourse principle is here given a new specificity by making an explicit argument for its temporal dimension: the right of future generations to exist under conditions that are at least no worse than our own. In principle at least, Kant's original formulation of the categorical imperative of morality allows for moral reasoning to be pursued in private but this is not the case for Habermas, Rawls and Jonas: for all three, the inclusion of those who may be potentially affected requires an act of political engagement of a whole range of perspectives that makes public discussion necessary. Collective deliberation plays a central role in modern democracies; therefore, the organisation of public discourse and political life more generally are of key importance.¹⁵ This clause is arguably more onerous in Habermas's formulation because for him that public disposition is by definition open-ended, while for Rawls it is essential that the fictional acceptability of the original position is limited to those who are to live within those institutions that are now being designed – for instance, a modern nation-state. To Jonas, the 'public' whose assent we must seek is axiomatically

¹⁴ According to Kant, no moral theory can work without an explicit consideration of the opportunities we afford to future generations: 'it is a crime against human nature' to prevent future generations from making their own decisions about substantive issues through their public use of reason (1999: 57). Assessed against that standard, it seems to me that Habermas does not have a consistent argument about the future, whereas Rawls's (1995) emphasis on the stability of social orders looks openly eschewed against a meaningful inclusion of the future in the original position. See Loewe (2015) for further discussion on the limitations of Rawls's temporal argument. See also Chapter 6 for Charles Taylor's argument on the commonalities between naturalism and modern proceduralism.

¹⁵ I have discussed some further implications of the public aspect of moral and political deliberations in relation to Habermas in Chernilo (2013b). See also the discussion in Chapter 5.

indeterminate and, given the scale of technological change and its impact over the environment, it may potentially include *future humanity as a whole* (1996: 99–112).

We should not, however, overstate the extent to which Kant would have been contented with purely private deliberation. For instance, Arendt (1992: 20, 40) made the point that public deliberation is in fact central for Kant on the grounds that his idea of freedom presupposes human plurality; otherwise, we may contend, there would be no need at all for the strictly deliberative dimension of the categorical imperative. In fact, it is Jonas who seems to be walking on thinner ice here. If we put their differences to one side, public and ultimately democratic debate is ultimately an expression of the rationality of our decisions for Kant, Rawls and Habermas. Jonas, however, vocally sides with technocracy and central planning when it comes to the task of making collectively binding decisions over the future. Jonas is very sceptical of liberal democracies being able to afford the level of self-restraint that would be required to secure continuous human existence on the planet – on this he has perhaps been proved right. And while empirical support may be found for this scepticism, Jonas was positively – though with hindsight also wrongly – impressed by the success of central planning in former socialist countries as a way of making a more efficient use of scarce resources. Jonas is committed to a *mild* form of public debate that does not lead to democratic deliberation as the best form of achieving rational decisions: opposed as he was to openly authoritarian regimes, he favoured what we may describe as a *benevolent technocracy* of those who, although they may not know so much better than the rest of us, may at least have the incentives to coordinate the use of resources more rationally. His argument is that a technocratic way out of the contemporary ecological crisis may have to be accepted as a lesser evil because the short-termism of capitalism and the partisan politics of Western democracy do not offer incentives to take the future as seriously as it is required (1984: 147–51). Somewhat paradoxically, his proposal becomes that of a technocratic way out of the crises of modern technology: technocratic domination (in politics) may prove the best way to achieve technocratic liberation (in science).

