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What Do You Think You Are?
A Discussion of Modern Theories of Human Nature

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I hereby declare that this thesis has not been and will not be, submitted in whole or in part to another University for the award of any other degree.

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Summary

This thesis looks at the way in which human nature has been construed and examined, with the focus on modern theorisations and conceptualisations. Here I separate theories of human nature according to a taxonomy of location – where they “place” human nature in the wider context of human existence (physical/biological, interpersonal, psychological, social, cultural etc.). I assert that this is the key to assessing theories of human nature; such theories can be evaluated on how well their placement encapsulates some meaningful aspect of what it means to be human.

To this end, each of the first three chapters is concerned with a grouping of approaches within the aforementioned taxonomy – what I refer to as “schemas” – which I assert have affinities due to similarities in the ways they address what they understand to be human nature. I dissect their approaches, considering each on its own merits, and discuss their strengths and weaknesses. I devote a fourth chapter to objections to the very idea of human nature. Here I address a number of complications or issues that might affect any given theory of human nature (as opposed to specific issues relating to particular schemas). However whilst these objections pose a challenge for human nature theories, in that they complicate our ability to accurately know and describe what makes us quintessentially human, they do not conclusively disprove the existence of human nature *per se*.

Thus I conclude by suggesting how this location-based taxonomy might help us construct a consistent and accurate human nature theory. I argue for an interdisciplinary, synthetic human nature theory that elaborates on a political interpretation of ethological and anthropological approaches, which I ultimately characterise as analogous to critical theory or evolutionary theory – in that it forms a general paradigm centred on a particular phenomenon rather than a fixed theoretical construct.

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Introduction

Ways of thinking about ourselves and what we are invariably touch on the concept of human nature, even if it is just to deny it. The idea of human nature – what humans just are, beyond their own volition or before their subsumption into some other context (such as their particular culture) – emerges throughout human thought, including, or especially, in politics and social philosophy. Here I am mainly thinking about what is believed to condition our human experience, in terms of how we are psychologically geared or socially conditioned to engage with what we encounter in the world. Such notions may not be incorporated explicitly, or appealed to directly, but they are a persistent feature of many of our explanatory frameworks. Whether this thing is referred to as human nature, philosophical anthropology or simply as an unspoken constellation of expectations and presuppositions, the question of *what* we are impacts directly on questions of *who* we are and what we do (or should do). As such I do not so much discuss “what it means to be human” as what is supposed/presumed, fundamentally, to underlie this “humanness”. Thus I do not, for example, discuss the role of art and music in human life or their significance for mediating human experience, but I do consider how theories think we approach experiential scenarios (including, or rather especially, interactions with one another). To follow the previous hypothetical example, suppose someone proposes an “instinct for art”, or an ineffable, radically undetermined human essence which we must represent to ourselves and others via images – in both cases something underlies these movements (which serve to anchor the relevance of spheres of human experience and meaning, *vis a vis* art) and this is what I discuss in the pursuit of a theory of human nature theories.

Such theories of human nature are ubiquitous. A sociologist or ethicist who makes presumptions about how an individual will react to a certain (kind of) stimulus is articulating an implicit theory of human nature. So too is a biologist who makes claims about the motivational and behavioural import of her genetic or neurological research. In a similar vein, various spiritual and religious traditions have offered ways of understanding what it means to be human (we could argue that this is part of their function) through a relation to some supernatural or divine force that governs our

essential nature. Human nature thus clearly serves an analytical and explanatory function – albeit in different ways dependant on the particular conception of human nature in question.¹ As Charles Taylor notes: ‘[A study of Human nature] is both terribly necessary, and also unbearably problematic.’ This is because our political and social projects ‘lean on certain assumptions about what human beings are like, which are often highly questionable.’ (*Op. Cit.* Honneth & Boas, 1988: vii)

Given the importance of this issue, I propose that we dissect and categorise the various human nature theories on offer, with the aim of creating a taxonomy or topology of human nature theory which tells us something about the way that this conceptual variety comes about. Most discussions of human nature, where they do not specifically concern themselves with a particular tradition, necessarily centre around (one might say confine themselves to) a survey of different theories. In contrast, rather than collect theories into kinds according to intellectual tradition or provenance, or a particular foundational thinker/paradigm, I want to adopt an alternative, previously unexplored approach.

In order to do this I organise theories of human nature according to where they locate their subject matter – in other words, where they choose to place the emphasis when addressing the question of “what is human nature?” These broad families of theories, or spheres, range from ultimate rules or logics which fundamentally govern human nature and existence, through psychological, dispositional and behavioural regularities, to socio-cultural phenomena which fundamentally transform some (minimal) set of innate capacities situated in human agents. I contend that which sphere a particular thinker adopts is the real determining factor in how they develop and articulate their theory of human nature.² We can imagine (overlapping) “territories” or niches within the ecology of approaches to human nature which each centre on one of these spheres. Consequently I devote the first three chapters of this thesis to influential examples within each of these areas, with the aim of discerning what characterises their common approach to human nature. In the fourth chapter I consider a generalised, critical approach to the very idea of human nature, which I nevertheless argue also reflects certain assumptions about what makes us human – in essence constituting a

1 See Toddington & Beyleveld (2006) for a discussion of this; however their conclusions differ significantly from my own.

2 And consequently in how this affects their approach to other questions which make reference to it.

fourth territory on our map of human nature theories. I conclude by suggesting that we can identify which spheres are most appropriate to serve as a starting point in discussing human nature, and tentatively suggest what such a human nature theory might look like.

Assessing Human Nature

First, however, we should briefly consider some of the ways in which the concept has been discussed before. Human nature has usually been portrayed as separate from, and often in conflict with, culture. The division appears in the distinction between *nomos* (culture/convention) and *physis* (nature) in some of the earliest classical philosophical thought, finding expression in the histories of Thucydides and Hesiod, in the sophists and of course in Plato and Aristotle. (Kahn, 2003; Sahlins, 2008:16ff) The result of this division was that “nature” came to be treated as static or immutable, whilst culture was more changeable, or ‘fragile’, as Marshall Sahlins puts it. By contrast, Kenan Malik (2002a: 40-1) attributes the emergence of a tension between nature and nurture – another instantiation of a division between nature and culture – to Cartesian dualism, wherein the concepts of a “mechanical” body and a free soul or subjectivity serve to divide individuals into two competing forces. Regardless of its exact origins, this theme resonates throughout the general idea of human nature, and gives it its power: the idea of inviolate nature reinforces its ability to rhetorically ground normative claims – i.e. claims that we ought to take a particular course of action, either for its own sake or because of some resultant outcome such as cultivating a virtue or habit. Even in Aristotle, who could be argued to blur the distinction, or at least to see a reciprocity between the two sides, it serves this function.

Of course the separation of nature and culture has helped generate the perception of conflict between the two: they have often been seen as competing forces acting against one another. Unsurprisingly this has lent itself very well to the identification of one side as “good” and the other as “bad.” Thus much of the discussion of human nature has typically taken place against a backdrop of the competing claims of two basic themes or tropes: violent, atavistic nature barely contained by culture, verses virtuous nature corrupted by defective culture. We can generally classify these as the Hobbesian

paradigm of a disordered and violent nature that requires restraint, juxtaposed with the Rousseauian paradigm of a “noble savage”, naturally benign and peaceful, made sick by the intolerable impositions of toxic social norms.

These paradigms do not necessarily originate in Hobbes and Rousseau, however. For example there are “Hobbesian” elements within Christian and Islamic thought – both have various interpretive traditions that represent human nature as in some way dangerous or corrupt, and at least in the former case this position informs Hobbes’ own perspective – with particular reference to sin – although it should be noted that genefrally they believe in the power of reason and faith (either in concert or with the former revealing the true wisdom of the latter) to guide human beings towards a negation of this corrupt (element of their) nature. (Stevenson *et. al.*, 2013: 115ff, 137ff) These traditions are not exclusively in one camp or the other. Within Christianity for instance there is a gap between the Hobbes-like Augustine and the somewhat more Rousseau-like Aquinas. (Stevenson *et. al.*, 2013: 154-156; Trigg, 1999: 35ff)

The main point here, however, is that whilst certain traditions and thinkers clearly pre-date both Hobbes and Rousseau, the English political scientist and the French *philosophe* represent the extreme ends of the spectrum, and thus lend their names to these positions, acting as convenient ciphers for certain morally-inflected theories of human nature as it relates to society.³ Hobbes in particular is taken to be a primary model for, and culprit in the rise of, a particular kind of theory of human nature. Mary Midgley (2010) identifies him (alongside Nietzsche) as a critical influence in the intellectual inheritance of gene-first Darwinian (pop-) evolutionary theory. In her eyes the Hobbesian paradigm has influenced the thinking of certain scholars, who have approached human nature with the preconception that it is a disruptive and antagonistic force (in this more modern incarnation, selfishness at a genetic level that pits individuals against one another, even though they may not realise it) in need of tempering through the influence of culture. Steven Pinker, for example, cites Hobbes as a credible early model for his view of human nature and is content to include Rousseauian views of human nature in his list of targets in *The Blank Slate* – alongside what is ostensibly his real target, the *tabula rasa* view – on the basis that they deny some fundamental

3 Nor, of course, is this a particularly “western” phenomenon, for example Xun Zi held that ‘Human nature is evil, and goodness is caused by intentional activity.’
I discuss the normative valencing and significance of human nature itself in more detail below.

darkness within human nature which he thinks is inherent in us as a species. In doing so he further vindicates his central thesis – that liberal society helps tame human nature – by denigrating those theories that think culture is a negative force opposing an inherently benevolent nature. This suggests that, at the very least, the *assumption* that theories of human nature may be divided into Hobbesian and Rousseauian types still exists.

The Move Towards A Naturalistic Human Subject

Against this backdrop there is another point of contention, one concerning whether or not human beings are in some way exceptional, or else “merely” another kind of animal. An early precursor of this can be seen in the Platonic school of thought, wherein rationality and intellect are attributable to the presence of a soul which is only contingently present in a given body: the imperfect material world is the place of the physical body; human souls inhabit these bodies and imbue us with rationality. The presence of a soul, then, is rather like a special quality that separates humans from other entities in the material realm. This attitude found itself replicated to a large extent in Aristotle, for whom the characteristic activity of human beings – that which is unique to them and gives them their *telos* – is to be rational. It is also expressed in the theological notion of a Great Chain of Being, the cosmological hierarchy according to which humans were set above animals by God who himself sat at the pinnacle of creation. According to some conceptions of human nature, however, we are much more similar to other living creatures than this kind of view believes. In these positions those qualities or properties which make humans special or unique are seen as being actually more contingent and tenuous.

On this view there is no particular quality or set of qualities that separates human beings from other animals. Rationality may be simply an extension of problem-solving abilities and the limited cognitive faculties of other, less complex animals. Morality could be a codification of sentiments necessary for members of any given social species to coexist in (relative) harmony. According to the materialist philosopher Julien Offray de La Mettrie, for instance, thought is simply the result of the excitation of matter (specifically neurological matter: the brain and nervous system). Changes in matter and its organisation affect thought and mental processes, and therefore, says La Mettrie,

there is no real difference (beyond the complexity of the organisation of said matter) between human thought and the sensory world of animals. In this he contrasts sharply with his predecessor René Descartes. For Descartes humans, like animals, are machines; however humans, unlike animals, are rational, they have a soul which endows them with self-awareness, which in the Cartesian system elevates them above other, unthinking biological machines. La Mettrie, on the other hand, did not deny that humans can think, but saw nothing particularly special to distinguish thought from other functions of biological “machines” beyond the material complexity it requires (an outcome which he attributes largely to luck). (Kramnick, 1995: 181ff; 202ff) Both of these writers subscribed to a mechanistic world-view, essentially agreeing on the basic principles of human physical ontology. Their disagreement stems from something more subtle in their interpretation of human nature – its uniqueness and where its true essence lies – even whilst working within very similar paradigms.

This divergence of approaches carries on into contemporary discussions, and is largely independent of other factors related to what certain scholars think human nature is and where they locate it. Psychologists like Melanie Killen regard human capacities as similar in kind to those of animals (Killen *et. al.*, 2011; Killen & Cords, 2002) whilst Kenan Malik, (2002a) also a psychologist, robustly objects to the treatment of humans as “just” another animal. In chapter two we shall see another example of this divergence in interpretation, in the work of those who deal directly with the question of animal behaviour. In this case, although both sides operate using the methods and perspective of comparative ethology – comparing human and animal behaviour and cognition, as a means to understanding human nature – they come to different conclusions about what makes humans distinct, and to what degree. Notably, these more modern forms of this debate are concerned less about souls (or their nature) and more about rationality, cognition, the nature of the subject, or language, and their role (if any) in making us *distinctly* human. (Trigg, 1999: 187)

These developments also highlight how recent iterations of the human/animal distinction have taken on a new dimension, or at least a renewed emphasis, with the rise of evolutionary theory and a kind of “biologising” of human nature. As the notion that humanity is one evolved species amongst many has become more embedded, so too has the idea that it can be studied with the same tools as other species. Obvious early

examples include those who saw themselves as Darwin's direct intellectual inheritors such as Francis Galton and Herbert Spencer, both of whom sought to apply the principles of evolutionary theory as they were then understood to "improving" the human species through eugenics. In Spencer's case especially, the goal was to further improve the human stock, and to create a more consistently moral human animal, one perfectly suited to eighteenth century liberal democratic citizenship. (See Trigg, 1999: 115; Loptson, 2006: 146-8)

Not all positions that attempt to incorporate this new perspective on human beings are necessarily so tainted by the spectre of eugenics of course (and, as intimated above, nor do all of their adherents necessarily think of humans as unexceptional). There is a broad range of approaches which might reasonably come under the heading of evolutionary or naturalistic human nature theories, a number of which I will examine in detail in subsequent chapters. Most contemporary incarnations are content to frame their psychological and behavioural descriptions of human beings within an understanding of humanity as an evolved species, and to apply similar standards and methodologies to humans as to animals in their studies. In other words, whilst the idea of guiding human evolution towards certain ends has deservedly fallen out of favour, there is still a strong sense that human nature as it presently stands is inherently connected to the human animal and its evolutionary history. This is not to say that human nature is now the exclusive purview of evolutionary theory, but the two are closely associated in current debates. This is especially so in the case of those suspicious or hostile to the (mis)use of the evolutionary approach. (Rose, Lewontin & Kamin, 1990; Malik, 2002a, 2002b; Buller, 2005; Tallis, 2011) Humanity's existence as an evolved, biological species has become something of a battleground for defining or denying human nature (particularly in the debates surrounding the biological work of Richard Dawkins). There is a certain appeal, connected to the normative power of "nature" discussed below, in being able to connect such a far-reaching concept as human nature to a naturalistic subject such as the human species. As we shall see in chapter four, this raises the suspicion that such naturalising projects are really illicitly legitimising particular, contingent conceptions of human nature.

Given the above, it is perhaps unsurprising that generalised discussions of human nature theories have tended to include Darwin or Darwinian concepts in the spectrum of theories they examine. Yet Darwinian approaches are obviously only one perspective to be included amongst many. Most discussions of human nature theories still devote much of their time to a variety of approaches to human nature – traditional and contemporary religious, philosophical and political conceptions of what human beings really are. Most such surveys tend to focus on a series of discussions of iconic approaches to human nature, picking out a selection of individuals and/or traditions to examine. This is strikingly true of *Twelve Theories of Human Nature*, expanded from a mere seven theories with the addition of two more authors over the course of several editions. (Stevenson *et. al.*, 2013) Each chapter is an essentially self-supporting discussion of a particular position on human nature. This approach has the undoubted advantage of treating each position (for example Aristotle's ethics, Buddhism, Kant's rationalism and so on) individually, thereby avoiding instrumentalising them to conform to an overarching theme. However this also makes it more difficult to draw comparisons between each position beyond those areas where particular authors/traditions share common interests or opinions (if they consider the role of dispositions such as love or reason to be important, and how; or if they agree over whether human nature is corrupt or saintly).

Some authors, such as Roger Trigg (1999) attempt to trace the historical development of human nature theories through a series of influential intellectual landmarks – not in terms of a single theoretical movement but rather as a broad area of discourse, including the development of – and debates between – differing positions. By doing this we can trace the shifting role that certain concepts, such as rationality, play in the ways people have variously understood human nature, as well as the tensions between the “Hobbesian” and “Rousseauian” views on intrinsic human goodness. Again, treating influential thinkers or cultural traditions individually ensures a fuller, more comprehensive account of each, but restricts the overall argument to a rather light-touch approach with regards to what it means to study human nature. Effectively we are left with a survey of different varieties of human nature but little in the way of a dissection of how and why these varieties come about. This falls short of what I want to do in discussing human nature theories. Peter Loftson (2006) appears to try and

compensate for this by introducing his own survey with a chapter framing his overall argument, as well as a postscript (*Ibid*: 251ff) in which he attempts to argue for the possibility of synthesising an intelligible comprehensive approach to human nature. In both instances he argues in favour of a human nature theory, to be taken as the product of some as yet undeveloped synthetic approach, and rejects the idea that the culturally situated position of scholars poses an insurmountable barrier to forming an accurate idea of human nature.

Other, less generalist works focus on specific issues either within certain approaches or within specific debates about human nature. For example Stuart Toddington and Deryck Beyleveld (2006) explore the idea of human nature in terms of a connective conduit between social structures and individual agency that explains how the latter retains its spontaneity in the face of determination by the former. Elsewhere political scientist Gary Olson (2013) has argued that socio-political conceptions of human nature must take into account empathy and emotional affect. According to Olson this is an aspect of human nature which has been ignored in political debates, one which ought to be reconsidered as both political issue and political tool. (In pursuit of this he concludes that we ought to import ethological sensibilities and findings into political conceptions of human agency.) Much of the work of primatologist Frans de Waal – in both his scholarly and more populist work – has also been aimed at building a detailed case for paying closer attention to empathy and cooperation. Similarly Midgely's *The Solitary Self* (2010) argues against the atomistic conceptions of selves, individuals and agency that she believes have proliferated in the common (Western) idea of human nature, although it is not clear whether this represents a rejection of human nature *per se*, or rather extends her earlier critique of certain approaches in *Beast and Man* (1995), where she argued in favour of a broadly naturalistic approach to humanity. Conversely, Marshall Sahlins (1977; 2008) and David Buller (2005) certainly do argue against the very existence of human nature, and do so from a starting point of ostensibly criticising biologicistic and evolutionary accounts, before broadening out to encompass all attempts to form general conceptions of what makes us human. In this respect, Sahlins and Buller represent a position hostile to the very idea of human nature which is based on roughly similar grounds to those who argued for the separation of humans and animals. Specifically, attributes like language and culture, on their view, render human nature

unintelligible. What makes us human is transmitted through culture and through linguistic frameworks specific to a certain time. Accordingly human nature is effectively overruled – any innate tendencies our species may once have had are treated as vestigial and impotent – washed away by the complexity of language and culture.

An alternative and equivalent reading is that this complexity makes generalisations about human nature impossible given the variety of cultural forms in existence and the ubiquity of culture in an individual's life: it is simply impossible to divide the world of human existence into constituent parts, some of which are “nature” and some others “culture”. Malik, (2002a) expresses a similar position, and adds that “reason” in particular makes many attempts to unpick human nature futile, since our capacity for abstract thought escapes what he considers to be the atomistic approaches of ethology and computer modelling.⁴ These qualities, or elements very much like them, make human beings resistant to the kinds of enquiry which treat them as evolutionary or ethological subjects. The upshot, according to these human nature sceptics, is that human nature has effectively no causal role in human life (if it can be said to exist at all) and is explanatorily superfluous, if not actively misleading and harmful. We shall address this latter issue in more depth in chapter four, where I call into question the efficacy of such critical claims in order to defend “human nature” as a useful concept.

Human Nature, Politics and Normativity

Of course the obvious political implications of human nature only serve to underscore the importance and utility of the idea itself. It represents a form of self-knowledge (ethical, existential or possibly even psychological) that is intuitively appealing as a reference point. I believe this to be the most important aspect of the concept of human nature, so that here we can set aside the idea that it is somehow about biologically distinguishing us from other species or stolidly defining us with a “laundry list” of characteristics and properties. Human nature is about what we are: (ethical) knowledge that seems intrinsically pertinent to understanding who we are and our place

4 Malik includes a broad range of targets, from gene-first Darwinism to ethology to artificial intelligence studies, in his attempt to defend agency and subjectivity as the cornerstones of human existence. This may, as I point out in chapter four, constitute its own unintentionally (and ironically) expressed theory of human nature.

in the (social) world. Hence, as a term, it has a rhetorical appeal that can be used to justify normative claims in other spheres. Human nature represents something primal, essential, objective or all three. As one commentator notes: ‘an appeal to human nature, like an appeal to God, is to invoke a seemingly independent arbiter to sort out our affairs.’⁵ (Malik, 2002a: 24) Human nature can be – and is – used to settle arguments beyond its own remit. As a consequence we ought to be cautious about the claims we make about it, and a taxonomy of human nature theories will help us with this aim.