We have said that at least part of Jonas's motivation to revise Kant's categorical imperative was that he considered it too demanding, but if now his argument depends on technocratic decisions having to pre-empt democratic mistakes, it is not at all clear that his own appeal to nature is as strong as we would require it to be. Indeed, things do not get any easier for him when he spells out the implications of his position for such difficult cases as suicide:

No consent to their nonexistence or dehumanization is obtainable from the humanity of the future, nor can it be assumed; and were it nevertheless imputed

to them (an almost insane imputation), it would have to be rejected. For there is . . . an *unconditional duty* for mankind to exist, and it must not be confounded with the conditional duty of each and every man to exist. The right of the individual to commit suicide is morally arguable and must at least for particular circumstances be conceded: under no circumstances has mankind that right. (1984: 37, underlining mine)¹⁶

However dramatic, personal suicide remains an option that cannot be condemned morally. Collective self-annihilation poses a different dilemma, however, because it is the continuation of the human enterprise as such that comes under threat. Jonas's insistence that collective existence is an unconditional duty should not be confounded with the conditionality of individual existence – or indeed the unconditionality of the existence of this or that human collectivity: the principle of responsibility is not committed 'to the future of human individuals but to the *idea of Man*' (1984: 43). But the possible slippage from the *duty for humanity to exist to the right of a person to commit suicide* is anything but straightforward.

These illiberal tendencies in Jonas's thinking are sometimes hard to make sense of – indeed, they are difficult to reconcile vis-à-vis his personal account of the impact of the loss of civil freedoms for Jews in Nazi Germany (which was the main reason for his emigration to Palestine before the war). At the same time, these comments may have something to do with the ontological status of the self-preservation of human life: the continuation of life itself was arguably the only hope that remained available to concentration camp inmates or those who were forced to live under increasingly inhumane conditions. But even at a strictly conceptual level, a major problem remains: if the 'sacrifice' of future humans is morally unacceptable, how are we to determine what constitutes 'tolerable' sacrifice among our own contemporaries? Even if the rich of today would freely decide to restrain themselves in order to grant future generations true self-legislative opportunities, the question remains open about the responsibility of those who cannot lead a human life now in the present and for whom that very possibility may depend on, say, the destruction of the natural resources that may then restrict the resources or opportunities to be afforded to future generations: what is the threshold that may make the current restriction to our self-legislative powers acceptable in order to allow these opportunities to future human beings? At one level, the universalistic orientation in Jonas's thinking points to a cosmopolitan vision of human solidarity that allows only for the whole of humanity – both present and

¹⁶ There is in fact an anthropological specificity in this freedom to choose suicide as a course of action: 'Suicide, *this unique privilege of man*, shows the ultimate manner in which man can become the object himself' (2001: 187, my italics).

future. But without social and political cleavages, this universalism unduly flattens the very differences that are to remain central for thinking normatively about these issues.¹⁷ However unwittingly, Jonas's anti-utopian vision of the future ends up eroding all legitimacy regarding the present: it is an inverted teleology that, for all its criticism of progress, it nonetheless favours the future over the present. Furthermore, if the *self-legislating* aspect of human life is the highest value that is worth protecting in what constitutes a human life worthy of its name, then we should not be so harsh in our indictments of democratic decision making.

Our being alive as human beings is a mundane though somewhat implicit fact for both sociology and philosophy – but these disciplines are not directly concerned with the fact that humans are alive but that they live well (1984: 99–100). That is, sociological knowledge depends on the fact that we are alive in exactly the same way as all other species who adapt themselves organically to their physical environment. But we are also alive in a completely unique way vis-à-vis all other species: we are conscious of ourselves, can imagine different ways of leading our lives and can take responsibility for our actions. Both conditions are equally inscribed in human nature and, if Jonas's naturalism is to have any purchase at all, it can only do so by taking the specificities of *human* nature into account. Human reason offers a claim to knowledge that knows no boundaries, but we should not hypostatise this for a principle of general authorship. Modern social science, on the other hand, seems to have inverted this principle as it suggests that we can only adequately understand those regions of the world that we ourselves have construed. For sociology, and the social sciences more broadly, this means that the perennial tension between facts and values, between description and normativity, is itself ontologically grounded because the normative itself depends on ideas of human nature. As we *describe* the social world, those very descriptions that speak about social institutions cannot help being assessed in *normative* terms; that is, whether they favour or undermine the development of those properties on which human life thrives.

¹⁷ See Chernilo (2012a, 2012b) for an idea of cosmopolitanism that rejects this flat conception of humanity.