This rhetorical and didactic appeal is, however, itself an extension of the appeal of nature in general. Scholars of history, science and natural philosophy are therefore unsurprisingly interested in the way that the symbolic or totemic power of nature manifests itself beyond the study of nature. In such diverse areas as values, morality and political contestation, nature acts ‘as an allegedly neutral judge’ and those who study it are ‘allegedly disinterested interpreters of nature’s verdicts.’ (Daston & Vidal, 2004: 7; see also Malik, 2002a: 21-5) Because it represents a standard that supposedly transcends the limits of convention and opinion nature has (paradoxically) been appealed to as an arbiter of correct and proper action, both in terms of politics and personal behaviour. (Vidal, 2004; Allen, 2004: 82-5) Nature is a potential source of value that goes beyond typical modes of reasoning and rationality, one that exists independently of other spheres such as economics or politics. (Price, 2004: 194-201) “Nature” looks as though it acts as a convenient heading for the way things just are; the patterns of the world as they operate outside the realms of human determination. It has also been pointed out that the objective character of nature reflects back on its own study. The elevated status of nature demands a certain propriety in the pursuit of natural knowledge, so imbuing nature with value in turn sets standards of appropriateness when dealing with it. (Daston & Galison, 2010: 39-41; see also Daston, 2004)⁶ This should be unsurprising since, if the interpreters of nature are in a position to hand out these disinterested verdicts, they must themselves be seen to be beyond reproach, especially in matters concerning that which they are interpreting.⁷

5 He continues: ‘Humans no longer have to take responsibility; God or Nature will.’ We will examine the motivating critique behind this complaint in more detail in chapter four.

6 Lorraine Daston (2004) also notes that enlightenment naturalists’ legitimisation of their investigatory practices contributed to the establishing of nature as a repository of specific virtues, through their attempts to connect even the tiniest observations of their studies to the overarching whole of monolithic “Nature”.

7 In this respect they are analogous to priests, or the attendants of any such similar source of value.

The power of nature is also revealed in its association with regularity and predictability. (See pages 19-22, below.) The image of nature as lawful, and of certain observed regularities as being governed by laws of nature, underwrites much of its persuasive potential. “Nature” and “natural” give a semblance of permanence and stability to positions in need of rhetorical support. Somewhat tellingly, the tendency to talk in terms of natural law was itself more one of rhetoric, which *portrayed* nature as regular and lawful, rather than being an accurate depiction of the *study* of nature at the time. (Roux, 2008; Steinle, 2008) Regardless of such niceties, however, the term nature and the image of naturalness have power, which makes them useful tools for those seeking to make a political point, or contribute a hazardous source of reification in cases of insufficient scholarly self-reflection.⁸ Society, monolithic as it sometimes may appear, is still conceptually a human institution based on convention, whilst nature appears to be governed by other means entirely.⁹ Consequently aspects of society (or behaviour, ethics and so on) with which we agree or disagree can be bolstered or countered by appealing to their respective naturalness or unnaturalness, at least rhetorically. Nature thus acquires an authoritative status in questions beyond those of how it works, both in its role as an independent repository of value and in its immutability.

This moral weight given to nature appears in a variety of contexts and cultures. Both the stoics and the Confucian tradition saw the natural order of things as inherently positive and virtuous. For his part, Aristotle backed up his thoughts on ethics and the state (the *polis*) by appealing to humanity’s nature as a political animal. (See *Politics*: 1252b, 1253a) Even today less developed civilisations are lauded by some as being more “in tune” with nature. Of course this inherent rhetorical potential of “nature” need not always be positive, but it does lend – or is used to lend – an added power to associated claims about politics, ethics and the social order. This is doubly so in the case of *human* nature, as evidenced by the tension between the Rousseauian and Hobbesian camps. In one instance humans have a natural virtue and benevolence, in the other they are inherently prone to anti-social acts. In both cases something about the nature of

8 See below for a treatment of this latter question of reflexivity.

9 Natural laws and laws of nature, after all, are not subject to the legislative processes that human laws are.

human beings serves to justify how humans should behave towards one another and/or organise their lives and social institutions.

Saint Augustine is a paradigmatic case of this. He saw humanity as being locked in a battle between their rational, God-given will and their baser (often libidinous) desires. According to the doctrine of original sin that he developed, postlapsarian human nature is fundamentally amoral (literally we have no inherent drive to be good, and so constantly threaten to lapse into sin). After the fall of Adam and Eve the human spirit was weakened, stripped of a disposition towards the good, leaving us unable to fully resist evil – further injuring the will by enslaving it to material desires. Furthermore this state was passed on to their descendants, so that all of humanity was similarly mired in sin. As such only God could grant salvation through divine grace, although for Augustine this can only be demonstrated through repudiation of sin and acting in accordance with divine edict. (See his *Confessions*: 7.13.19; see also Mann, 2001)

Human nature thus provides him with not only an explanation for the existence of evil, but also a *modus vivendi* – it dictates how the faithful should best live their lives. This Augustinian doctrine had a profound influence on the conception of human nature within the “west”, with some modifications such that later Christians reserved a place for earning salvation through righteous, often ascetic, devotion and belief. This intellectual inheritance has resulted in a generally negatively-charged interpretation of human nature, leading some to regard the very concept as a tool of social control. After all, if human nature is regarded as “fallen” then it makes it that much easier to advocate for social conventions meant to repair or “redeem” such a nature. This influence makes itself felt even in the avowedly naturalistic example examined in chapter one – there we shall look at gene-based theories of human nature, in which humans are again portrayed as amoral, and naturally inclined to serve their own interests. The human nature it presents is fractious and bereft of an inherent drive towards a positively ethical life (or else filled with equally negative or atavistic drives that balance out any innate moral sense). Accordingly, certain recommendations are made on the basis of this conception of human nature about the way we should organise society in order to sublimate its worst aspects and improve its moral status – strikingly similar to the Christian admonition to repudiate sin and act virtuously so as to gain redemption for our fallen nature.

Nor, of course, is this a uniquely Christian interpretation. Anthropologist Scott Atran relates speaking to mujahideen as part of his own research on religion and human decision making. On being asked whether children switched at birth would become good Muslims, ‘nearly all’ gave a response similar to the one he got in an interview with ‘the alleged emir’ of Jermaah Islamiyah Abu Bakr Ba’akir:

Human beings have an innate propensity to *tauhid* – to believe in the one true God. If a person is raised in a Jewish environment, he’ll be Jewish. But if he’s raised in an Islamic environment, he’ll follow his *fitrah* – nature. Human beings are born in *tauhid*, and the only religion which teaches and nurtures *tauhid* is Islam. ... If [a child] is born in an Islamic environment, he’ll survive. His *fitrah* is safe. (*Op. cit.* Atran, 2010: 14-15)

Here the emphasis is less on a fallen human nature in need of fixing, and more on a metaphysical essence that is liable to become ‘broken’ in the wrong circumstances. Thus there remains a moral imperative to living in the correct way.

Such usage only underscores the importance of discussing human nature and theories of human nature. Ideas about human nature influence our folk psychological conceptions of what it means to be human,¹⁰ and as we shall see in chapter four, we cannot seem to do without them: they keep reemerging. At the very least they have a rhetorical, but also, I would argue, a genuine political utility and power that has an enduring appeal. We find it difficult to discuss how we live or should live without invoking some idea of who or what we are. So we really ought to discuss the issue openly. The question is, how do we analyse and evaluate the plethora of human nature theories, and perhaps equally importantly: how do we go about formulating a “definitive” human nature theory for ourselves? To do so we need to ask three questions: what is nature? What do we mean by human? And where do theorists generally start when trying to describe human nature?

What is Human Nature?

The first task is to consider what we mean by the term human nature, with the main emphasis on the second term, nature. If nature can be seen as a (supposedly

10 Which is why the gene-first Darwinism of chapter one is such a powerful breed of human nature theory: its prevalence in the popular science literature gives it a cultural caché far more widespread than just the biologists and psychologists who articulate it.

immutable) repository of value then human nature is simply a subdomain of nature which pertains specifically to human beings, with a concomitant “added value” for human subjects. Conversely the concept “human” is relatively simpler to pin down, as a designator relating to a certain kind of beings (which we could also refer to as *Homo sapiens*).

What is Nature?

Thus an appropriate place to start would be a consideration of some of the ways in which we approach nature in general. The main feature has already been alluded to above – it is whatever is not the product of culture, or human artifice. As a rule, nature is thought of as the opposite of culture and conscious modification, or at least as the absence of these things. In trying to define or conceptualise the natural world we do so in terms of a contrast with the ostensibly human, cultural world. Another way of thinking about this is that nature is what comes before society, culture, and human action more generally. In some sense it provides a resource that is transformed or a basis on which to build. So some philosophers, such as Hobbes and Rousseau, posit a “state of nature” that came before the political community. In these conceptions said nature is structured such that there are good and bad paths to take with regards to that political community – given what we know about the state of nature we can determine how best to proceed.

Unsurprisingly ecology and ecological thought have called attention to an additional complexity here. Considering nature as a sphere distinct from culture is itself an artificial construct, in the way that we demarcate what is and isn’t “natural”. By existing within nature we automatically become entangled with it, notwithstanding the tendency of any animal to alter its environment in some way, and thus subsuming its activity within the general sphere of nature. By contrasting our socio-cultural formations with nature we *create* this self-same division between the two. William Cronon calls attention to this with respect to the idea of “wilderness”. We imagine wilderness as raw nature, untouched by human intervention. However in reality wildernesses are highly artificial, being created by legislative and political constructs which demarcate areas as nature reserves or protected land. (Cronon, 1996; see also McKibben, 2003) Furthermore such places are often patrolled and cultivated by

professionals (such as rangers) tasked with maintaining and preserving these areas in a particular state, usually with regards to some requisite level of biodiversity. Wilderness and nature emerge as somewhat fantastic, or as an imaginary Other that serves to demarcate our (cultural) selves. Analogously, in Larry Niven's novel *Ringworld* the protagonists encounter an entirely artificial world; an immense ring with landmasses and seas built into the inner edge. The world's designers constructed areas of wilderness, and the local inhabitants treat their world as natural – even mistaking the curve of their ring-shaped world as a great arch, standing over their heads – but the entire structure has been designed. As wild and natural as the world looks from the ground, the novel's protagonists – from their position as outsiders – know they are standing on an artificial structure and treat both it and its inhabitants as remnants of the same (now defunct) society. It is thus safe to say that the division between nature and culture is permeable, and largely a matter of pragmatic convenience. It is certainly not a clean ontological split.

Clearly this will have some repercussions if we imagine possible analogous relationships in other discourses about nature. It becomes difficult to determine what is natural or unnatural, what is really characterised by the absence of cultural or agential mediation. Supposedly natural remedies have undergone cultivation, harvesting and processing by human hands (not to mention rather sophisticated marketing strategies) whilst synthetic pharmaceuticals may ultimately be based on the chemical composition of naturally occurring compounds.

So it may be with *human* nature. Whatever makes us human which is not rooted in culture, which is not attributable to our socialisation and social constraints, can conceivably be considered to be our nature. However the same issue confronts our conceptualisation of human nature as it does our conceptualisation of nature above, namely how to extricate nature from culture when the former is so often conceived of as simply the absence of the latter. Given this, how do we untangle our own nature from its socio-cultural trappings? If we have misdiagnosed some cultural affect, in particular if we entirely fail to identify some part of ourselves as cultural in origin¹¹, then we would risk mistakenly investing it as a part of our nature. The child and developmental psychologists featured in chapter two offer a potential response to this: their subjects are

11 Effectively the accusation levelled by some of the critics when they argue from provincialism or historicism, see chapter four.

young enough to be largely free of cultural influence. In fact much of their work could be construed as tracing the gradual encroachment of culture on young humans' developing faculties. By studying the behaviour and (once verbal) reported judgements and opinions of infants and young children these researchers can approach human beings in as culture-free a state as possible. However this solution comes with a trade-off: such a human nature would then lack the contextualisation of fully grown human subjects; it would not represent human nature as it is instantiated in the majority of actual humans (this is the contention and focus of those theories dealt with in chapter three).

An interesting, if perhaps problematic, point we can derive from the above is that nature is often defined negatively. Noticeably, as well as being that which is not derived from culture, nature is also thought of as non-supernatural. Nature constitutes the world of non-supernatural cause and effect. So there are, by definition, no divine influences or entities in nature, though in various mythologies such things may be taken to make themselves felt in the natural world.¹² This actually harmonises well with the Augustinian narrative on human nature, since in that case living well means repudiating our fallen nature in an attempt to live in accordance with the divine (i.e. supernatural) world. At best we are left with a definition of nature as something more or less self-contained and self-sustaining: we shouldn't have recourse to external influences to explain natural phenomena, it should all be present in the same ontological world. However this, of course, returns us to the problem highlighted by the ecologists once we start trying to distinguish between what is "really" natural and those things which are the result of externalities such as human agency.

Natural Stability

Another way of considering nature is as a set of immutable regularities.¹³ It stands as a constant or set of constants which appear to us as simply the way the world works. (Farber, 2000) A common phrase used to capture this idea is the "law of nature", a term that rose to prominence in the maturation of natural philosophy and its

12 Through miraculous divine intervention, illusions perpetrated by malevolent and devilish entities, the actions of animist spirits or the Kami of the Shinto tradition, and so on.

13 This ties into the contrast with nature, since culture is more clearly amenable to modification and change via conscious action.

transformation into science. In the seventeenth century – the common origins of our scientific and philosophical discourses on nature – the idea of a “law of nature” was invoked not just in natural philosophy but also in the explanations of the social and psychological functions of people. A law of nature was taken to be an axiomatic statement of the underlying guiding foundations of a behaviour or activity; the rule in accordance with which a thing acts. Like a platonic form, law was thought to be an expression of the regulating and regular aspect of the universe. It also did double duty, allowing natural philosophers of the day to respond to criticisms of atheism, by demonstrating that a law must have an author and that such an author, in the case of natural laws, could only be God. (Steinle, 2008: 226-227, 230; Roux, 2008: 207-213) But perhaps the most important feature of natural laws was their fundamental and universal character. They applied at all times and in all places.¹⁴ The central premise was that a phenomenon of a given type could be traced to a single common cause. Thus certain phenomena, be they optics, weather patterns, gravity or anything else naturally occurring, could be described as having the same general cause whatever location they occurred in. (Roux, 2008; Joy, 2006: 85, 91-92, 102)

The very idea of a lawful nature has obvious similarities with other types of law prevalent at the time. Theories of juridical and divine law permeated the intellectual climate, and they clearly had an effect on the ways people thought about other kinds of law, even if the relationship was not always an easy one. This was a climate in which people worked in a variety of fields, and usage of a term in one did not automatically mean that the same author would necessarily appeal to it in the same way (or at all) in another. (Ahnert, 2003; see also Pyenson & Sheets-Pyenson, 1999: 397-400) However since the universe was supposedly determined and guided by the dictates of each thing’s internal “nature”, conforming to lawful behaviour according to the laws instituted by God, the law of nature in any given context was a manifestation of God’s will. As civil laws were laid down by the sovereign power, so were natural laws laid down by God (the ultimate sovereign power).

An idea of nature as lawful also makes its presence felt in the idea of normative natural law – a prescriptive law set down by nature – and thus also worked its way into

14 This point was not without its controversy, since it raised questions about the nature of miracles and the efficacy and character of God’s will. (Roux, 2008; cf. Pyenson & Sheets-Pyenson, 1999: 395-397)

conceptions of *human* nature during this time. Whilst laws governing human *behaviours* were of a different kind from laws governing the activities of exterior nature, the very idea of a “law” implies they could still be considered to be just as universal and just as determinate as any other natural law. Human beings were seen as being subject to their own laws, or rather there were some natural laws which were concerned with human behaviour. As such nature was perceived as directly setting codes of conduct and as providing norms of appropriate behaviour or action. Thus in discussions of society or morality the laws of nature could and would be appealed to in order to ground certain normative claims. (Allen, 2004; Larrère, 2008) Laws of nature, qua statements about the fixed constants of the universe, were thus a feature of many aspects of early modern and enlightenment thought. At the individual level, especially in (juridical) practice, the focus was on nature as benign and binding, whilst the concept of being “unnatural” and going against the natural law was considered manifestly worthy of condemnation. (Puff, 2004: 237-239, 246-249; cf. Outram, 2005: 80-81) It was thus just as much a polemical rallying point and disciplinary category as it was a philosophical doctrine. The law of nature could also be used as a supposed guide to ethical and psychological hygiene, quite often linked to some concern with sexual practices. (Puff, 2004, Vidal, 2004) Noticeably, these instances imply that both the law of nature and the natural law could be broken – how else could some act or some individual be unnatural? This reflects a degree of inconstancy in the idea of laws of nature as universal and fixed features, since a notable feature of laws is that they may be transgressed, and therefore cannot represent something that is *ipso facto* immutable.

Taking a closer look at this intellectual history we can begin to call the idea of a lawful nature into question. Laws suggest a definitive statement, but what was (and is) articulated in relation to nature is actually quite different. “Laws of nature” were really formulated in retrospect, to codify what had been discovered about nature; they were not the transcription of pre-existing edicts. In both nature and human nature we see the expansion of the use of law-talk to represent nature’s order coinciding with a loosening of the concept, to account for the lack of order or uniformity in (some of) the things it was used to describe. Theoretical and philosophical thought focused on the concept of “a law of nature” even as practical examinations rendered scholastic descriptions of

these principles problematic, and Lorraine Daston draws our attention to the disunity between the way the concept of a law of nature was thought about and how it was actually developed in application. (2008: 235, 242-244) In practice regularities were often recognised as conditional, and some people preferred to apply the name “rules” to them rather than laws. This tendency was embedded even in some of the earliest developments of ‘law-talk’ in natural philosophy – whilst the concept of a law of nature pulled a lot of weight rhetorically, in practice there was difficulty in the idea of calling the regularities being sought laws. (See Steinle, 2008) In fact it is worth pointing out that, as Sophie Roux notes regarding natural philosophy: ‘Not only do these texts [on the character of universal natural law] not produce any science, they are behind the science of their own time’. (Roux, 2008: 213) Only when “laws” became associated with empirically established regularities¹⁵ towards the latter half of the seventeenth century did the term increase in usage amongst the natural philosophers of the day, and Steinle notes this required a broadening of the term itself. (2008: 218-220, 223-229; see also Joy, 2006: 102-103)

So whilst early modern science affirmed the regularity of nature, it initiated an openness to revision with regards to our knowledge of these regularities. Nature came to be viewed as predictable, but our descriptions of it were not presumed to be absolute. We see this reflected in such perceptions today. Although “law talk” still persists to some extent it no longer has the same forceful or literal meaning it once did. The subject of such a law may still be treated as though it were dutifully obeying a command, but no-one seriously believes any such command has ever been given, and furthermore we hold open the possibility that the “command” is in actual fact being filtered through a chain of intermediary processes. (Joy, 2006: 90-91; Carroll, 2011; see also Cohen & Stewart, 1995: 217-222) If law *is* seriously invoked it is in a more metaphysical vein. These putative natural laws are the fundamental rules of the universe, and whilst they might pertain to phenomena in the everyday world, they will not necessarily be perceptible, given that such phenomena might be the result of many such laws. (Mumford, 2004; cf. Buller, 2005: 451-4) Whereas in the early Enlightenment laws could be thought of as ‘placed at the top of a deductive system’, albeit one based on observation, the new regularities can be thought of as some basic principles which

15 Rather than unvarying absolutes.

underpin observable phenomena, discovered (with the proviso that such discovery may be disproved or superseded) via deductive and inductive reasoning, as well as a certain amount of inference. (Steinle, 2008: 218; Mumford, 2004)¹⁶

Thus the idea of a law of nature emerges as an *ex post facto* description of regularities, formulated on the part of human scientific observers, rather than an objective “edict” of nature. The stringent law of nature that comprehensively and definitively governs natural events was a theoretical formulation traceable to Kant, but this was and is simply not how it came to be used by the experimental natural philosophers who took it up. Instead the study of nature has revolved around observable regularities, revised and amended as time goes by. A disconnect thus emerges between the philosophical category “law of nature” and discussions of the apparently law-like regularities found in nature.

The Case of Human Nature

I maintain that something akin to this applies in the case of human nature. Few human nature theories treat what they discuss as an incontestable, unchangeable fact; a trend I believe will be made apparent in the following chapters. In fact most theories are amenable to the idea their theories could be revised (though some are confident such revision would only be minimal: a “filling in” of detail) and/or have an idea that there are various components which interact to make “human nature” rather more unpredictable. For the most part, whilst there might be some “law” – some truly immutable consistency – at some level, that is not necessarily what we are looking at with regards to what is natural about human beings (after all we would not consider physics to be particularly relevant to human nature, although humans are certainly subject to the laws of physics).

Consequently we might regard the concept of human nature as the description of regularities in the human world, once again not attributable to culture (though perhaps marked by mediation by it). However we ought to be wary of seeking inviolable “laws of nature”, not only because such edicts are formulated in retrospect, to *describe* regularities as we observe them, but also because this is simply not what many scholars think of when discussing human nature. It would be more appropriate to regard this as

16 For two scientists’ view on these issues, see Cohen & Stewart, 1995: 13-15, 30-55, 220-221, 397-399

the attempt to locate dependable regularities, to describe and explain them, and this is what we see in the theories covered in this thesis. Although these theories may locate human nature in different parts of the human world, and adopt their own approaches to dealing with it, they can all be said to seek out regular patterns of human existence. In each case we are presented with an underlying consistency innate to the human being. In the case of Karl Marx, to take an example we will come to later, these regularities are fairly minimal, and what really matters for his analysis is how they become transformed through social practice, but there remains a universal structure to consciousness that makes the productive forces he identifies particularly relevant to the question of human nature. In this way even non-biologistic or non-naturalistic essences can be regarded as part of the variety of human nature theories, given that they describe something reasonably dependable in human life.

So human nature may, taking the foregoing into account, refer to an essence or general cluster of properties: humans are pro-social; or have certain moral preferences; or they are intimately bound up with their identity; and so on. It is entirely possible that we could analyse these in natural terms, and even trace them back to a naturalistic explanation, but we needn't be reductive about them nor reduce them to biology (or anything else); it suffices that they function as we've described them and as we've been able to study them. For example, if Jürgen Habermas¹⁷ argues that we have a communicative essence – that is, we are characterised by our ability to formulate and communicate our ideas about the world – we can trace this essence to our “language instinct”¹⁸ and the coordinative necessities of a social species, but this would not necessarily add anything to the Habermasian account. What matters is that if we can determine that such properties or essences are not the product of socialisation or acculturation – and are therefore non-contingent – and occur reliably in human beings *per se* (i.e. cross-culturally), then we may reasonably describe them as part of our human nature. Hence in any eventuality, the concept of human nature refers to that part of human existence which is not entirely “political” in origin.

This returns us to the central question of this thesis of where exactly people look for these regularities. Different ideas of human nature will obviously each possess their

17 See chapter three below.

18 See chapter one below.

own quirks and eccentricities, and many theorists and scholars will delineate what they are discussing in radically differing terms to others. There is no guarantee that they will even use the term “human nature”. Hence the necessity of defining what we mean by human nature within the wider context of a discussion of human nature *theories*. Given the above, I propose that we can regard it in this way: human nature is simply what we just are by dint of being human. What I mean by this is that whatever a given theory claims is our nature (or is “natural” or intrinsic to the human condition) it considers we have it purely by virtue of our own “humanness”, however this is construed (indeed, this construal forms the basis of the taxa according to how I categorise theories in the course of this thesis). That is, human nature is whatever scholars identify as reliably and universally present in humans, outside of (but in most cases only ever imperfectly insulated from) anything socially or culturally inculcated. This definition does not necessarily restrict human nature to some kind of essence, and it certainly does not require that human nature consist entirely of something exclusive to the human animal (although it would include accounts of human nature that involved either or both of these claims). It merely refers to a description of human beings, with an emphasis on innate features or potentialities.

What is Human?

Of course we should pause here to consider the other element of the human nature concept a little more. Having made an attempt to encapsulate what we mean by “nature”, surely we need to do the same for “human”. This is particularly so since the way I have proposed we try and grasp the subject of theories of human nature does not make reference to definition. In other words, I have suggested human nature is something existential or ethical, rather than a matter of definition; theories of human nature are not really about *defining* human nature so much as describing it. Nevertheless, the term human nature refers to something specific rather than the entirety of nature, thus we should attempt to delineate what we refer to when we say “human” in this context.

One way might be to define humans as not being animals, but this is complicated by the previously mentioned divergence of opinion over the continuity between the two. If we are a kind of animal, then to what degree can we identify what

counts as some part of human nature or a part of an antecedent nature? It is difficult to try and further delineate this by appealing to our status as a species, since a species may not be a definitive and unbreachable boundary. In fact evolution depends upon this to work: one species becoming another, quite apart from the phenomenon of hybridisation. Early humans may themselves have interbred with Neanderthals. There is therefore little of ontological significance to being a member of *H. sapiens* that generates some kind of philosophical anthropology, since in a sufficiently large timescale creatures of a certain lineage take on radical changes (we obviously have quite a different nature as ancestral *Pan* or primordial single-celled organisms). A solution would be to claim human nature is not unique to humans – not an Aristotelian characteristic essence – but can be characterised by certain faculties or dispositions which are shared by other animals (especially, but not necessarily restricted to, close evolutionary kin), thus reinforcing the idea that human nature is descriptive. (See also Machery, 2008; Lewens, 2012)

The term “human” must also refer to a very general type of entity, since it not only covers numerous individuals displaying a range of physical and psychological variations, but also to children. These latter in particular might not display certain human faculties that only develop later in life, and conversely could be regarded as being closer to their “raw” nature in other ways, given that they are not yet fully socialised into a particular culture. As such I would propose that “human” denotes a variety of animal that shares a common evolutionary history resulting in our species as it is today, though not locked to a particular genome, nor identical with it, which may share certain similarities with other entities.

Locating Human Nature

On this basis I would argue that human nature is in principle possible (it could exist) and, again in principle, is analysable (it can be studied), yet we still have not addressed the question of how existing theories actually approach and analyse what they define as “human nature”. Clearly the human being exists within a whole host of areas: simultaneously biological, cultural, psychological and so on. My suggestion is that theorists come to explain human existence in terms of those areas relevant to the

phenomena in which they are interested. They form assumptions about human beings based on how we fit into the other theoretical constructs they employ. This results in a varied ecology of approaches to human nature when, in accordance with their preexisting theoretical constructs and areas of interest, these theorists subsequently try to situate that nature within the topography of human existence as a whole.

This topography poses its own challenges, since many human nature theories identify human nature at least partly within its environmental context. These accept that part of what makes us human is attributable to the circumstances we find ourselves in, even if this is somehow linked to how human nature manifests itself in response to contextual specificities. Hence we can divide the field of human experience into two general areas – or, to continue the topographic analogy, “biomes” – that of “nature” and that of “politics” (this latter being a simplification; a catch-all term for politics, culture, economics and so on). Yet these two are divided by an exceedingly nebulous and permeable border, so there is no reason to suppose that any given human nature theory will fall entirely within the sphere of the “natural”. Of course those that do incorporate an awareness of such environmental effects into their picture of human nature conclude that a crucial and characteristic part of our humanity is in fact the ways we engage with each other and/or our social world. (This, after all, is clearly the major part of the human environment.) It is hard to deny that this would imply that such a nature already has a political dimension, whilst also opening up the possibility that its content is at least in some aspects contingent on the political circumstances of the day.

We can consequently create a taxonomy of human nature theories based on which aspects of existence are most commonly taken to be relevant to explaining what we are – how far into the “biomes” of nature and politics they reside. I refer to these groupings as “schemas” given that they are broad outlines describing the structure of these perspectives on the subject of human nature – the specific examples given are themselves ciphers, contemporary instantiations of potential modes of approach. They are broadly representative of the family of theories to which they belong (their schema). In doing so I emphasise the question of where human nature lies; yet it is also simultaneously answered as our attention is directed towards the way such scholars, not always from the same intellectual background (not to mention others who draw on their work and observations), approach humanity. A single schema may encompass a number

of approaches or disciplines that makes either word unsuitable. The term schema also invokes the idea of a psychological schema: an epistemic framework about some part of the world or object of knowledge, which can be adapted to new knowledge but which may also (as a matter of course or through force of habit) prioritise some types or sources of information over others. It should then be possible for us to understand and dissect theories of human nature by considering how the schema under which they fall characteristically approaches the topic of human nature.

The first of the most relevant sphere lies deep within “nature”, in the case considered here biological nature, and can be regarded as the search for definitive rules which will help us understand our own nature. These represent – or most closely approximate – something like a search for laws of nature: ultimate, universal principles – akin to laws of motion or gravitation – on which all human nature is based. A consideration of this schema forms the basis of the first chapter. There I will argue that this runs the risk of reductive functionalism, reducing observable human particularities to their supposed origins in these (evolutionary) principles. The second chapter, then, will focus more on individual humans themselves, with an emphasis on their interactions with one another. This approach I characterise as “motivationalist”, and focus on a set of paradigms within psychology, ethology, and anthropology that focus on motives and the faculties necessary to pursuing these motives. Here humans are often regarded as a variety of natural being – in some instances specifically a variety of ape – a part of nature that we can analyse in particular ways. Most notably these include the kinds of ethological investigations we apply to other, “lower” animals, as well as direct comparisons with such creatures. In the third chapter I discuss a variant of human nature theory that places the emphasis very much on politics, or context, rather than a natural facet of human existence. The schemas of the preceding two chapters pay little attention to the political mediation of human activity and existence. By contrast, here human nature emerges as a composite of some basic human regularities, but these provide very little content. We might, for example, be inherently productive or communicative, but the substantive content of our nature is “filled in” by the particular forms of production or communication we engage in. The contention with these theories is that human nature is conditioned and given meaning by the environment it finds itself in.

These variations require a discussion of how we can or should go about thinking about human nature. Can we draw any conclusions about this ecology of approaches? Are any superior to any others with regards to explanatory utility or accuracy/truth? Rather than cataloguing the various existing human nature theories or selecting a particular conception of human nature and arguing for or against it, I feel discussions on this subject ought to serve as a means of understanding how such theories are formulated, and to assess their ability to really articulate something meaningful about what it is to be human. Ultimately I hope this will allow us to formulate some kind of working theory of human nature. By dissecting existing theories according to a taxonomy based on the loci with which they identify human nature we will be able to identify the most fruitful approaches from which to synthesise a new approach.

The Potential for Outliers or Unclassifiable Theories

As a caveat to all of the above, I do not take the content of theories to be indicative of their particular character except insofar as this content reveals something about the sphere(s) of human existence they take to be constitutive of human nature. (In other words: their specific claims about what human nature is merely indicate where they locate human nature.) Thus it may be possible to argue that the content of some theories not only resists easy categorisation (such that the theory may fall within the borderlands two schemas), but introduces some peculiar quality that makes these theories unique and entirely uncategorisable, since the specificity of this content cannot be compartmentalised from how and where the theory in question grounds human nature. Such may be the case with German philosophical anthropology, a tradition originating in the universities of early twentieth century Germany.¹⁹ Its central conceit was that there are imminent linkages between human beings that perforce lead to inherent requirements for and implications about how we should live. Thus the normative impact of this particular human nature springs directly from how it is approached – as something enmeshed with the interpersonal relations that individual human beings are constantly engaged in. Two of its disciples described it as attempting ‘to grasp “the fundamental structures of humanity” through comparison of man and

¹⁹ And consequently falling somewhat out of the timeline covered in this thesis. However it is included here in the interests of pursuing this particular question and because like Marx and Freud (below) the tradition has had some influence on subsequent figures, albeit to a lesser extent than those two icons.

animal, and through critical examination and appropriation of as many findings of the natural and cultural sciences as possible.’ (Honneth & Joas, 1988: 41) Unsurprisingly, from this description, we can note that some of this “anthropology” was influential in the development of ethology (the study of animal behaviour), which can be considered as one its intellectual children (the other being certain paradigms within social theory).

The requirements created by our social linkages manifest themselves as needs (and, indeed, in some instances wants). For a number of German philosophical anthropologists they are a direct result of our human plasticity – human nature is marked by a flexibility and near-protean indeterminacy, unlike the specific and specialised niches occupied by other species. (*Ibid*, 1988: 53-5, 73-6; Moss & Pavisch, 2011: 147-8) We are capable of redefining our relationship to the environment – social or natural – since we are presented with an almost endless space of possibilities. Thus human nature is considered as the totality of biological facts (including plasticity) and culture which gives them context, meaning and a space of definition. It must be studied with a broad, interdisciplinary approach. (See Wein, 1957) It is, however, the move to culture which shows how needs emerge and give rise to certain human interests which must be satisfied in order to fulfil human nature. Cultural institutions, systems, and relationships serve to narrow the field of possible actions that an individual can pursue, but they do so by providing a context for action. In this way they provide material required for action, in terms of commitments (duties), responsibilities, cultural capital and, of course, physical materials like raw resources or goods (including status symbols). Our ability to engage with these possibilities and materials brings with it sets of expectations – needs and interests – associated with what these contextual determinants are supposedly for. Humans assign meaning and value to their practices and expect this meaning to bear fruit, to play out as expected; and we expect a lot, given that humans are not “locked in” to a meaningful relationship to our environment as a simpler animal which merely wants its hunger sated or a suitable habitat might be. (Moss & Pavisch, 140-1, 159-61; Honneth & Joas, 1988: 52-4) Some German philosophical anthropologists even went further, noting that as human culture becomes more complex and produces more complex systems of relationships and goods human needs and interests proliferate. Not only is (social) activity necessary to engage with and

satisfy these needs, but (social) activity is creating them.²⁰ (Honneth & Joas 1988: 99-101) Consequently human nature – being simultaneously synthetic, syncretic and protean – gives rise to inherent normative conclusions (arising primarily through its plasticity and position on the ever-permeable and indistinct border between nature and culture) and stands awkwardly amongst the schemas here elaborated.

However, as a caveat to this caveat, German philosophical anthropology is not necessarily unique in this emphasis on an inherent normativity. We could potentially reword Buddhist cosmology in such a way as to draw some similarities between it and the European proto-ethologists. Buddhists hold that we desire – we have certain human needs and interests – and that these desires are particular to individuals whilst falling within common categories: we are susceptible to lust, or pride, or we become attached to things like possessions or status. However we also have a universal, general interest in acknowledging our oneness with the universe and our place as part of a larger nature that exists above and beyond our particular human selves. They thus reject certain human interests over a greater, more important one. In order to properly realise our nature we must give up its transient, ephemeral (and ultimately unreal) elements such as desire or the impression we are a separate, isolatable self. The question then becomes one of why one approach demands that historically-determined needs be fulfilled whilst another rejects them utterly. I would suggest that this is resolved by situating them within the landscape of human nature theories elaborated in this thesis. Buddhism locates the most important facet of human nature within a different sphere to the Germans and those influenced by them – it approaches human nature as a part of a wider whole, effectively identifying it with nature in general. Though both have putatively normative implications inherent in the way they construct their theories of human nature, the differences might be thrown into stark relief if we attempt to situate them within the general landscape of human nature theories as I attempt to map it.

This thesis is thus a qualified defence of the concept of human nature, and an attempt to identify the most appropriate place to locate it. However I also want to say that its mediation by a social and cultural environment complicates the issue and makes it difficult to definitively encapsulate human nature in any single instance (without

20 Note, however, that this is largely a recasting of Karl Marx's view on needs, expressed several decades earlier. See discussion in chapter three.

claiming that such mediation renders human nature mute or eternally elusive). If, as I have suggested, approaches are differentiated by schema, and human nature and politics are merely two regions within the same conceptual landscape, then it may not prove possible to simultaneously encapsulate everything about human existence into one approach, even one such as I describe. More importantly, it may not be possible to completely say what human nature is *and* completely say what it is doing. Yet, keeping this in mind, it may prove possible to say what human *nature* is more exactly than previously possible – in part through accounting for its political mediation – and to subsequently import such theorisations into the political dimension – replacing assumed or *a priori* philosophical anthropologies – on condition that the provisional and ongoing character of human nature study is recognised and accounted for. In order to do this, however, we first need to see how existing human nature theories address the issue.

1: The Algorithm

If human nature is basically a set of universal, non-artificial regularities of human behaviour and thought (in short, the natural part of human existence), and if we can find some axiomatic way of expressing these regularities, then it would be appealing to locate human nature at the level of this expression. We might therefore be forgiven for thinking that human nature could be summed up by a description of these ultimate, universal regularities. This first schema might reasonably be characterised as doing precisely that. Its main feature is that those whose human nature theories fall within the scope of this chapter locate a set of ultimate rules from which all the rest of our nature flows or unfolds. They hold that the most important factor in human nature lies in some area that could be said to be, if not foundational, then certainly fundamental and necessary. Here I characterise such a perspective on human nature as an algorithmic one: a conception that understands human nature in terms of some set of principles that produce a result (in this case human existence).

Here I focus on the most prominent modern incarnation of such an approach, the construal of human nature as the outcome of (a particular interpretation of) evolution, and an evolutionary logic as the defining determinant of much of our experience. This is in part related to the emergence of biologised views of human nature post Darwin. A deeper historical (and metaphysical) analogue might be a democritean determinism, by which all that exists, including agents or at the very least the world as they experience it, is the result a deterministic process of cause and effect. Everything that is is only so because of an unbroken chain of prior events, and can be understood as such. (In fact, the philosopher Daniel Dennett invokes a democritean metaphysics in *Freedom Evolves* in order to explicate why free will and Darwinism are sometimes seen as incompatible.) Few now subscribe to a hard determinism such as that espoused by Democritus, however, but other more modern incarnations tend to bring us back to a scientific, biologicistic view of human nature. These would include paradigms such as neurophilosophy and the like, including neuroaesthetics, which describes phenomenological and aesthetic reactions to various artistic forms and media in terms of their activation of neural pathways and physiological changes in the brain, and makes conjectures about why it might be advantageous for our brains to be set up in such a

manner. Although this approach comes in for its own share of criticism (see Tallis, 2011; see also Hatfield, 1988; Churchland, 2013) it is a compelling example of an algorithmic approach. In the Enlightenment of the eighteenth century la Mettrie's idea that our conscious thought was the result of physical excitations of nervous tissue, in part a result of his physiological studies, might have been the closest relation. Nevertheless here I confine myself to discussing a circumscribed set of paradigms within evolutionary theory that approach human nature algorithmically, in terms of the role they ascribe to evolution and the attention they tend to place on genes.

In fact an algorithm is precisely how Daniel Dennett, himself a prominent proponent of this kind of post-Darwinian theorist, characterises Darwin's insights into evolution. In his terms '[an] algorithm is a certain sort of formal process that can be counted on – logically – to yield a certain sort of result whenever it is “run” or instantiated.' (Dennett, 1995: 50) It follows that natural selection is the algorithm of natural history,²¹ and that therefore an examination of that algorithm supposedly informs us about the fundamental workings of our nature. In this chapter I attempt to illustrate the idea of an algorithmic human nature theory via an examination of what we can call “gene-first Darwinism”. I contend that whilst there is some explanatory power to these ideas, and our humanity is undoubtedly underpinned by our physical existence and its origins, such an approach adds relatively little to our understanding of human nature.

The Primordial Origins of “gene-first” Darwinism

There are in fact two strands to this gene-first Darwinian human nature theory. First is the idea that genetics “programs” a being's nature. The important thing for gene-first Darwinism is the idea that this can be extended beyond their physical body, to their behaviour, if we accept that genes also control the development of the brain and hence (at least in part) the being's psychology. Humans could be intrinsically conditioned towards certain behaviours or reactions, a contention that has ramifications for how we relate to interpersonal and socio-cultural experiences. The second strand is the evolutionary process itself, the culmination of which is instantiated in our current

21 For all species; only a set of metaphysical precepts would yield a more universal basis for human nature.

genetic components. What we are now, then, is the outcome of these two processes; the first proximal, the second ultimate. An algorithmic interpretation of this holds that understanding these processes will reveal something of unique import about human nature.

Mendel and the Synthesis Theory

The first step towards the gene-first Darwinian paradigm hinges on the connection between these two strands: the fusion between the theory of natural selection developed by Charles Darwin and the genetic theory of inheritance developed by Gregor Mendel. Working at a similar time to Darwin, Mendel worked out a mechanism by which the inheritance of biological characters was carried out – the main element that his more famous counterpart lacked. His experiments on peas in the gardens of his monastery in Brno gave him some intimation of the means by which one generation's traits are passed onto their progeny. Mendel had gathered data suggesting that characters were affected by two determinants, segregated in the 'germ cells' (gametes). These determinants are now referred to as genes and Mendel even managed to describe how some genes or traits are recessive and others dominant, illustrated through his tracking of the prevalence of yellow peas through successive generations of plants. (Stern & Sherwood, 1966)

Whilst the connection between these 'germ cells' and natural selection was not made at the time (Darwin was ignorant of Mendel's work), in the twentieth century biologists began to see how the transmission of traits via genes provided a crucial mechanism which could complete the theory of evolution. (Olby, 1985: 45-47; 103-104; Rose, 1998: 39-41) As a consequence of Mendelian inheritance biologists could now describe how particular characteristics could be preserved and passed on, via 'particulate inheritance' and the development of population genetics – the tracking of subtle changes across generations – further refined the understanding of these mechanisms. It allowed biologists to trace the spread and variety of characteristics within a species, a prerequisite of modern evolutionary thought.

This gave rise to what is more accurately called the Synthesis Theory of evolution, but is sometimes conflated with the term neo-Darwinism, (particularly by those calling themselves neo-Darwinists and most vociferously advocate for gene-

centric models of natural selection). Indeed, Mendel is often credited with providing the key to particulate inheritance which neo-Darwinists see as completing the groundwork of Darwinism. (Dawkins, 2006: 33-34; Ridley, 1999: 42-45; cf. Cziko, 1995: 23; Ryan, 2002: 64-65) The synthesis effectively unites Mendel and Darwin, although as Frank Ryan (2002) points out it is still arguably ignorant of several pertinent mechanisms. It identifies changes in a species' adaptive fitness, required for its continuing survival,²² with gradual change to sections of its DNA, the substance of which genes are composed. As such we can not only hypothesise about the nature of genes and their role in human evolution but we can also track them at a molecular level.²³

Where this insight becomes interesting, from the perspective of an inquiry into human nature, is the idea that human behaviour might be genetically driven – that our dispositions and propensities to act in certain ways are influenced by our DNA. If some of our behaviours, dispositions and faculties are natural we can think of them as traits, genetically “programmed” for in the same manner as physical traits like eye colour (or the colour of a pea's fruits). Thus human nature could be described in terms of our shared genetic heritage.

Sociobiology

This idea – that human nature might have a genetic component which is analytically useful – formed the core of early sociobiology, the conceptual precursor of modern gene-first Darwinism. Sociobiology has now largely diffused, becoming an influence within various other paradigms and disciplines, especially gene-first Darwinism. The term was used by Edward O. Wilson as the title for his well-known 1975 treatise on ‘behavioural biology’. He coined the term to refer to a branch of evolutionary biology which he held (and still holds) to be helpful in understanding human motivation and activity in terms of their most fundamental characteristics. In essence it means approaching and analysing society through the lens of species' interests and biologically embodied characteristics that facilitate them. That is,

22 At least until a dramatic enough shift occurs to classify it as a new species.

23 It is important to note, however, that just because genes are generally agreed to be the main unit of inheritance – they are how characteristics are coded for and transmitted to the next generation – this does not mean that all evolutionary theorists share the view that genes are the only thing being selected for (more on this below). Nor does it imply those who do think that selection solely works on genes will necessarily subscribe to an algorithmic theory of human nature (if, for example, they think something other than biology takes precedence *vis a vis* human nature and experience).

biological impulses and instincts make up the commonest components of the activities of living things and, humans being another, albeit highly complex, type of living thing they must surely be subject to such forces too.

Perhaps the most important aspect, however, is the role of adaptation and natural selection assume in this approach. Wilson bases sociobiology on the foundation of evolutionary necessity. That is, species exist by virtue of ensuring that they reproduce, and surviving long enough to do so. In order to do this they must be well adapted to their environment – “fit”, in Darwin’s terminology, for purpose, where that purpose is simply survival. Wilson’s behavioural biology extends this to include the idea that behaviour, just as much as physiology, is geared towards enhancing relative fitness within a certain environment. Some behaviours are more conducive to survival, and survival means a creature will have more success in reproducing, passing on its genes (and its genetically-driven behaviour) to the next generation and generally proliferating the species. When we encounter a species, then, we can reasonably presume that most of its behavioural repertoire will be the end result of this process, and therefore not just adaptive but innate.

The convergence of the evolutionary imperative and our own particular evolutionary history can thus conceivably inform our understanding of modern *human* behaviour. After all, animals are predisposed to act and react to an environment to which they are adapted in certain ways, new adaptive behaviours arising amongst older, simpler ones. Humans, too, have expanded and refined adaptive behaviours throughout our evolutionary history, and so we have a biological and evolutionary dimension to both our natures and our societies. (Wilson, 2000: 3-5, 550-552, 457-459)

As far as this goes for society itself, certain social and cultural mechanisms are taken to be a part of the intrinsic characteristics of a species by virtue of their ultimate origins in behaviour biologically “programmed” into individuals. (For example, nationalism may emerge from an atavistic territorial instinct.) In particular there are certain mechanisms which consistently appear in many species, although not always in the same ways – the work of sociobiology as a scholarly discipline is to identify where and in what ways these mechanisms appear in various species. (Mundinger, 1980) To this end, sociobiologists identify a number of common mechanisms that arise in some way in all animal societies as a matter of instinct. These usually consist of dominance

strategies, methods of delineating territories or building nests/hives, and communication.

Once again, these same principles apply to human beings, although not in such instinctual or reactive ways. In fact Wilson stresses that the more developed the organism is the more elaborate will be the mechanisms. (Wilson, 2000: 144ff) As humans and our environments both become relatively more complex the adaptive traits that will arise can be expected to be correspondingly more complex, in particular our abilities to reflect and communicate. So too will the manifestations of more ancestral or primordial behavioural traits. Territorial instincts, to take one example, manifest in social phenomena such as tribalism, nationalism, xenophobia and war. (*Ibid*: 564-565, 572-574) Human economic norms are also traced back to the systems and mechanisms that animals possess in their social lives. In Wilson's early sociobiology, bartering and the division of labour are asserted to have a biological and evolutionary basis, akin to the fixed biological castes or roles of (in particular) insect societies. (*Ibid*: 551-555) Even human culture itself, whilst not controlled directly by genes, is conceived of as indebted to a biological capacity for communication and language.

Sociobiology thus encapsulates the conceptual trends that characterise the more recent versions of gene-first Darwinian thought of the past forty years. These are that human nature is instantiated and passed on via the genome, that at least some cultural formations take their cue from this nature, and that this nature is the outcome of a universal process: evolution. The natural human regularities we inherit are there and have thrived because they (or the genes that give rise to them) have emerged from the process of natural selection.

Wilson and the Levels of Selection Debate

In his latter work, Wilson diverges from the position that subsequent algorithmic human nature theorists of this stripe tend to adopt regarding the centrality of genes. In particular, in elaborating an explicit stance on human nature Wilson makes it clear that whilst genes may be the biological carriers of our nature, our evolution owes more to the relative adaptiveness of groups. It is, in some instances at least, the group which is selected for. (Wilson, 2012, 2015) For example two competing groups that share the same evolutionary niche (say, the apex predator within a particular food chain, or the

niche of opportunistic scavenger in a savannah ecosystem) may play the role of competing candidates for evolutionary selection. Their whole suite of physical and behavioural traits will contribute to their relative fitness. (cf. Boyd & Richerson, 1990) When this happens between two groups of the same species or two closely related species, this will have massive implications for the evolutionary future of the species. This is one way of interpreting the rise of *Homo sapiens* at the expense of *Homo neanderthalensis* and other hominid cousins.

For Wilson, this is the way we should understand evolution in general and our evolution specifically. Our nature is defined by the traits and characteristics which made our groups more successful than others (including those which contributed to our ability to live and work together as a group in the first place). He still approaches human nature as the outcome of an evolutionary process, and humans as biological beings, but now the beneficiary of that process is a larger unit – the group, or ultimately the species – rather than an atomistic gene. The relevant measured output has changed (and, to anticipate some of the later discussion below, moved further towards the sphere of everyday human experience and interpersonal interaction) but the algorithm itself is the same, as are many of its axioms. This noted, it must be said that whilst he retains an evolutionary sensibility, and whilst his early work certainly remains within an algorithmic approach (because his human nature is still the result of the processes of inheritance and evolutionary necessity) this is an important difference. In Wilson's case, human nature is a collective property instantiated in individuals rather than something proper to each individual. We shall return to this notion when examining Marx, and it becomes relevant in the conclusion.

What this does do is call our attention to a contentious issue within biology – and the philosophy of biology – that may partially explain why not all biologists or evolutionary theorists would necessarily articulate an algorithmic human nature. (See chapter five, below.) It is not a foregone conclusion that genes are the only thing to be selected for under evolutionary pressure. Traits, combinations of traits, or group dynamics may be selected for – that is, give an advantage to the species chances of survival – and specific gene sequences will only proliferate insofar as they positively contribute to these other features. Multi-level selection theorists, for example, are happy to concede that some (or the majority) of selection can be construed as happening at the

level of genes, but sometimes what is being selected is some other unit, such as the group.²⁴ There is nothing particularly divergent in the way they approach evolutionary theory – as noted above, the gene-first model is only one of a number of evolutionary models.

Consequently gene-first human nature theorists are merely those theorists (from biology, psychology, philosophy or whatever) who subscribe to a gene-centric view of evolutionary selection (what Dawkin’s characterised as the “selfish gene theory”) and incorporate this into their conception of the human condition. Conversely if a theorist places sufficient emphasis on the group-level then they may well begin to see a species nature in terms of its inter- and intra-group dynamics, or its place in its environment, or both. Doing so will likely move them further and further away from the algorithmic schema – and further into some other territory – as they shift the focus on what influence(s) constitute a species’ (i.e. human) nature. Indeed, an intellectual history of Wilson’s own thought could be said to describe a migration from deep within the algorithmic schema into the intellectual landscape that borders that of the next chapter. Thus what a theorist thinks about the levels of selection debate may or may not have an effect on where a theorist subsequently falls in the topology of human nature theories, should they proffer an analysis of ethics and/or politics which draws on their opinions about selection. Of course, these opinions may well play no part in theories articulated by those who, consciously or unconsciously, compartmentalise their treatment of evolutionary selection and their ideas about human nature (even if the latter retains a naturalistic slant or influence). Chapter five, below, discusses such issues in more detail. For, though, we turn to consider a more modern incarnation of this schema.

The Modern Gene-First Darwinian Concept of Human Nature

“Reading” the Genome

No-one is naïve enough to think that they can simply look at a gene and know something new about human nature. However the expectation is that any behavioural

24 The topic here, however, is human nature. For a full discussion of these issues see Boyd & Richerson, 1990; Okasha, 2006; Sterelny, 2012; Sterelny *et. al.* 2013 cf. Carey, 2012. Sterelny and Okasha, in particular, ultimately come down in favour of the gene selection model, but also endeavour to give scrupulously fair hearing to those positions with which they ultimately disagree.

characteristic will have an evolutionary explanation, which for gene-first Darwinians means an identifiable (in principle) genetic cause.²⁵ Thus it *is* thought to be possible to “read” the genome and better understand human nature, but this requires a certain level of translation – in other words knowing which traits are associated with which genetic markers. Once this is known, says the reductionist gene-first Darwinian, we in principle have access to the total biological knowledge of the species.

Less prosaically this understanding is implemented in a number of ways. The crudest is to talk about “a gene for” something (a popular preoccupation of journalists), and whilst this phrase is still occasionally used it cannot be said that gene-first Darwinism’s supporters do so without caveats and at least some acknowledgement that it is an abstraction. The more common way is to simply note the covarying of a gene and a phenotypic effect. More accurately what is varying is a polymorphism of a particular gene – a specific form of the gene, which when observed together with a phenotypic expression implies a correlation, if not causation, between the two. The classic example used here is that of eye colour. The gene that causes eyes to be brown or blue is an allele of the *same* gene: a slightly different version of the same segment of DNA.

More specifically and more complex is the example of the hox genes in the animal kingdom. Hox genes are found in a number of organisms, but have differing yet related roles in each. In insects such as *Drosophila* flies these genes determine the development of body segments. Depending on which hox genes are active (and which are inactive) a section of the developing fly will become either a head, an abdomen or a thorax. In humans hox genes govern the development of the body along the anterior-posterior (head-to-tail) axis, most notably the spine. In this role they are instrumental in developing the ‘limb buds’ where arms and legs begin to develop on the embryo. However they also govern the development of these limbs themselves. (cf. Leroi, 2005: 112ff, 126-129) Should a hox gene be mutated it will lead to physical abnormalities at the phenotypic level. Flies can develop legs where their antennae should be, or vestigial wings. Humans can acquire a range of mutations, such as polydactyly (many-fingers) or extra ribs. It is partially through such mutations that we are able to determine the functioning of certain genes. When they are mutated or absent entirely (either by

25 Hence Matt Ridley’s belief that reading the genome will be able to vindicate or verify some of the assertions made about human evolutionary development. (Ridley, 2000: 35)

accident or, in the case of laboratory animals, by human design) we observe changes to the normally stable phenotype.

Gene-first Darwinist theory holds that we can find similar examples concerning the human character. These range from the capacity for language, to violence, and even to the degree to which an individual might be affected by environmental conditioning. The first of these is quite instructive as it offers a way of transitioning into more complex questions of human nature. It is based in the idea that human language is innate, not in the sense that there is any given ur-language, but rather that we are born with a sense of grammar and a set of linguistic mental tools. This is a ‘universal’ or ‘mental’ grammar which reveals itself in the way people think about and decode language. This observation is attributable to certain linguists, such as Noam Chomsky, who noted that any given human language will share certain structural similarities and ways of *interpreting* grammatical rules with all other languages. (Pinker, 1995; Ridley, 2000: 91ff; see also Chomsky, 1976) An instinctual or innatist view of language typically locates this capacity in Broca’s area, a region of the brain associated with linguistic use and ability. Damage to the area often leads to Broca’s aphasia, an inability to understand or implement grammatical rules. Some research suggests that an increase in the size of Broca’s area correlates with improved communication skills in chimpanzees. (Hopkins, Russell & Schaeffer, 2012) According to Steven Pinker this implies that an innate capacity for language is a biological fact, and furthermore an evolved one. Our complex ability to communicate is a product of our genetic heritage as members of *H. Sapiens*. The genetic dimension is reinforced by suggestions that this inherent grammatical ability is disrupted by genetic mutation. One diagnosis of some linguistic difficulties, such as specific language impairment (SLI) – a condition which hampers verbal and written language use – holds that they may be genetic. (Pinker, 1995: 48-49, 322-325; Gopnik & Crago, 1991; Gopnik & Goad, 1997) People with SLI have difficulty in applying grammatical rules, such as how to combine root words or pluralise others. A dominant genetic marker seems to be present in certain people with SLI, which suggests that perhaps some section of the ‘language module’ of the brain is not functioning as it does in the average human. This is not without its controversies (Ridley, 2000: 98-101), but if true it would serve to reinforce the contention that language, a crucially human trait, is biologically – and genetically – founded.

On a more dispositional note, the science writer and geneticist Matt Ridley collects a number of possible examples that may account for sexual preference, at least in men. (Ridley, 2000: 116-121; 2004: 160-162; cf. Pinker, 2003) Indeed one or two of these potential discoveries were taken as proof that homosexuality is not a choice, indicative of moral laxity, but something that certain people are born with, a natural occurrence. (see Ridley, 2000: 116) Alongside the more obvious description of a potential incidence of genetic causation (a correlation of homosexual preference with a particular gene) Ridley also locates a rather more interesting example. Here the gene involved does not belong to the individual organism, but to the mother. Second sons are statistically slightly more likely to be attracted to the same sex, implying that something is happening in development which affects a hormone balance in the foetus. It appears that antigens released during the masculinisation of the body provoke an immune response from the mother, which is stronger in subsequent pregnancies (since the immune system has already encountered the antigen and adapted). The antigen is thus suppressed more in male pregnancies after the first. If, as some suggest, the antigen is responsible for activating other genes within the foetus that are involved in masculinising the brain then its suppression by the mother's immune system may influence the resulting child's sexual preferences in later life. (Ridley, 2000: 118-120; Blanchard & Klassen, 1997) Similarly, geneticist Armand Marie Leroi relates a number of incidences where pseudohermaphrodites (those who superficially appear to be one sex but in fact have the reproductive organs of the other) find themselves attracted to individuals of what is apparently the same sex, but in reality the opposite sex of their 'hidden' biological sex. His conclusion is that, all relevant factors accounted for, hormones must have *some* effect on sexual preference, although he is rather more equivocal than the devout gene-first Darwinists.²⁶ (Leroi, 2005: 217ff)

All this is not to say that gene-first Darwinists are ignorant of the effect of environment, nor that they ignore the intricacies of genetic and biological interaction. Dawkins, in a retrospective endnote on the thirtieth anniversary edition of *The Selfish Gene*, actually asserts that such considerations are at the core of the gene-first Darwinian understanding of genetic evolution, and refers back both to his statements in

26 Having a fascination with classical analogies, he describes the problem thus: 'The causes of our various sexual orientations are so obscure that Aristophanes' explanation is about as good as many others current today.'

the original 1976 edition, and to the work of G. C. Williams in order to do so. (Dawkins, 2006: 271-272; cf. Williams, 1966) With regards to his work on language, Pinker notes that whilst there are isolatable sites within the brain associated with language, language as a whole does not reside in any one of them. (Pinker, 1995: 313-315) He also notes that finding a gene that disrupts a function when mutated does not mean that gene *controls* that function. (*Ibid*: 298) Furthermore there is strong evidence that there is a critical period in brain development which, if missed, can lead to an individual having little or no skill with language. gene-first Darwinists are keen to note such instances of biology-environment interaction in the development of a trait. Indeed, they hold them up as examples of the importance of interaction in the unfolding of human nature and the centrality of this viewpoint to their paradigm, even going so far as to militate against the division between nature and nurture. (Ridley, 2004: 167-170) However we ought to note how the central role is reserved for the genetic component: this is what is meant to reveal something about a given behavioural or dispositional trait. The context is invoked to explain how human nature fits in to the environment of the modern world.

Echoes of Evolution

Of course genetics is still only held to be a measure of innateness. The linking of a gene with a trait only really demonstrates that that trait is part of our human inheritance. Gene-first Darwinism finds its completion in the appeal to the same evolutionary imperative that sociobiology was based on. This emerges as the notion that the activity of genes – regardless of the proteins and higher phenotypic structures that they are ultimately involved in coding for – in ensuring their own replication is the driving force in evolution. This is the theory of the Selfish Gene, (in)famously put forward by Richard Dawkins, so called because it is based upon the principle that the only thing a gene – which is after all nothing more than a strand of DNA – can really be said to concern itself with is its own continuance. Not that what genes “want” will control what people want or the ways they behave in every situation, as they cannot form intentions or hold beliefs or desires. But as we shall presently see, gene-first Darwinists like to distinguish between what genes would find most agreeable and what we, their hosts, find most agreeable. But the premise underlying the theory is what matters: that underneath all of evolution, human or otherwise, is the imperative for

organisms to transmit genetic information to the next generation.

Gene-first Darwinian theorists base this premise in the first instance in the search for the stable elements of evolution. In other words, what they are seeking is those elements which persist through time and represent the most durable and consistent entity involved. This is almost a metaphysical proposition, in that it involves the search for the underlying constants which anchor reality. The entity they put forward as fulfilling this role is of course the gene, and from this basis unfolds the logic of the gene-centric selectionism in particular, and their concept of the unit of selection more generally. (Dawkins, 2006: 12-13) The case for this claim comes from the idea that genes are ‘immortal’ whereas the organism that possesses them is a transitory unit. When organisms reproduce, their genetic material is divided and mixed so that each sex cell has one copy of the parent’s genes. Offspring organisms thus have a unique genome assembled from two sources – hence the organisms themselves are not what Dawkins and others have dubbed “replicators.” The reproducing organisms do not replicate fully. They are only partially reconstituted in the offspring. Genes meanwhile, in the sense of sections of DNA which code for a protein, do get passed on intact. They are the particulate units that do not get blended, the copies in the offspring are the same as those in the parents, save that they exist in a differently-constituted genome. (Dawkins, 2006: 21-25, 34-35) In asexually reproducing organisms the case is still the same – whilst the offspring will be identical to the parent, its genes are what matters (indeed, it is identical *because* it shares all the same genes).

On this basis gene-first Darwinians have made the claim that natural selection can be considered as acting exclusively on the genes, and any question of fitness is resolvable in how it benefits the genetic constituents of an organism or its species. (Hamilton, 1963; Williams, 1966; Cronin, 1993: 63-66) Which genes persist and which do not is determined by the evolutionary fitness of the phenotypes (in other words organisms) to which they give rise. Genes, as immortal replicators, are capable of copying themselves almost endlessly, so long as the phenotype that carries them survives and reproduces. Whatever that phenotype is, then, it is only by virtue of how its natural history unfolded, and this is ultimately a question of the evolutionary logic, encapsulated in gene-centric selectionism as the process of selection acting on genes and genetic variation. Gene-centric selectionism thus provides us with a basic

framework for understanding human beings (or any living thing), which is to consider them as adaptation machines.

In an afterword to Dawkins' *The Extended Phenotype* Daniel Dennett says: 'I take this to be a *philosophical* discovery....' (Dawkins, 1999: 268, emphasis original) It is this discovery that he expounds upon in *Darwin's Dangerous Idea* and, to a lesser extent, *Freedom Evolves*. (1995; 2004) It calls into question the way we view the world as imbued with meaning and cosmological significance. The only reason we are what we are is because of a complex process working not on us but on our genes (in reality, the genes of our ancestors). Dawkins and his supporters like to thus characterise organisms as being 'vehicles' for genes. Any given phenotype is a temporary transporter used to protect genes until they get a chance to replicate. This includes behaviours and patterns which manifest within groups, rather than purely individual organisms. Dubbed by Dawkins 'the extended phenotype' these are complex social or environmental interactions which, whilst identifiably genetic in origin, are expressed at levels much higher than single organisms. (Dawkins, 1999; 2004)

Consequently our nature is that of vehicles designed to survive an evolutionary environment. This is essentially the same claim as sociobiology, and it should be clear that it is founded on much the same suppositions. The difference is that the interpretation is sparser and more focussed on the history of species – it does not require complex notions of territoriality or economic exchange, but can argue that such behaviours are rooted in (epigenetic²⁷) impulses developed in the distant past for the benefit of the genes inside such vehicles. Such a perspective informs the core of evolutionary psychology, and there is a lot of crossover between gene-first Darwinism

27 Epigenetics just means phenomena immediately above genetics, including those processes by which genes are expressed, i.e. produce the proteins or chemical signals by which actually perform their role. What this actually implies is that there are levels above that of the gene in which genes (more properly, the products they code for) interact, some genes activate or suppress others, and various genes collectively contribute towards the formation of tissues and cellular and organ structures. Epigenetics is the source of differences between genetically identical individuals (including the same individual at different stages of development); it is the actual unfolding and expression of genes. Some argue that this level of enhanced, complex interaction, enmeshed in the formation of basic biological structures but subsequent to (and "higher" than) the genetic level, actually plays a much larger role in defining the human being. They see the reductive habits of the gene-first theorists as truncating a host of complex processes in order to construct a simple picture of genetic function, and that this complexity may introduce a much greater degree of indeterminacy and contextual sensitivity into human nature, or help explain its variety of forms. (See Carey, 2012; cf. Leroi, 2005; Ryan, 2002)

in general and classical Evolutionary Psychology (EvoPsych). (Tooby & Cosmides, 1995; Ridley, 2004: 247) EvoPsych is based on the idea that much of our psychology is geared towards enhancing a species' chances of survival and proliferation. It frees itself from the need to constantly refer back to the genetic level by using "reproductive fitness" as a shorthand – the good of the gene is left as a background assumption, available to refer back to if needs be as well as making the findings of evolutionary psychologists easily accessible and adaptable for more gene-centric writers like Dawkins or Ridley. The core tenet of the paradigm is that capacities and patterns in both body and mind can be traced back to the evolutionary process, at some time during which they were evolutionarily advantageous. The puzzle in understanding a trait, human or otherwise, is thus pared down to one of determining what possible role or function that trait might serve or have served. (Ridley, 2000: 103) For example language, discussed above, is presumed to have an evolutionary advantage, and can be easily thought of in terms of the ways it allows communication between individuals. Being able to coordinate the actions of multiple individuals during a hunt has obvious survival advantages, not only through increasing chances of success but also expending less energy on failed hunts or longer chases.²⁸ A species with language, or more generally a method of communicating, will thus be at an advantage since individual members can exchange valuable information and thus jointly enhance their own fitness.

Society

Sociobiology appeared rather functionalist – the presumption was that there will be a genetic root to any given behavioural or dispositional trait, that each will perform a function. Anything might reasonably be described as the outcome of a species' genetic heritage if we can fit it into an evolutionary narrative. Gene-centric selectionism and evolutionary psychology might offer gene-first Darwinists a better way of describing such phenomena and avoiding such a simplistic view. They argue that the behaviours that contribute to these phenomena must have been beneficial at one point, but there is no guarantee that they still are, since the context in which they are enacted has since

28 We should note that this saved energy may be offset by the energy needed to build and maintain a brain capable of language and the requisite intelligence.

shifted, as humans have moved first into towns, then into cities and have repeatedly changed their technological and political structures throughout history. (Tooby & Cosmides, 1990)

Trivially, we can see where the idea that behaviours and instinctual dispositions have identifiable genetic loci plays a part in the social sphere. Most, if not all, behaviours have some implications for society, and thus the idea that either a behaviour or its cause can be attributed to a gene-first Darwinian human nature does not have to be adapted terribly much when we move into thinking about society. The main change is that we must broaden the scope both in terms how the behaviour plays out and how genetic triggers are activated. External stimulus is now considered as the interplay of different individuals rather than a simplified internal/external split. To be sure, the difficulty in simplifying the exposition of the role of genes whilst still retaining accuracy concerning their trigger conditions means that the move from the concept of gene-reading to its social implications is a rapid and organic one in most gene-first Darwinist texts. Wherever a characteristic such as behaviour or instinct is dealt with some consideration is usually given to what it means at both the genetic and interpersonal level (since we could make no sense out of such a trait outside of this context).

Some of the implications are obvious. Being predisposed towards homosexuality could have a variety of effects, depending on the circumstances. Gender norms may be “socially constructed” but if they are so constructed as to criminalise or morally condemn certain sections of the population then members of those sections are at a severe disadvantage. Having certain sexual proclivities or even varying from what are considered gender norms because of a chance combination of hormones can have severe ramifications for the way an individual relates to society. The same could be said of those who do not relate to others in “normal” ways because of autism or other conditions. Any number of biologically originated dispositions might affect the way an individual interacts with their social environment. Those with some degree of autism may just have difficulty relating to other people. Others will have more or less trouble fitting in to society depending not upon their dispositions *per se* but rather on what is counted as normal in that society and how that relates to said dispositions.

Gene-first Darwinists therefore recognise a disconnect between the human

nature they describe and the world as it exists. This is particularly clear in EvoPsych, unsurprisingly so given that it is the main approach within gene-first Darwinism that concerns itself, as a matter of priority, with the behaviours and mental states of evolved subjects. Occasionally anomalous behaviour seems to defy explanation in terms of evolution – either it is not currently adaptive, or it does not seem to have any adaptive utility whatsoever. EvoPsych attempts to explain this by positing an environment of evolutionary adaptedness (EEA), a point in time at which we *were* adapted to our environment but which we have since left (through cultural innovation). (Tooby & Cosmides, 1990; Foley, 1995) We are, however, supposedly still saddled with the adaptations developed in the EEA, since culture develops faster than we can adapt to each new formation. Thus we might find ourselves influenced by pre-conscious dispositions which would have helped in another environmental context. A simple example of this might be a predilection for sweet or salty foods (typically hard to come by in the evolutionary past) when these things are in an unhealthy abundance, resulting in epidemics of obesity and hypertension. Alternatively the faculties which we use in the modern world might better reflect the pressures and priorities experienced in the EEA. We view the world in a way that would have been advantageous to facing challenges which are no longer as relevant as they once were. (cf. Diamond, 2012: 415-7; Teehan, 2010: 46) Apparent pathologies or abnormalities can thus be understood as the result of an interaction between human nature and the modern society it finds itself in.

The Basis of Society Itself

There is another problem that presents itself to gene-first Darwinists, which is how society (and thus culture) is possible to begin with. They cannot simply assume, as cultural anthropologists seem to do, that society is a given. Furthermore society seems to extend as networks of cooperation and identity far beyond what ‘models in economics and evolutionary biology’ would predict. (Boyd & Richerson, 2000: 160) The key to this problem is cooperation – cooperation implies using one’s own resources to benefit another. From the perspective of gene-first Darwinist evolutionary theory that implies the reduction of the comparative fitness of one individual in order to increase that of the other. Why would any organism sacrifice the means of its own survival to help another organism to survive unless it was getting some direct benefit? The laws of

evolution and natural selection would be stacked against such behaviour and genes that encourage it would be eliminated. (Cronin, 1993: 253, 274-277) *Any* environment bar a post-scarcity society should conceivably select against an individual or species which squandered its limited resources on another.

This is the main problem with altruism as gene-first Darwinism sees it. Altruism represents the primary problem with explaining the cooperative impulses necessary for social interaction in complex organisms.²⁹ It relies on organisms sacrificing their well-being to help others, with little or no consideration for reward or pay back. Fortunately gene-centric selectionism provides a ready framework through which to understand the phenomenon. The explanation is much the same as that used for language, in that a disposition towards altruistic acts, like a capacity for language use, increases the overall fitness of the genes responsible by making their vehicles better at navigating and surviving in a social environment. Altruism, however, does so in a different way, it increases fitness by allowing members of a species to pool resources.

To be clear, as far as gene-first Darwinism is concerned, altruism is not thought to come about through selection for species, through comparative fitness differences between different species. Any apparent selection at this level is, like all selection, actually taking place at the level of genes. Altruism is explained as originating through the advantage it confers to the genes that reside within a particular phenotypic vehicle. However there is also the potential for inclusive fitness via kin selection – animals are likely to help their family members, and members of their group or tribe who probably share the same gene pool. When they help one another they have a good chance (lowering slightly the less related the recipient of altruistic acts is to the actor) of improving the fitness of their own genes – the copies of those genes that reside within the recipient. Genes which encourage altruistic or cooperative behaviours benefit *themselves* only through encouraging their organism to aid and assist other organisms which are likely to share these same genes. This would fulfil the main purpose gene-first Darwinists attribute to all genetic effects: to ensure the perpetuation of the genes themselves. Genetic level participants that encourage phenotypic level cooperation improve their own survivability and likelihood of spreading by encouraging the protection of copies of themselves in other individuals. Genes that reside on the same

29 Social insects are not such a problem, since they are often directly influenced by pheromone signals and act almost as a single organism.

DNA section, but which do not encourage their hosts to act altruistically, will likely be outcompeted since their overall inclusive fitness is less than that of alleles that do. (Cronin, 1993: 253-255; Dawkins, 2006: 88ff)

But what of genes that are not involved – even in a thought experiment – in encouraging altruism? They can also benefit so long as they do not compete with genes that do, nor impair their function in some other way. So genes that reside at the same point on the chromosome as “genes for” altruism will likely die out, out-competed by altruism genes which ensure their hosts help one another. Likewise, genes whose proteins interfere with those produced by altruism genes will likely suffer as their hosts are not involved in altruistic behaviour (having interfered in some way with the expression of this aspect) or are not viable as organisms (the protein interference being enough to radically distort the development of the physiology). The logic is generally applicable to higher levels, by which I mean that whereas a group-selectionist might see an altruistic population being able to out-compete or out-survive a less altruistic one, the gene-first Darwinist will point out that this is a result of the average genetic composition of the respective groups. Were they to interbreed (presuming this to still be possible) the process would likely begin again as an intra-specific dynamic, identical in almost all respects to that just described.

The account is complicated by the idea that some individuals may cheat, and by the fact that altruism is more widespread than just between kin. Here gene-first Darwinists can rely on the concept of reciprocal altruism – that we will cooperate and form bonds because they benefit us in the long term. This is potentially why we form societies rather than just small bands of close family members. The concept is indebted to the work of Robert Trivers, who offers the paradigm a way of explaining cooperation between non- or distantly-related organisms that side-steps the difficulties gene-first Darwinists identify in group-selection theories. (Trivers, 1971) Altruism of this kind is made possible if it is likely to be repaid – we will cooperate and not take advantage of one another because we are aware that if we cooperate now, our partner will be likely to cooperate again later. This is clearly an instance of an iterative prisoner’s dilemma model. On to this is added a number of other human faculties gene-first Darwinists reason are necessary for (and probably also connected to) the emergence of social cooperation. Most notably these are related to intelligence and reasoning abilities crucial

to recognising and keeping track of other individuals within the group. How else would such an iterative game work if the players could not keep track of who had cheated and who was scrupulously honest? (Cronin, 1993: 255-259; Dennett, 2004: 213ff; Dawkins, 2006: 202ff) Furthermore, emotion may well be co-opted to provide motivation for following a policy of reciprocal cooperation – animals cannot grasp game-theoretic concepts (which have only been recently developed, relatively speaking) nor rationally calculate relative payoffs, but they can experience revulsion or anger at being “cheated” or considering cheating themselves. (Dennett, 2004: 262-265) It seems logical that any highly-evolved social species will develop faculties such as these quite early on.

Society may even play an explanatory role as the source of some behaviours, not just the patterns and features of our social activity. Sexual selection is used to explain why apparently disadvantageous traits will proliferate through a population despite reducing their possessors’ fitness. The argument goes that whilst such traits might impede an individual or cause them to expend energy on apparently pointless tasks and physical appendages (the male peacock’s tail being the classic example) their fitness can in fact be enhanced if such behaviours or appearances make them more attractive as mates to members of the opposite sex. (Cronin, 1993) Here selective pressures are seen to be not just environmental but also social.³⁰ The essentially arbitrary preferences of one sex might shape the behavioural strategies or physical attributes of the other over several generations.

The Social Order

There are, as we have begun to see, a few simple features of human nature which impact on human society in the gene-first Darwinian account. Humans have evolved as vehicles: “designed”, so to speak, to benefit their genes. The majority of their actions – perhaps even the entirety, when looked at from certain angles – are geared towards serving this purpose. Human beings can be assumed to maximise the fitness of their genes, which tie them to their kin but create only loose affiliations with others. For the most part they can be regarded as serving their own interests.

When it comes to the actual structure of society, gene-first Darwinists have somewhat modest ambitions; in many ways they accept the *status quo* as a given. (See

30 In general, society can be regarded as part of the environment, especially more recently (cf. Ridley, 2004). Here “environmental” means part of the wider ecology, but excluding the organism’s species.

de Waal: 2002 for discussion.) Some gene-first Darwinists have even gone so far as to explicitly interpret their findings as supportive of a pluralist and democratic society. They point out that each human being will be in some way unique, as a result of their specific genetic and social heritage. (Ridley, 2004: 256-260, 267-269) It is natural for different human beings to display individual personalities, quirks and preferences; however they still share the same essential traits by virtue of their shared evolutionary heritage represented in the human genome as a whole. Human beings have intrinsic social instincts which lead them to seek out human companionship and yet also express their individuality in the group – we both seek to conform but also to establish ourselves as unique. (Ridley, 2004: 256ff) Furthermore what is universal is a need for esteem and a desire for some kind of power in the social group (or perhaps simply a resentment of ‘tyranny’ on the part of others). These factors make the democratic mode of organisation a perfect fit for our human nature, as far as Pinker and Ridley are concerned. (Pinker, 2003: 296-8; cf. Ridley, 2004: 199-204)

Here we encounter our first major problem with gene-first Darwinism: the prospect that their reports of human nature are not as impartial as they presume. I would furthermore argue that this will be a danger present in any attempt to locate the essence of human nature in algorithmic rules. Inadvertently or not, those making such attempts may be introducing prior opinions and expectations, warping their interpretation of the material. There are, of course, a number of factors which cast doubt upon the specific story told by Pinker. The historical period he concerns himself with primarily covers 1950 to 2010, when nations were disarming from a world war and yet also intensely paranoid as the Cold War ground onwards – significant western disarmament (Pinker’s proof that democracy fosters peace) occurred in accordance with periods of détente with the Soviet powers, and thus may have had little to do with the particular qualities of representative democracy. Additionally, democracies tend to be tied economically to one another, and so material loss (via war) could reasonably be expected to occur rather than any gain, although Pinker regards this as strengthening his case since representative democracy is, to his mind, intrinsically linked to free trade. (See Pinker, 2011: 285-287) The result is a hagiography to classical-liberal ideals – democracy via representative government and liberalised trade arrangements – the success and superiority of which

he later attributes to their relation to human nature. (*Ibid*: 571ff)³¹ In effect Pinker endorses the present political system based on its supposed record of ameliorating the worst excesses of human nature and promoting its positive potential, but does so via an analysis which overlooks elements of the contingent specificity of the historical trends to which he appeals. (See conclusion for full discussion.)

Some Issues With Gene-First Darwinism

This is not the only problem with a perspective that tries to treat human nature as the outcome of an algorithm. Gene-first Darwinism's critics have argued that genes, and biology in general, play a much less important role than its proponents think. Of course few, if any, of these objections will apply to *all* evolutionary theories or natural selection models; and certainly not to those theories which, for whatever reason, do not take up the idea that evolution is a key constituent of human nature. These objections concern only the gene-first Darwinists' approach to human nature.

Principally, according to these critiques, the role of society – in inculcating norms and values, in fostering and transmitting beliefs and so on – is much more profound than any influence that might come about through genetic or even epigenetic rules. On this view, biology simply has very little causal power (or else it cannot be separated from the myriad possible causes) in determining human thought- and behavioural-patterns. Observed traits are hard to pin down to specific causal factors, even with genetic sequencing. In order to ground their arguments critics have identified areas of gene-first Darwinist thought which are contentious, often highly so – often areas which are presented with little or no acknowledgement that the contention might possibly exist. However the criticisms are not without flaws, the chief of which is the tendency of the most ardent critics to over-simplify the claims of their gene-first Darwinian opponents. They do not quite build straw men, but they come close.

31 However, often it does not appear that the elements of liberal democracies appealed to in order to satisfy this supposition are *unique* to liberal democracies – in particular the social interconnectedness which guides the increased expansion or exercise of empathy. Such interconnectedness is present in more close-knit and tribal societies, and whilst Pinker is happy to write off appeals to such societies as indulging in the myth of the “noble savage” (Pinker, 2011: 692) he may have missed the point that these are cases some anthropologists and social theorists think we can *learn* from rather than simply emulate. (cf. Barclay, 1990; Diamond, 2013)

The critics of gene-first Darwinism, or at least those motivated by political concerns, are vociferous and uncompromising. At times they seem to use scientific data as a blunt instrument to support their political agenda, laying their objections down and presenting the presumed refutation of gene-first Darwinist reduction as *fait accompli*.³² Steven Rose, Richard Lewontin and Leon Kamin use the (rather self-serving) depiction of themselves as fire-fighters putting out the infernos of ‘genetic determinism’, and Richard Lewontin returns to this metaphor in an article for the New York Review of Books in 1994. (Rose, Lewontin & Kamin, 1990: 265; Lewontin, 2000: 203) For their part, gene-first Darwinists take up a defensive and obstinate stance, at times seeming to resent what they see as an impugning of their professionalism. Dawkins describes Midgley as ‘someone called Mary Midgley’ and takes up an injured and derisive tone as he dismisses her original philosophical objections to his use of the concept of selfishness in genes. (Dawkins, 2006: 278) Ridley attributes the rejection of the paradigm – from Wilson onwards – to the fact that ‘human beings do not enjoy seeing themselves removed from the centre of the universe.’ (2004: 244)

The arguments are often vicious and rarely very helpful. As physiologist Denis Noble notes ‘[o]ne of the problems is that the debate has been so polarized, and so finely balanced on meanings of words, that one sometimes has the impression more of a medieval debate than of a modern scientific one.’ (Noble, 2008: 15) Ullica Segerstråle has pointed out that the vituperative rhetoric (and the obvious ideological motivation of some critics) has done more harm than good. (2000: 101) Nevertheless, the objections often have some relevance, and in many cases they are taken up and improved by more sober writers who have not staked so much of their professional and public reputations to one side of the argument or the other. It is these arguments and objections which reveal more general issues that might be applicable to the algorithmic schema in general.

Causal Complexity of the Gene → Phenotype Relation

Virtually all gene-first Darwinian assumptions are based on the idea that genes can cause things to happen, from the development of the body to attitudes to social

32 See (Charlton, 1999) and (Anderson, 1999) for observations on Steven Rose’s critique of genetic determinism. (Rose, 1997) It is interesting to note that Anderson objects to Rose’s critique of reductionism on the ground that it is itself reductionist.

circumstances. Some writers have challenged this view, pointing out that the issue of the causal power of genes undermines the explanatory role genetics can play. Genes only ever lead to the development of phenotypic structures as part of a group. Hox genes do not individually specify which vertebrae will form ribs, but rather that specification relies on precisely which *combination* of such genes are activated. Genes that contribute to Broca's area must do so in collaboration with the myriad other genes which contribute to the structure and function of the human brain. Gene-first Darwinists are well aware that the phrase "a gene for" is merely a shorthand – but this raises the question of whether it is even a *useful* shorthand.

In our understanding of biological development we are often confronted with the non-linear and iterative processes by which our bodies and minds are formed. (Leroi, 2005: 126; Fox Keller, 2010) When it comes to locating genes or other factors in development we often have to rely on quite obvious mutations. Gene polymorphisms (different "versions" of the same gene) usually lead to similar results, and so the only way we can locate which genes are causally involved in development is through finding drastically different polymorphisms which occur in conjunction with drastic differences at higher biological levels – mutations. Leroi's *Mutants* is predicated upon locating such abnormal development in order to identify covarying genetic abnormalities/mutations, and thus trace a causal connection between the normal manifestation(s) of the gene and its role in development. He seems under no illusion that this shines only a partial light on the role of any particular gene, especially since a single mutation can have multiple effects (so it is not a mutation which causes cyclopia, but rather a mutation which causes a protein's function to be impaired, which can lead to various problems in the development of a foetus' geometry (Leroi, 2005: 74-76)) or similar abnormalities can be caused by different factors.

However our understanding of the causal contributions of genes is further complicated by their interaction with the environment.³³ Different environments can trigger genes in different ways or to different extents, in ways we may not even know about. When discussing a given trait, therefore, we will have trouble disentangling the relative contributions of the environment and genetic factors. (Fox Keller, 2010) When a

33 Causal complications abound within gene-first Darwinism, and even the base assumption – that genes are the "true" level of selection – is not immune. Okasha, for example, believes that debates about levels of selection are partly philosophical issues about causality, and hence not resolvable purely by empirical scientific inference. (Okasha, 2006: 79-80)

trait is dependent upon both genetic and environmental influences their effects will be intricately linked. Evelyn Fox Keller takes as one example the effects of diet on the intelligence of two individuals who differ with regards to a single genetic mutation. The difference in intelligence cannot be attributed to genetics or environment because the two are entangled – the diet affects how the gene behaves. (*Ibid*: 5-7, 53-54) This is brought out more starkly by Lewontin, who highlights that there is in fact a third factor at work here, that of interaction. Genes and environment interact and the relative differences produced in a given character may not be traceable to either, even in principle, since the interaction cannot be measured. (Lewontin, 2011) As gene-first Darwinists fully recognise, context often plays a major part in how genes are expressed. It thus becomes difficult to justify both their attributing causal power to a gene and their description of evolution itself as acting for the benefit of genes. (cf. Okasha, 2006: 168, 170-171)

The issue is then how we are to resolve the causal links between human nature as it actually is in the world, and the fundamental rules from which it is supposed to flow. There are various intermediary steps between a gene and the trait it contributes to: first it must be “read” by the machinery of the cell, which produces a protein, which in turn may be used for various purposes involved in the structure of cells or the function of the organs of which they are a part. These steps also interpose themselves between our nature and the rules of evolution – we may be endowed with evolved traits but these are the results of evolutionary forces working on distant ancestors. Human nature, as instantiated in individuals today, is not necessarily subject to these same pressures as greatly as it is to more immediate, contingent influences.³⁴

Translations and the “Levels” of Human Nature

Can we really derive anything from these universal sources of human nature? There is confidence that we can find genes associated with behaviours, and perhaps learn a bit more about how such behaviours are acquired by species and become manifested in individuals. But does this actually say anything new about human nature?

34 There is also some controversy over the EvoPsych notion of “massive modularity”, which posits mental (and corresponding brain) modules which could serve as an intermediary step as modular competencies are acquired and new ones layered over the old. The existence of such modules is unlikely, however, and the issue sheds little light on the more general problems attendant to an algorithmic human nature theory.

Does it discover any new behaviours? It does not appear to be so. To take an example previously considered, finding genes for homosexuality might help to naturalise it, but such genes – and knowledge of precisely which ones are involved – have not previously stood in the way of the claim that people are simply “born gay”. Such discoveries *might* help the cause of gay rights³⁵ but could not be said to have discovered homosexuality.

The same argument can be made for other traits, behaviours or dispositions. What makes the search for a “gene for altruism” possible is the observed instances of altruism at an ontological level higher than genes. It happens at a phenotypic level, or above even that, at the level of inter-organism relations (Dawkins’ own extended phenotype). Whilst the gene-first Darwinians may still insist that altruism is real, they do so in such a way as to reinforce the divide they see between the replicator and the vehicle and place the emphasis on the former. When it comes to other areas potentially of interest to human nature the paradigm is analytically useless. It offers explanations which may have a good deal of truth to them (though, where based in gene-centric selectionism, never free of a certain functionalist dimension, see below) but the analysis of human nature comes from elsewhere. It cannot, for example, offer proof of a need or instinct for socialising in human beings, but rather only an explanation (a story or narrative, if you will) of how genes that promote sociability might flourish in certain species – an explanation which would merely be a modification of that offered for altruism. These explanations might even true, but behind the rhetoric of being able to “read the genome”, or of possessing a “universal acid” which dissolves more mythic explanations of our essential humanness, they are rather uninteresting. It seems unlikely that the gene-first Darwinian paradigm will ever shed any real light on issues such as sexuality or gender, save to show that there is nothing unnatural about any of the potential proclivities, or that there is – for example – a slightly increased statistical likelihood of second sons being homosexual. Useful ammunition for gender theorists if they care to look for it, but there is very little there on which to theorize a concept of human nature.

Before locating a trait genetically – that is, locating some genetic loci involved in its expression – that trait is first defined, usually with reference to some

35 To the dismay of certain opponents who, as Ridley notes, attacked even the *possibility* of such evidence on the grounds that it ‘gives leverage to homosexual rights organisations.’ (*op. cit.* Ridley, 2000: 116)

environmental function, or even just to the other systems of the organism. (cf. Lewontin, 2011; Noble, 2006; Rose, Lewontin & Kamin, 1990: 272-282) Regardless of any other issues attached to the idea of genetic determinism, it could be argued that a genetically focussed theory of human nature does not tell us anything that is not tautologous. To discover that excessive empathy or aggression covaries with a gene requires us to first have an idea of empathy, aggression or whatever else we are measuring. This implies that any innate tendencies are genetically based, but cannot tell us anything particularly new about them when we then read the genome. It is akin to translating a passage written in one language into a second, and proceeding to translate it back. We might be generous and agree with Ridley in saying that some of our discoveries have revealed that human beings are fundamentally similar, and yet each is individual, but this is more an observation about the implications of genetic science for a theory of human nature than the substance of a genetic theory of human nature. In addition to this, there are also value-laden terms being read into the genetic level. Although gene-first Darwinists are aware of the problem of the naturalist fallacy, their theory seems to read certain principles into human nature as a matter of course. We have already dealt with the two most obvious examples of this: altruism may exist, but it is caused by self-interest at a lower, more “fundamental” level; aggression and obstinacy is inherent in human kind, necessitating liberal democratic government.³⁶

There seems to me to be a problem inherent in locating the meaningful aspects of human nature in this realm of ultimate universality. It thus seems reasonable to argue that human nature is operating at another level or levels. If we are identifying aspects of human nature at some more proximal point then they ought to be treated as existing at that level, rather than given a superfluous connection to genetics or the cosmic logic of evolution. This is akin to what Don Ross and James Ladyman call ‘real patterns’ in their naturalist metaphysics. Perhaps somewhat ironically, the idea is credited to Dennett (1991) who proposed the idea in relation to beliefs in the philosophy of mind. A real pattern is one where the total information used to describe a phenomenon is less than the total information required to describe the underlying workings of said phenomenon. For example it is easier to treat a planet as a single point mass than to tabulate the

36 This latter viewpoint, incidentally, invokes another narrative which the anthropologist Marshall Sahlins claims has been the predominant one of “western” concepts of human nature for nearly two millennia – that of a hostile nature which must be controlled by a more enlightened human culture. (Sahlins, 2008)

location and mass of each atom in it, and from there to work out the total gravity and orbital trajectory.³⁷ (Ladyman & Ross, 2007: 258ff, 289; cf. Cohen & Stewart, 1995: 280-282) This principle can be applied to human nature. It is reasonable to suppose that our dispositions – whether they be aggression, empathy, an aesthetic sense or similar – are real in themselves, and may be better treated as such rather than as surface appearances of deeper, more fundamental objects. Rose, Lewontin and Kamin gestured towards a similar principle in the final chapter of their critique of early gene-first Darwinism, where they attempt to offer a positive exposition of their own position. They describe the principle of what they call a ‘unitary phenomenon’ – a nexus of biological and environmental influences – and offer their perspective as being an alternative to the reductionism of the gene-first Darwinians *and* the grand systems of the holistic viewpoint. (Rose, Lewontin & Kamin, 1990: 278-282)

Perhaps this is why much gene-first Darwinist writing on society necessarily relies on these higher levels. Pinker, for one, is heavily indebted to a classical enlightenment concept of self-interest – mingled with and reinforced by Darwinian concepts of advantage and pay-offs – and assumptions about the nature of altruism. His analysis takes place upon a background of a quasi-scientific framework that deals with humans as an evolved species (of which gene-centric selectionism is an integral part), but the genes do not form the core of the analysis, rather they are the naturalising agents which ground behaviours in a purportedly objective realm; in turn, adaptation itself is taken as an assumed principle rather than a litmus test of the primacy and relevance of human impulses.

This should serve to illustrate the notion that human nature operates at some level(s) other than simply that of the genes, and whilst I would argue that analysis and translation between the level of human being and that of genes is useful in the medical sphere, for example, it is less so in telling us something about human nature. But does this affect the narratives of EvoPsych? I would argue that it does, since it also raises the question of what constitutes human nature. If, as Lewontin and Fox Keller illustrated above, traits come about through the interaction of genetic and environmental causes then human nature in general must also. An individual’s nature must in some way

37 Thus the planet and its orbit can be considered real, even though it is possible to describe them in terms of the detailed arrangements of more fundamental structures, since it is more informationally parsimonious to think of them as such.

accommodate both the innate qualities of their existence as a member of *H. Sapiens*, and their life experiences. EvoPsych attempts to synthesise something like this, but phrases it in terms of deeply ingrained, biologically imprinted dispositions – “modules” which our species acquired, newer ones augmenting the old – which are frustrated, enhanced or are simply not adapted for the present social and material environment of the individual. However to truly incorporate the concept of causal complexity, as well as the multi-levelled quality of human nature, we would need to go further, in order to examine how we come to express human nature in the first place, since it does not develop in a vacuum, only then to become exposed to modern society. This is the characteristic of the third schema, which we will turn to presently.

A Conspiracy-Theory of Human Nature

The philosopher Mary Midgley draws our attention to a kind of grim inevitability encapsulated by the logic of the selfish gene itself. Here there is a fatalistic agent – an ‘active oppressor’ – the abstracted notion of rational self-interest itself. (Midgley, 2010: 3) Nearly all critics charge gene-first Darwinism at the outset with being too focussed on a narrow, atomised individualism, wherein the fundamental unit is the individual and its activity can be described in terms of personal gain, hostility and competition. (Rose, Lewontin & Kamin, 1990: 5-6; Midgley, 2010: 2-6) In light of the previous sections, Midgley’s critique could be regarded as perhaps more stable. She focuses more on the ramifications of gene-centric selectionism and gene-centric selectionist-inflected evolutionary psychology, and the philosophical climate that informs their background suppositions. (It bears noting, however, that Midgley herself brings a number of her own suppositions to this, namely the presumption that a kind of metaphysical meaning and ethical/agential significance must be present in the world.)

The premise of gene-centric selectionism, as outlined above, can be distilled into a question asked by Dennett, and which gives rise to the title of this subsection: ‘*cui bono?*’ Dennett introduces this question in *Darwin’s Dangerous Idea* and returns to it in *Freedom Evolves*. (Dennett, 1995: 324ff; 2004: 175-176) What makes the question tantamount to a declaration of a conspiracy is the unspoken assumption behind it: that for every event or phenomenon, no matter how apparently accidental, there must be someone who benefits from it. In the case of gene-centric selection theory, that

“someone” is the genes themselves. To illustrate this we can return to the explanation gene-first Darwinists give for the occurrence of altruism. Altruism, and the cooperation necessary for a functioning society, is problematic from an evolutionary point of view – it requires expending energy for little or no return, in fact it seems to benefit other organisms who are presumably in some form of competition with the altruistic actor. The solution, as we saw, is to regard the benefit in this scenario as accruing to the genes themselves – their inclusive fitness includes the copies of themselves in other organisms, and can be enhanced by ensuring as many copy-bearing vehicles survive as possible.

This works as an explanation, but has the disadvantage of portraying altruism as a tenuous and uncertain occurrence, constantly embattled by a self-interestedness which is posterior to and more forceful than it. The argument assigns a more primal role to self-interest than may actually be the case, both in the sense that it is portrayed as an older instinct and as ontologically prior to altruism. For all that figures such as Pinker (2003) repeatedly insist that we are not solely selfish, such insistence is almost invariably followed by a caveat to the effect that our altruism comes from the selfishness of genes. This is the first half of the narrative which underpins gene-first Darwinism, the more metaphorical half, which insists that self-interest must be located at some point within the activity of evolutionary participants. It is this narrative that Midgley believes is most central to gene-first Darwinism, not scientific objectivity. She argues that it is an interpretation of evolution that is heavily indebted to a wider intellectual tradition which emphasises self-interest over cooperation and rational calculation over emotional impetus. (Midgley, 2010: 17-20, 35ff) Self-interest, as well as the notion of a radically detached or atomistic agent, is rooted in a Hobbesian and, to a lesser extent, Nietzschean tradition of ‘heroic individualism’, doctrines which Midgley claims were necessary at the times in which they were written³⁸ but should be recognised as historically situated. The mistake of gene-first Darwinism is that it presupposes some rational, self-interested entities (or entities which can be treated as though they were rational, given that ultimately we are presented with non-conscious candidates for this role), which it traces to the genes. This is made explicit by Dawkins himself, who claims ‘selfishness is to be expected in *any entity* that deserves the title of

38 Personal attachment to abstract political causes in the case of Hobbes, the ‘nihilistic’ character of Christian quiescence for Nietzsche.

a basic unit of natural selection.’ [Emphasis added.] The gene is ‘therefore the fundamental unit of self-interest.’ (Dawkins, 2006: 33) Midgley observes that this stance, contra to what Dennett (1995) claims, in fact reintroduces a purpose to the universe, or at least to the biological elements of it – the evolutionary process exists to further the interests of genes.

Gene selectionist theorists often appeal to notions or metaphors of contract theory to illustrate how the whole arrangement is supposed to work. (See for example Pinker, 2003) However, genes cannot make contracts or agree to truces or come to arrangements about how to cooperate. Nor can they actually be selfish in the proper sense, since they lack the ability to form goals or intentions. These theorists know this, and stress that they are not actually imputing to genes any kind of sentient capacity, but rather illustrating a process they see as taking place at the genomic level. This raises the question, however, of what exactly gene-centric selectionism is supposed to be doing. As Samir Okasha observes ‘[p]roponents of gene's-eye thinking have been guilty of a certain ambiguity. Sometimes they present their view as an empirical thesis about how evolution happened, sometimes as a heuristic perspective for thinking about evolution.’ (Okasha, 2006: 146) If, as Dawkins’ claims in the preface to the second edition of *The Selfish Gene*, it is more than merely another way of understanding the same phenomena and is instead a *better* way of doing so (Dawkins, 2006: xv-xvi) then it does not appear to be merely a heuristic device but the basis for a paradigm.³⁹ (cf. Noble, 2006: 14-15) If this is so we would expect it to dramatically affect the thinking of gene-first Darwinian theorists, which it does and which Dawkins himself, again in the preface to the second edition, foresees and approves of. The concept of self-interested genes competing with one another is not even restricted to the more “popular” literature in which gene-first Darwinists encapsulate and promulgate their ideas. One paper in an academic journal portrays the activity of genes within the same genome as an all-out war: ‘The mammalian Y chromosome is thus likely to be engaged in a battle in which it is outgunned by its opponent. A logical consequences is that the Y should run away and hide....’ (Amos & Harwood, 1998: 182) The geneticist Leroi also uses this terminology,

39 It follows from this that if it is the former then gene-centric selectionism is supposed to be a scientific theory, and if so it fails on Popperian grounds. Gene-centric selectionism is unfalsifiable: there does not seem to be an experiment that can be performed where the results cannot be interpreted as the confirming gene-centric selectionist position. However if it is merely a heuristic device then it is arguably a distorting one – it relies on a metaphor that is unhelpful and evocative of an overly-specific and normatively charged set of systemic relations.

although in his case it appears to be as much in the interests of lyrical continuity with his allegory of the tango than solely in service to the metaphor of a war within the genome. (Leroi, 2005: 230-231) However what is most interesting is when he, elsewhere and in similar instances of chemical competition, uses the metaphor of calculation – a mathematical allegory, which implies that Hobbesian metaphors are not as central or necessary as is often portrayed. (*Ibid*: 82ff)

However perhaps more damning than this reading of metaphorical selfishness into the fundamental groundwork of our human nature is what this does to the analysis produced. Evolutionary theory comes under the larger umbrella of sciences referred to as “natural history” and it bears noting that, just as with any other form of history, narratives are at best problematic. Gene-first Darwinism is no exception, relying as it does on a number of narratives, variations on the same theme – that all traits can be assumed to be adaptive; that all adaptations can be assumed to benefit the genes; and that genes are responsible, at bottom, for any particular given trait. Inevitably we find a certain functionalist logic, as the purported purpose of a given trait or gene is eventually located within some narrative framework. Whilst this leads to an over-simplification, it does not necessarily lead to an *ignorance* of the complex processes underlying the surface account, which is what is imputed in the causal complexity argument. (The logic is, after all, flexible enough to incorporate any number of intermediary steps between the gene and its higher-level expression, as the concepts of inclusive fitness and the extended phenotype attest.) Even Steven Jay Gould, a critic of gene-first Darwinian thinking, was in theory supportive of the notion of an evolutionary psychology: ‘Humans are animals and the mind evolved; therefore, all curious people must support the quest for an evolutionary psychology.’ However he observed that the real trouble here lies with the reduction of all evolutionary accounts of human behaviour to the postulation of some prehistoric environment in which curious behavioural traits would have been adaptive, whereas today they are not. (Gould, 2007: 452-454) This is not only philosophically functionalist, he argued, but poor science: it is unfalsifiable, and therefore, we might add, fails to live up to Popper’s standards for a theory to qualify as properly scientific.

This is the second half of the gene-first Darwinian narrative: the attempt to connect any given trait to the presupposed adaptive advantage all traits must confer (and

with regards to politics we should be especially concerned with behavioural/dispositional traits). Thus, for all that recent gene-first Darwinist theory manages to affirm a role for environment and “nurture” in forming human nature, it retains a functionalist aspect. There is always assumed to be some core element to human thought and behaviour that had some evolutionary utility, even though it is realised through and mediated by a complex human culture. Ridley is perhaps being hyperbolic when, in talking about mental plasticity, he says ‘[t]hese are, if you like, the genes for nurture’, but it is an accurate summation of gene-first Darwinian assumptions about biological cause-and-effect. (Ridley, 2004: 167)

The viewpoint is also summed up by Wilson in a retrospective on *Sociobiology*:

To grasp human nature objectively, to explore it to the depths scientifically, and to comprehend its ramifications by cause-and-effect explanations leading from biology into culture, would be to approach if not attain the grail of scholarship, and to fulfil the dreams of the Enlightenment. (Wilson, 2000: vii)

Note that explanations run from ‘biology *into culture*’ – human nature runs in a linear sequence, flowing from the genes and the regularities governing evolution. Its indeterminate elements are conceived as being open-ended terms – a variability of outcomes – rather than a result of the unfolding of a reciprocal relationship.⁴⁰ This same directionality is present in EvoPsych, sociobiology’s successor. (See Derksen, 2007: 192ff)

We thus reach a limit of gene-first Darwinian human nature. There is a logic at work which is at once functional and circular. Having described humanity as in possession of certain features, and proposed an adaptive explanation for all such phenomena, human nature becomes a matter of discerning the adaptive background behind this or that particular human trait. In knowing that background we are presented with a revelation of how it, in conjunction with the originally proposed process of adaptation, leads to human beings as we encounter them today. In reality this tells us

40 However biological systems are not linear – cause and effect runs in loops that encompass systems on a variety of levels. Wilson is aware of this, and argues that the sociobiological perspective is an interactionist one – it is the way that genetic influences interact with higher (most notably social) levels that is of interest. Nevertheless it is rife with simplistic narrative accounts and assumptions, and later iterations of gene-first Darwinism place an even heavier importance on the logic of reductionism in an attempt to ‘correct’ (to use Dawkins’ term) an emphasis on group selection.

very little about human nature or its significance to our politically laden day-to-day lives.

Yet this is not simply the consequence of some perspective specific to gene-first Darwinian ways of thinking. Instead it is the result of adopting what I have termed an algorithmic human nature theory; of looking for some definitive, law-like rules that govern human nature. It should be clear from the above that when gene-first Darwinism, or any similar conceivable algorithmic perspective, looks for human nature, they are not in fact looking at human beings themselves. Instead their preoccupation is with what they have deemed eternal or immutable, in this case the logic of evolution and the replications which serve as its axioms. How could any human nature theory, once it has posited the existence of fundamental, eternal rules from which human nature flows, not spend an inordinate amount of time showing how each aspect of human nature actually reflects the unfolding of these rules?

2: The Motive-Bearer

The second type of human nature theory takes a different tack. Theories of this kind locate the stable, reliable aspects of human nature lie somewhere closer to the “surface” of human action and experience. This, I feel, draws us closer to some workable starting point for a theory of human nature. Such approaches are involved in what Midgley refers to as ‘taking motives seriously’, in that they take motives and choices as somehow revealing or indicative of certain facets of human nature, rather than as phenomena to be explained, as I have argued the schema of the previous chapter does. We can thus describe this as the “motivationalist” schema, given that theories that fall within it will place their main emphasis on dispositions towards certain actions and preferences, as well as the capacities required to pursue these dispositions (or simply to exist as human beings). This leads to some variation within the schema – at least with regards to the disciplines and paradigms used as examples here – between those who see human motives as exceptional in some way and proper only to humans (be it through a capacity for reason, sheer complexity or some other quality specific to our species) and those who see many, if not all our dispositions and capacities as extensions of ones we share with other animals, particularly close evolutionary kin.

Nevertheless, both sides can properly be said to belong to the same schema according to the criteria I have identified; namely the locus with which these thinkers/disciplines concern themselves when it comes to human nature, and the epistemic priorities revealed by their methodologies. This principally involves a focus on nature as it is instantiated in the activity of actual agents – in this case, human activity and the psychology underlying it as revealed by the behaviour of individuals, either alone or in groups. These individuals are not in themselves the totality of human nature, but rather examples, from which a fuller picture of some behavioural or psycho-social phenomenon can be inferred. Here I discuss how this is done by a number of disciplines whose adherents could be (as a general rule) collected under the heading of a motivationalist schema. Through such a discussion we should get a better picture of the relative merits and limitations of locating human nature within the sphere of human psychology and (immediate) action.

As before, it is necessary to sketch out the content of this schema, but in doing so the aim is to reveal something characteristic about the means by which this content is developed. Thus I intend to identify some (but far from all) of the most salient aspects of the understanding of human nature identified by those falling within this schema, in order to demonstrate how they come to examine and understand these aspects.

Noticeably there is also some strong affinity and continuity between the approaches examined here and those of the previous chapter. This is a conscious choice intended to draw contrasts and comparisons between differing deployments of naturalism – in the first, general instance – and evolutionary frameworks – in a secondary instance more specific to a subset of disciplines considered here. Both sets of examples place an emphasis on a certain kind of naturalness on the part of humanity. This includes the idea that human beings have evolved and that therefore evolution naturally provides and constrains the range of possible forms an organic, naturally occurring species' nature could take. However for the human nature theories examined here the process of incorporating evolutionary insights rests on the crucial difference between this and the previous schema: the aforementioned centrality of motive and behaviour. Motive assumes centre stage as critical indicator of human nature, rather than an artefact of external forces (evolutionary, cultural or otherwise). In fact it plays a key role in interacting with these external forces (the connotations of “interaction” also serving to acknowledge a degree of plasticity to how these motivations play out). Certainly, within the theories here considered, evolution is taken as important to fully understanding both motives and the behaviours elicited by them; hence the affinities with evolutionary psychology, of which some theorists cited here cite in their turn. (See de Waal, 2002) However in EvoPsych a motive is treated as something to be explained in terms of an evolutionary heritage, often through disjunctive relationships with an environmental context it is not adapted to. Here a motive forms the nexus of a multifaceted analytical framework intended to fully elucidate the place of that motive within the psycho-social ecology of an individual (and, in the case of ethology, of a species).⁴¹

41 This is particularly clear within developmental biology and ethology, where evolutionary explanations are encapsulated within two of the “four questions” originally posed by Niko Tinbergen. One question is that of why a species' trait evolved – what adaptive advantages it gives. Another is how that trait evolved – why it takes the form it has now. A third is how it functions – its

Consequently in the current chapter a good deal of consideration is given to the way humanity's status as an animal is incorporated in many such conceptions of human nature. The reasoning is that if there is a human nature – and if that nature has evolved along with the species itself rather than being mystically invested in it – it seems probable that *H. Sapiens*' place within the other species and phyla will have some bearing on its nature. Of particular importance to this facet of the present schema is the idea that examining the similarities and differences between human beings and our closest ancestors (as well as other social species) can lead us to better understand certain aspects of ourselves. What we might term “comparative ethology” or “evolutionary anthropology” can affirm or refute the idea that certain propensities or tendencies are “natural” or innate. Here we might pause to consider philosopher Philip Kitcher's remark that ‘in any evaluation of our evolutionary history you can emphasize the continuities or the discontinuities. I think little is gained by either emphasis. You do better simply to recognise what has endured and what has altered.’ (de Waal *et. al.*, 2006: 139) For Kitcher the main virtue of such analysis is the ability to note changes and continuity; the argument over whether we are unique or not is simply a side issue.

Other examples used to elucidate this schema directly observe human beings in a variety of ways. Research in cognitive psychology, to take one case, particularly when aimed at understanding social competencies, reveals interesting things both about the way we think and the ways we interact with one another. When applied to child development, such research allows us to better grasp the workings of some of our core social competencies, not to mention the ways that they develop over time. A good deal of this research is devoted to understanding how much of their surroundings infants and young children comprehend. Moreover, some scenarios are aimed at discovering what kinds of activity such children are inherently motivated to do (in other words, without prompting). The idea is that we can get a truer picture of – and understand more about – our nature by contemplating the behaviour of those members of our species with little or no experience of the acculturation process.

mechanisms. The fourth is how traits develops through the lifecycle of an individual member of the species – like the third question this can also relate to how a characteristic relates to the environment. As commentators have noted, this results in a ‘comprehensive, multifaceted understanding of a characteristic, with answers to each question providing complementary insights.’ (Bateson & Laland, 2013: 712; see also de Waal, 2002)

Ambiguity and the Flexibility of Expression

As much of the foregoing will suggest, what is mainly of interest to those within this schema are capacities and dispositions – they take motives seriously. These theories are more concerned with the ways that human beings think and feel, and the ways in which these thoughts and feelings influence their actions. They are not overly concerned with deducing a set of rules which could be said to adequately describe human nature, nor is behaviour ever more important than the underlying dispositions it reveals. As primatologist Frans de Waal observes: ‘It’s impossible to follow what’s going on in a chimp community without distinguishing between the actors and trying to understand their goals.... The literature of biology [is] of no help in understanding the social manoeuvring, due to its aversion to the language of motives.’ (Midgley, 1995: 114; de Waal, 2005: 32-33; 53) Consequently, throughout this chapter I shall endeavour to speak in terms of "innateness", "dispositions" and “capacities”, and avoid in all but the most general usage the somewhat mechanistic phrase "instinct", since whilst evocative there is not a particularly strong consensus on what this latter term precisely refers to. An instinct may be regarded as a dispositional state, or a tendency to make certain classificatory distinctions (such as in-group/out-group, or natural kinds) or even a certain behavioural tendency (although this latter usage is thankfully and rapidly disappearing from talk about all but the "lowest" and least complex species). As a conceptual term, instinct can tend to cause confusion. Thus human nature, under this schema, can generally be treated as dispositional and as certain capacities amenable to normal human functioning.⁴²

Incidentally, the complexity of human culture is invoked to account for many of those aspects by which humans diverge from animals (although it is not always considered to be the *source* of our humanity) – that element whereby what are quite often seen as ancient or even atavistic dispositions are reconciled with the kind of

⁴² At its most basic this functioning simply means survival (and so in this respect the similarity with the previous schema still stands). However since this survival is enhanced by group living it follows that abilities that facilitate and enable the human being to navigate and act within a social environment – including those meant to secure individual advantage from such an environment – are just as important as capacities such as locomotion or digestion. Human beings (or rather, their ancestors), in evolving a survival strategy that involves inter-organism cooperation, necessarily simultaneously evolved the abilities to facilitate this survival strategy/way of life. This is discussed below in relation to cooperation and altruism.

“sophisticated”, reasoning entity we consider human beings to be. Culture is the arena in which human beings act and as such it influences the ways in which our dispositional and motivational states are expressed. Our openness to this culture is, in a limited sense, itself partly a function of our nature, since culture is largely a sphere populated by various kinds of norms and human beings can be considered to be inherently receptive to such norms (a capacitive characteristic which can interact with other potentially innate elements, such as territorialism, empathy, or in-group/out-group distinctions).

However the primary reason that human nature is not thought of as a rigid, fixed thing under this schema is that it undergoes a degree of development as individuals acquaint themselves with the world (social and otherwise) around them. In some cases this happens in a predictable pattern, resembling not so much openness to cultural affect as directed mental development (which is entirely in keeping with the biological and neurological complexity of the human being). This directed development is referred to as canalisation, a concept that plays a recurring role in a number of these paradigms, and I adopt its use for the sake of uniformity of terminology. To say a characteristic (mental or physical) is canalised means that, given the initial biological material, there are a number of potential paths for development, with the potential for subtle variations in the precise results. The particular sequence or path of development is dependent on subtle variations in the environment. Trivially: think of how a frog’s genome contains different sets of instructions on how to develop the embryonic frog into a tadpole, based on such external variable as temperature. The result is the same (a frog) but the path is subtly different, taking into account the rates of biochemical reactions that might change in response to the external variables. The rate and order in which we develop the abilities crucial to understanding one another’s mental states are a more concrete and relevant form of canalisation (see below).

Other occurrences are rather more varied, resulting in diverse social forms which may reflect – and so also encourage – some parts of human nature more than others. This is a more radical kind of canalisation; more like conditioning, in that one a set of possible outcomes exist and the individual can be directed towards one or another based on environmental cues. In this sense there is another kind of continuity with another of our schemas, although in this case it is the one we shall be examining in the next chapter. This continuity consists in a contextual element in which individuals’ natures

are shaped by their social circumstances.

Taking these two points together – the dispositional approach and the socio-cultural influence recognized by the present schema – we can talk of an inherent open-endedness to many of the aspects of human nature that this schema identifies, and to the resultant picture of society its adherents hold. We shall consider some examples in the course of this chapter, but it is worth mentioning at the outset that one particularly pertinent point to bear in mind is the extent to which these capacities, internal to the human being, interact with one another. Being open to mediation does not just mean having a contextual component relative to the environment, but suggests an inherent ambivalence *within* human nature itself. Whether or not the coincident *societal* contingency is an outcome of or a contributing factor to this ambivalence is a technical question that falls outside the matter currently at hand. However this plasticity plays an important part in the way that some of the viewpoints I shall be considering relate human nature to society, and so it is doubly important to outline the ambiguous character of human nature under the motivationalist schema.

Many of the writers and researchers that I shall cite in this chapter make explicit comments on the reality of tension or conflicting elements in human nature. For example the way that the anthropologist Christopher Boehm thinks about hierarchy *relies* on positing conflicting forces *within* individual human beings, not just them. Meanwhile the constant tension between self-interest and gregarious generosity is a reoccurring theme in de Waal's observations of chimpanzee and bonobo populations.⁴³ This kind of ambiguity is central to the social psychology of Jonathan Haidt, who holds that human beings are largely motivated by emotional affect, whilst also having a plurality of emotional cues and biases. (Haidt, 2001) He also thinks that this plurality is expressed in differences *between* people and their interpretation of the world and important events. If this is so, he argues, then it may go some way to explaining why party politics becomes so entrenched – neither side can appreciate the priorities and values held by the other, at least not at the same level that their opponents do. Furthermore it casts doubt on the possibility of creating a political consensus which will keep all participants happy all or most of the time. (Haidt, 2012) Midgley articulated

43 As is the difference in the balance these two species strike between their competing impulses.

something similar in her argument for a more rounded approach to humans' status as animals. In asserting that humans and animals are much closer than contemporary philosophy and society typically believe – whilst simultaneously rejecting what she views as the excessive reductionism of gene-first Darwinism – Midgley argued that individuals' natures encompass a diverse range of motives. (Midgley, 1995: 55-57; 161-162) This does not always lend itself to easy resolution: like a number of the philosophers whose views we shall discuss in more detail below, Midgley thinks that part of our moral nature stems from human nature as such (specifically dispositions rooted in sympathetic moral emotions, but also encompassing our natural reason), but that at the same time much of what creates “evil” in the world also stems from that same human nature. (Midgley, 2011)

Certainly the ambiguous character of human nature will frequently emerge in the form of apparently straightforward oppositions – the desire for power versus egalitarian dispositions, or self-interest versus the needs of others. However, these dichotomies will be played out against the background of a much wider “psychological ecology” of desires (dispositions), motives and capacities. For instance there is a widely observed tendency for social species – including human beings – to distinguish between those belonging to the “in-group” and the “out-group”. This might well lead to xenophobia and tensions between different groups of people, but at the same time it might play a role in the creation and maintenance of cohesive moral communities. Similarly, the striving for dominance may in fact be facilitated by being sensitive to the desires of others and a sense of fairness or “justice”. Below we shall discuss examples of this relationship between dominance strategies and social sensitivity, but for now we can easily identify its importance in the human context by recalling many of the recommendations found in Machiavelli's *The Prince*, and its ubiquity throughout human history demonstrated by the satirical trope *panem et circenses*.⁴⁴ That such occurrences are conceived of as complex dynamics, involving diametrically opposed dispositions and capacities (for example creating communities versus “othering”, or self aggrandisement versus empathic affect), speaks to one of the possible strengths of this schema. The focus on dispositions and capacities means that a “motivationalist” view of

44 De Waal even relates an incidence where a dominant chimpanzee male would routinely take possession of any meat acquired by the troop and dole it out, cementing his power through the distribution of a favour food source.

human nature focuses on multiple psychological dispositions, rather than attempting to identify the one true and underlying source of those dispositions (whether this be evolution, universal consciousness or some other demiurge).

These comments should also be taken to serve as a cautionary note: whilst the following section is laid out in a ‘laundry-list approach’, enumerating the most common areas I feel theorists of this persuasion identify, each aspect is intimately interwoven with many of the others. For the sake of intelligibility each is discussed in turn, however the nature of the phenomena being discussed and the ways they are approached make this compartmentalisation inappropriate without some forewarning that it is merely a methodological convenience. Indeed the fact that this perspective treats its object as an interleaved whole is perhaps one of the more obvious strengths of this approach to human nature. (cf. Boehm, 1999: 230-231) Many of the connections will be readily observable, and I shall seek to draw them out explicitly as we move through each aspect.

Aspects of the Human Animal

Cooperation and Altruism

The first feature commonly identified by an innatist theory of human nature is that of the human capacity for cooperation and of altruism. This is also a suitable place for us to start as it has several points of contrast with the approach examined in the previous chapter. This will allow us to more readily define the relevant features of these competing frameworks (which after all both make strong appeals to the concept of humanity as an evolved creature) and the way they treat the coordination and interaction of individuals’ natures.

One issue in this area is that altruism can be described in a variety of different ways. Bowles & Gintis (2011) succinctly sum up such descriptions in the two definitions of altruism they identify and use. The first is a standard biological definition – that an altruistic act is one in which the actor benefits another at their own expense. In evolutionary terms, they enhance another’s fitness whilst diminishing their own. The second definition is dispositional – it concerns intentions or preferences – according to

which an action is regarded as altruistic if the actor carries it out with the intention of benefiting someone else but not him- or herself (even, or rather especially, if they are aware that this will negatively impact their own well-being). Notably these two definitions are not necessarily dependent on one another. If the recipient of a beneficial act feels compelled to reciprocate then by the first definition – which considers only outcomes – the act was not really altruistic in a biological sense. However there is nothing to stop the agent or their behaviour from being altruistic in the second sense, due to the fact that they incorporated a preference for another’s well-being into their decision-making procedure. They valued the outcome for someone else as much as, or more than, the outcome for themselves. (*Ibid*: 201-202; cf. Boehm, 2012: 9) In their discussions of altruistic feelings and dispositions this is the definition that is most often (if sometimes tacitly) referred to by proponents of this kind of theory of human nature. The biological definition is not ignored, of course. In fact it is the underpinning of almost everyone’s explanation of the evolutionary origins of the social sentiments. It manages to clearly illustrate the plausibility of the evolution of *genuinely* altruistic dispositions, since within a group these can mutually boost the overall fitness of those with altruistic motivations, even whilst the *results* of their actions are not formally altruistic in the biological sense.⁴⁵

The proponents of psychologically-centred, innatist theories of human nature are arguably better at separating these two definitions – of taking both the long-term and short-term views of human altruism. Whilst this perspective accepts the validity of both definitions, the focus when talking about what human nature actually *is* is mostly directed towards the psychological view (that is, towards the dispositions that most immediately affect an individual’s motives); the other is not taken to encapsulate some more fundamental truth about altruism or cooperation more generally, but has an analytical role in telling us about the (evolutionary) development of such activity. The mere fact that our “good intentions” are in some way evolutionarily beneficial does not mean, as it is sometimes portrayed in the gene-first Darwinian narrative of the reductionist paradigm, that we – or some “deeper” motivational mechanisms – are tricking ourselves when we act and think in altruistic ways. De Waal makes a similar point, drawing upon Mencius (and sentimentalist early-modern Europeans), by

45 This can also apply to relative inter-group fitness, whereby a group of altruistic co-operators can have a higher overall fitness than that of another, less cooperative group.

reminding us that when an individual sacrifices themselves for another it is the result of an emotion, not a complex thought process. The experience is immediate, and this would appear to rule out ulterior, selfish motives as the “real” causes of an actor’s choices – that explanation, he suggests ‘seems to grossly overestimate human intellectual powers, let alone those of other animals.’ (de Waal *et. al.*, 2006: 50-52) Thus the majority of our altruism (or at least spontaneous altruism) is considered genuine, and motivated primarily at the level of affect.⁴⁶

There are two arguments which are commonly appealed to in order to assert the innateness of psychological dispositions towards cooperation and altruism – or indeed any dispositions – often but not always deployed in tandem. One is an argument from ubiquity, whilst the other grounds the claim of innateness in cooperation’s emergence prior to the organism/agent’s exposure to any strong culturing influences. The former expands our attention beyond the sphere of human nature, and encourages us to view humanity as an ethological subject. Its main point of reference is the existence of patterns of helping mutual aid dispositions, or capacities for empathy, outside of our own species and yet markedly similar to our own. The classic examples are those where an animal takes a risk that confers benefits upon others around it – the individuals who act as lookouts or who give warning cries when a predator approaches. Similarly there is some experimental evidence which suggests that given the choice between securing a benefit solely for themselves and securing one for themselves and one for a partner, chimpanzees (one of our closest primate cousins, but *not* the most prosocial) will actively choose the option which benefits another. (Horner *et. al.*, 2011) The contention of the innatist perspective is that such instances are alike in kind to many human behaviours. Since this is how helping and cooperative behaviours work in non-human societies, it stands to reason something similar is happening in human activity (unless we wish to contend that humans have supernatural origins).

Mere correspondence between human and animal forms of altruism is certainly not the entirety of the connections made by those interested in this aspect of human nature. Connections are sought by those working from the opposite direction: by theorists reaching outwards from within more hermeneutic disciplines. Observed

46 Hence de Waal’s insistence on ‘the primacy of affect’.

similarities regarding the ways that humans and animals treat one another are used to ground moral theories such as Peter Singer's concept of expanding circles of morality. (Singer, 1981; Joyce, 2006; Kitcher, 2011) Interestingly, de Waal offers a broadly similar idea, illustrating that any such expansion should be explicitly recognised as context-sensitive. According to him, Singer's expanding circles are in actual fact a 'floating pyramid, viewed from above.' (de Waal *et. al.*, 2006: 163-165) The 'buoyancy' of the pyramid is determined by the available resources – altruism and its related moral practices are applied to the inner circles (our family and kin, for example) of our commitments first, and to the outer circles (the nation, humanity as a whole, or other species) on the condition that the inner circles are taken care of (remain "above the waterline" of the resources in which the pyramid floats). There is an imminent dependency involved in this altruism. In times of adversity or scarcity we may adjust our moral accounting depending on which circle or level of the pyramid we perceive others to occupy relative to ourselves. (de Waal, 1996)⁴⁷

Accordingly, altruism is said to constitute one of (but only one of) the core contributing factors or "building blocks" of modern humanity's moral psychology. Whilst kin selection and the evolution of *reciprocal* altruism are (alongside group selection) thought to be the plausible paths by which this form of activity arose, altruism itself acts according to its own particular remit rather than being tied to whether the recipient is kin, or believed to be likely to return the favour.⁴⁸ Its effect is to encourage individuals to value the benefits to their group, rather than simply themselves. (Bowles & Gintis, 2011) But whilst this pattern of behaviour(s) can be compared between animals and humans, what guarantee is there that there is a similar innate or internal disposition towards altruism in humans – who may just be ideologically inculcated and induced to sacrifice themselves – as there is in animals – who lack the cultural framework to be indoctrinated in such a manner? This is where ethologists and psychologists, not to mention the philosophers who draw upon both, can meet and exchange ideas and data. For instance Michael Tomasello cites a number of studies –

47 Both de Waal and Singer argue that currently in the west we have such an abundance of resources that we should extend our moral sensibilities to the outer-most reaches – to include not just all of humanity but also animals – perhaps illustrating Joyce's contention that an evolutionary/naturalistic perspective on morality does not cause it to become irrelevant. (cf. Joyce, 2006: 224ff)

48 For some this still raises questions about its place in the evolutionary development of species, but these questions are not considered to be casting any kind of implicit doubt on the reality of altruism, as appeared to be the case in the previous chapter where we observed a need to *explain* altruism in order to situate it.

many of which he was involved in running – in which young infants are seen to freely help an adult with a simple task such as fetching something (‘instrumental helping’). (Tomasello *et. al.* 2009: 6ff) There are, he says, a number of reasons to thus believe that certain basic forms of altruism and helpfulness are innate. The first is their age, since the children studied were only a little over one year old. Not only this, but rewards did not appear to affect their behaviour – in fact Tomasello cites a study in which he and his colleague Felix Warneken found that rewarding young infants appeared to undermine their readiness to help in subsequent tests where a reward was not forthcoming. (Warneken & Tomasello, 2008)⁴⁹ Interestingly, the opposite appears to happen in cases where resources are being divided up – younger children (ages three to four) do not seem as good at sharing as older children (ages seven to eight). (Fehr, *et. al.*, 2008) Nevertheless, when given the option to acquire rewards for only themselves or for themselves and another, very young children chose the latter option over the purely selfish one. (*Ibidem*) Tomasello suggests that this may indicate that there are two types of altruism – one connected to helping accomplish a task, the other involving the ceding of access to desired objects to another, which emerges in middle-childhood.⁵⁰ (Tomasello & Warneken, 2008; see also Spelke’s contribution to Tomasello *et. al.*, 2009: 149-172)

Inherently connected to the concept of altruism is that of cooperation. Both require an individual to expend effort towards securing the well-being of another or others. Cooperation, of course, is somewhat different since it almost always involves simultaneously securing one’s own well-being and involves acting in conjunction with others. Cooperation is also a good way of covering those acts which appear altruistic to some within this paradigm, but which may not be considered altruistic by others. Many philosophers such as Joyce will tend to regard an action as psychologically altruistic only if the individual enacting it is capable of considering the outcome for both themselves and the recipient. For them an emotional impetus to aid another is not in itself sufficient to consider certain animals as having the required motivating *reasons* to count as altruistic (or, indeed, selfish), since reasons are bound up with beliefs and

49 This has parallels with some ancillary findings concerning chimp prosociality in Horner *et. al.* (2011)

50 For which there may, or may not, be evolutionary reasons based on an infant’s ability to secure resources, or possibly the emotional-cognitive framework available.

deliberation. (Joyce, 2006: 14; cf. Boehm, 2012: 9) Cooperation offers a wider range of activities which could be thought of as falling within its definition. One of the foundations for thinking that human cooperation is unique is that it involves a great deal of planning, mental representation, intent and communication on behalf of (in some instances) large numbers of individuals. Other forms of cooperation, meanwhile, are much more contingent and immediate. For instance chimpanzees on a monkey hunt do not necessarily have pre-arranged roles that each animal fills, nor do they arrange a hunt ahead of time, with prior intent. Instead they will tend to spontaneously form a hunt when prey has been located, and will fill roles (such as chasers or blockers) depending on the flow of the hunt and their placement relative to the prey and one another. Those who argue for a degree of human exceptionalism, as Tomasello or Joan Silk do, see this as the primary form of cooperation amongst primates, whilst the former, more intentional form is unique to humans. Although a detailed exposition of the differences between these two schools of thought – the “continuationists” and the “exceptionalists” – would be tangential to the wider analysis presented here, it is useful, especially with regards to cooperation, to deal with it in the process of discussing this core feature of the nature and social lives of both humans and animals. In particular I believe it illuminates the character of human nature as it is seen by this perspective. In some ways it even throws light upon the *similarities* between the two schools. Perhaps the most relevant and commonly identified aspect of cooperation – not to mention a significant similarity – is an innate capacity to coordinate with others to achieve a joint goal or mutual benefit (sometimes referred to as conspecific mutualism).

Once again, resources play a role in the analysis of our behaviour. However in this context they play an active role in explanations about just how and why cooperation is thought to be so natural and central to our existence. They feature heavily in the question of what capacities are revealed by cooperative behaviour. Within one’s group resource sharing is perhaps the most fundamental form of cooperation we take part in. This, so the argument goes, is even more evident in groups where resources are harder to come by: early hominids, “primitive” tribes and our primate cousins. The difficulty of obtaining a primary source of food – hunted prey – requires that it be acquired through group effort.⁵¹ Said difficulty lies at the heart of conceptualisations of cooperation such

51 This is not to say that the sensations and experiences associated with hunting and sharing food are identical to or responsible for those that drive and govern cooperation today. Such an imputation

as the stag hunt model proposed by Bryan Skyrms – the greatest benefit, both for one’s group and one’s self, requires coordination. (Skyrms, 2004) In such models the origins of inter-group cooperation and coordination are explained via the necessity of securing food, which can only be done through not only working together but also by ensuring future cooperation. Thus those who take part in the hunt (and perhaps even those who do not) share in the spoils, whether or not they secured or brought down the prey. (This in its turn presumes that co-operators can remember who is likely to help, a point touched upon later.) Not only is a certain disposition towards cooperative behaviour required for this to be possible, so too is a capacity to formulate goals in relation to the activity of others. The presumption is then that other forms of cooperation – including those complex forms engaged in by modern, highly developed human societies – also require such capacities. Those capacities, being so crucial to the simpler forms of cooperation, are thus innate capabilities which make contemporary life possible – or at least give it part of its particular character. Such models can be lent a concrete foundation through the experimental researches of the more empirically-driven disciplines within this schema. Similar to the infant helping experiments referred to above, experiments can be conducted which reveal both an animal’s preparedness to cooperate and the ways they go about doing it.

Many such experiments conducted on chimpanzees follow a general theme – two (or more) individuals are required to cooperate in order to get a reward, the reward being placed upon a moving board or platform. The participants can only pull the board towards them by simultaneously pulling on each end of a single rope looped onto the platform. There are a number of variants of this experiment. Some offer unequal rewards, or have a single undivided reward, to test what influence the reward has on participation. Others test different animals – elephants, for example (Plotnik *et. al.*, 2010) – and increasingly researchers will structure their experiments so as to allow the animals to choose whether to take part or not, and with whomever they wish. This latter helps test their memory of who cooperates and who doesn’t, and subsequent willingness to interact with poor cooperators. (Melis, Hare & Tomasello, 2006) Such studies give

would resemble the “stone-age skulls” paradigm associated with the perspective analysed in the previous chapter. Instead, such activities and practices are believed to be the origins of the innate *impulse* we have towards cooperation and the *capacities* which make it possible. Meanwhile their continued prevalence amongst less technologically advanced cultures, as well as other mammals, reinforces this interpretation by illustrating how central cooperation really is to these practices.

reasons to suppose that the animals tested not only have a disposition towards cooperation, but also a deep understanding of the ways in which their actions are dependent upon those of others. In the elephant-based experiment cited above, experimenters concluded that:

Our own study shows that elephants not only (i) cooperate successfully in a coordinated pulling task but also (ii) recognize the need for a partner by waiting if the partner is delayed. Elephants perhaps also (iii) recognize the necessity of their partner's actions, given that they discriminate between a partner with or without rope access. (Plotnik, *et. al.* 2010)

This could strongly suggest that cooperation and the capacities associated with it have natural roots, a supposition which can be lent more weight by similar experiments using human children as subjects.

Some – such as Tomasello – consider animal cooperation to be emblematic of the way in which human cooperation is likely to have evolved, however in their view the human form involves a set of different capabilities such as trust, mental representations and understanding the intents of others. (Tomasello, *et. al.*, 2009: 24-27, 54ff) For analysts such as these the key difference is our capacity to form joint or group goals. To approach one's aims in terms of what "we", rather than what "I", wish to accomplish. (*Ibid*: 62-64; Tomasello, 2007) Investigations into this facet of cooperation – and the wider field of human nature – often focus on the mental underpinnings required to take part in complex social activities. In particular their experiments are focused on how young children and infants are able to spontaneously (although not always perfectly) identify with the aims of others and construct a form of group self. (Warneken & Tomasello, 2006; Rakoczy, 2008) Whether or not these capacities imply that human forms of cooperation are unique (since opinion within this perspective is divided) their existence, revealed through studies of child sociability and cooperation, has obvious repercussions for how we view human nature. On the present view we are not solely driven to secure our own benefit, and even when we are we often do so in conjunction with others. This means not only being oriented towards cooperating but also being able to share others' perspectives and even take part in creating a group identity.

It is also interesting to note the way many of these studies demonstrate a change in the capacities studied, often over a relatively short period of time. Given the young age of the children involved we can legitimately construe these findings as revealing

innate aspects of human nature. However the nature they reveal is not one of reflexive instincts but instead consists of a range of possible forms and outcomes – canalised to some extent but not linearly determined. There are isomorphic similarities between children’s helping behaviour and that of adults, although the former do not necessarily place the same kind of caveats or conditions on their cooperation as adults might. Early social and interpersonal interactions have a strong effect on the ways in which certain capacities develop or “unfold”.⁵² A crucial part of the formation of human nature is not just epigenetic, it may also be postnatal. Hence in the following sections we shall discuss the ways in which empathy and representation form part of our nature, as well as how our capacity for making judgements (especially about other people) is a nascent but emergent complement to, and modifier of, these capacities and dispositions.

Empathy and Theory of Mind

In the previous chapter we saw how altruism was conceived of within the algorithmic schema as the mechanism by which our genes could get us to increase *their* overall chance of replication. Whilst this genetic benefit is not ignored by many working in the motivationalist schema, as we have just seen our cooperative side is studied as a thing in itself rather than simply a means to an end. On this view working for the benefit of others – especially in altruistic activities – does not require that we fool ourselves into believing our motives are unselfish or other-regarding. This is largely due to our tendency to value the interests and well-being of others. (Tomasello *et. al.*, 2009: 120) As was suggested above, altruism relies on empathic concern over the feelings of others, whilst cooperation requires an awareness of what the other party desires. Indeed for some, such as de Waal, a great deal of what makes altruism and cooperation interesting is what it reveals about the underlying capacities necessary for such behaviours or tendencies to be enacted. Innate cooperative dispositions can themselves be decomposed to reveal something about the way humans act and think. This is one of the primary reasons that so much effort is put into studying it empirically, and why it is of interest not only to psychologists but also to philosophers and ethicists.

Beyond cooperation – beyond even empathy – knowing, or believing one knows,

52 Brownell *et. al.* (2012) gives a good example of this.

what is going on inside the heads of others can be viewed as an important part of what it means to be a member of a social species. Many social activities (including, as we shall see in a later section, inculcation into communal systems of belonging) require such a capacity. We regard its absence, such as autism, as akin to a pathology.⁵³ Subscribers to the perspective(s) considered here hold that this is a deeply engrained core capacity, often with a traceable evolutionary pedigree and developmental vector. Here we find a range of capacities which appear to be strongly innate. Not only is it hard to imagine how such things like intuiting the intentions of another person could be taught, but research into primate and infant behaviour suggests that from a very early age we have these capacities, which we share with our closest relatives.⁵⁴

The more conceptual or hermeneutic readings of human nature included within this perspective – not just primatologists like de Waal or Jane Goodall who attempt to write for a wider audience than their normal academic papers reach, but also those philosophers and ethicists who seek to understand their subject through some form of a naturalistic lens – seem to agree with and draw upon the more naturalistic examinations when they assert that understanding the inner world of others is a core component of certain human activities. For example when Richard Joyce talks about the evolution of morality, he mostly deals with cooperation and helping, but still counts understanding the psychology of others as crucial to group belonging which in turn helps facilitate complex forms of cooperation. (Joyce, 2006: 41-42) It also appears to lesser or greater extents in his treatment of motivation. (See *ibid*: 222ff; Joyce, 2002) Meanwhile Philip Kitcher underlines the importance of the role played by sympathy in a number of Humean and Smithian accounts of ethics and the possible, provisional, vindication of such accounts through considering the evolutionary pathways of empathy.⁵⁵ For him ethics is an ‘extemporised solution to instances when our ‘limited altruism’ fails us. (de Waal *et. al.*, 2006: 124-131; cf. Clavier, 2012) Note, of course, how the focus remains at a level where dispositions and capacities play the key role, over and above an abstract principle or socially-sensitive relativism.

53 Although those with such pathologies are often able to *intellectually* understand the inner worlds of others.

54 That said, although it cannot be taught this ability *is* acquired during early infancy and childhood. Some behavioural pathologies, in particular sociopathy and psychopathy, may have their roots in the impeded development of empathetic faculties.

55 Which he argues is accompanied by a much greater enlargement and mental abstraction in ethics and in humans more generally – resembling Smith’s impartial spectator – which forms a discontinuity alongside the continuities identified by de Waal. (de Waal *et. al.*, 2006: 133-135)

Of course, there continues to be a strong empirical strand to this line of thought for such ruminations to draw on (and critique). As Gould observes in his foreward to Goodall's *In the Shadow of Man*, '[m]eticulous and unobtrusive observation must be our method if we hope to grasp the complexities of true history.' (Goodall, 1988: viii) Field research amongst our closest relatives implies that spontaneous identification with another's situation exists beyond our own species, and can inform the actions of those in which it is found. In an anecdotal vein, for example, de Waal describes a recurring incident at the San Diego Zoo, where a dry moat in the bonobo enclosure had a chain that allowed the apes to climb in and out, so they wouldn't become trapped. In such incidents a younger male would pull up the chain after the alpha male had climbed down. (de Waal, 2005:182) He would then look down at the alpha with an expression primatologists recognise as 'the equivalent of human laughter....' The alpha, Vernon, was not always stuck for long – another bonobo would arrive and help 'by dropping the chain back down and standing guard until he had gotten out.' As de Waal points out, '[b]oth observations tell us something about perspective taking.' Not only must the juvenile prankster have been aware of the significance of the chain – its potential use and relevance to the context – but also how its use relates to the situation of an other who is not itself (one who is actually experiencing the context in which it gains its particular use). The "helper" (a female called Loretta) must also have grasped this significance and its effect on the "victim", and must crucially have also experienced some form of *affect* leading her to reinstate access to the chain to allow the adult male to escape.

A number of such observations look directly at the emotive aspect – that is, the naturalness of empathy and empathetic affect within our closest evolutionary relatives. Some hands-on researchers have observed what appears to be consoling behaviour amongst chimps. When two chimps get into a fight the loser will understandably be upset, even if they are not physically hurt. This loser will often seek out or otherwise elicit the attention of another member of the troop and the two will engage in some social contact which appears to comfort the individual who lost the fight. (Palagi, Cordoni & Tarli, 2005) Usually this takes the form of simple physical contact or perhaps grooming. Other studies have shown such consolation apparently being offered spontaneously. (Romero, Castellanos & de Waal, 2010) Significantly, such observations

note a relationship between the willingness to offer this “consolation” and previous instances of grooming behaviours. The suggestion is that apes are more willing to be kind to their “friends” – to those that they have had a lot of contact and social exchanges with. Similar findings were found when studying non-primate mammals, such as elephants. (Bates *et. al.*, 2008)

De Waal (2005; 2009) gives a number of further examples gathered during his and others’ field researches and time spent working with animals. I am also tempted to suggest that similar emotional mechanisms are at work in those anthropological observations of social pressures such as ostracism that Boehm (1999) and Barclay (1990) cite in their treatment of social cohesion and egalitarianism (anti-hierarchy), which we come to examine in a forthcoming section. For his part, de Waal is keen to put forward what he sees as a formative (certainly for himself) set of observations from as long ago as the 1970s, in the work of primatologist Emil Menzel. Menzel was interested in the cognitive capacities of apes, in particular the way they navigated their environment. But this also involved understanding the ways that apes communicated – how they shared knowledge (even unintentionally) and how they might interpret “meaning” in one another’s movements, gestures or attentive cues. (Hopkins & Washburn: 2012) His work ‘laid the foundation... for many contemporary research topics in psychology and primatology including non-verbal and gestural communication, theory-of-mind (before this was the fashionable term), and behavioural economics.’ (*Ibid*) One notable observation was of two chimps, one of whom knew the location of some food. This “knower” would often inadvertently allow the other to guess the location of this food, which he would promptly take. In order to do this the thief (Rock) had to be able to infer – from the knower’s body language and taking cues from where her attention was directed – where the food was. This resulted in a game of cat-and-mouse as the knower (Belle) learned that Rock would often take the food she had located. ‘If Rock were not present, Belle invariably led the group to food and nearly everybody got some.’ If Rock was around, Belle would be more hesitant. ‘The reason was not hard to detect. As soon as Belle uncovered the food Rock... took it all.’ (Menzel, 1974: 134-135) The contention is that both chimps were able to intuit (albeit not to the same extent as we see in everyday human interactions) the intentions and goals of the other.

These are not trivial points, but rather the backbone of field research, amongst both apes and humans; however de Waal acknowledges that this forms a methodological problem: ‘the most striking examples of empathetic perspective-taking... concern single incidents.’ (de Waal, 2009: 103) This is why primatologists and ethologists engage in the kind of experimentation seen in the previous section. These allow them to set contexts and goals, and to see whether or not their subjects are capable of meeting their goals, how they behave in the attempt, and to consider what these observations mean. As we saw, such experiments directed at looking at helping behaviour often describe participants’ ability to know who is likely to cooperate, in some ways indirectly looking at this present element, but there are also some which explicitly concern themselves with an actor’s capacity to understand the other. Instances of this more directed experimentation aim to create situations that elicit the same kinds of behaviours as those observed by Menzel (amongst others), under controlled conditions. An experimenter might hide food in sight of a subordinate chimpanzee, and then watch what happens when this subordinate has to interact with a dominant member of their community. (Hare *et. al.*, 2000; Hare, Call & Tomasello, 2001) If the dominant had not seen the food, the lower-status animal would approach it more freely than if the other had seen where it was hidden. In such competitive circumstances the chimps showed a limited capacity for understanding what others see and know about their surroundings. (cf. Tomasello, Call & Hare, 2003)

These experiments typically attempt to explicitly test the ability of individual subjects – in this case apes – to understand one-another’s mind, rather than the actions of the experimenters, reducing the interference of the human observer as much as possible. However the ability to control the parameters of the tests impinges upon this neutrality – this role of the inert observer, the view from nowhere. Passive observations of captive and wild populations typically get around this, but as we saw they do so at the expense of replicability. There is thus a tension between the injunction against the researcher overly imposing themselves on the object of their study and the necessity of high-fidelity to the truth of the matter (the “reality” of nature as it exists apart from the presuppositions of human researchers). This is perhaps why both are given alternating precedence, by which I mean the overall view of the subject is synthesised from field

reports on the one hand and in-depth, expert-led studies involving structured tests.⁵⁶

To my mind these approaches show that within this perspective it is almost taken for granted that the nature of any given social species involves, at the very start of our analysis, capacities involved in orienting the individual within their social environment. (Hence my earlier, coarse-grained characterisation of this as a “surface level” approach.) As a consequence, much research revolves around how far and in which species certain capacities can be found. Hence those instances when the debate *within* the schema turns to the question of to what extent there are continuities or discontinuities between humans and animals. (see Kitcher, 2011; Tomasello, Call & Hare, 2003; de Waal *et. al.*, 2006) Indeed, many of these aspects – and thus the nature as a whole – cannot be understood without reference to a social context. But for our purposes we have further to go.

For present purposes establishing how social capacities manifest specifically in human beings falls to comparative and developmental psychologists. These researchers have devised tests and experiments to test competency in what is called theory of mind (ToM). ToM can be thought of as the ability to know, explicitly, the intentions and motives of others; it is the ability to intuit what they are likely to know or believe about the context they are in. (Carpendale & Lewis, 2009) To examine how this capacity works researchers can ask subjects, usually young children, a series of simple questions – neutrally phrased so as to avoid leading the participant towards expected answers – aimed at discovering what they understand about the internal mental states of characters in a fictional scenario. Trials such as these show that not only do children have these abilities, but also that the said abilities are consistently present across cultures. (Wellman & Liu, 2004; Tan-Niam *et. al.*, 1998) Coupled with the youth of the subjects, the not-unreasonable theory is that this implies that ToM is a truly in-born human universal. However it is also important to note that ToM abilities do not arrive fully formed; studies often observe that the abilities being studied are imperfect in the youngest children studied, and that ToM competency increases with age. To confirm or test this hypothesis some studies involve testing their subjects at intervals throughout their development, tracking in what ways and how quickly the subjects’ abilities progress. (see Knafo *et. al.*, 2008: 739-740) This is compounded by an asymmetry in the

56 Gary Fine and Kimberly Elsbach (2000) grapple with this same problem in relation to human social psychology.

way that this competency develops – some children increase in aptitude faster or slower than their peers, despite sharing the same general background, social status and environment (which are, after all, the control parameters for these studies). Additionally the sequence of this development may display cultural variations in the way that a child's ToM emerges; the ways in which the other's perspective is understood can develop faster or slower depending on the implicit social context. (Lillard, 1998; Shahaian *et. al.*, 2011) Indeed, much of the research carried out presumes that culture *can* make a difference and in some cases the studies are precisely aimed at determining to what extent this is so.

Although it appears that everyone eventually reaches the same level of ability before adolescence, these two observations demonstrate, for current purposes, that a certain degree of flexibility is incorporated into the motivationalist schema. The present perspective on human nature views developmental pathways, particularly in early life, as integral to the nature of the animal. What is given about the human being is, in addition to being heavily dispositional, also directional: it has to take into account the complexity of the organism's world, a complexity which can only be confronted and realised⁵⁷ through learning processes which are canalised by the combined structure of their dispositions and capacities in conjunction with their social context.

Judgements and Norms

We can see this developmental factor in the ways in which we make judgements about events. In fact, theory of mind tests form the basis of the work by Melanie Killen and her colleagues, looking into the phenomenon of moral judgement. In one study they examined the competencies of children across two different tasks (rather than in similar tasks across intervals of time): the first was a ToM test, the second was an evaluation of a scenario where they were asked about the characters' intentions and moral culpability. (Killen *et. al.*, 2011) The results indicated that children who scored higher in ToM competency made more "correct" judgements about the culpability of the scenario's characters, and did so because of the same reasons we would expect adults to make such judgements. For instance they recognised that a character who threw away a bag containing an object (a sweet treat) valued by another character was unaware of the

⁵⁷ Confronted in the sense that the external world it encounters is complex; realised in the sense that the organism's internal workings, which orient it *within* that external world, are themselves complex.

contents, and therefore were less likely to rate them morally culpable or their actions as particularly bad. On the other hand, those participants who showed less proficiency at understanding what other agents know were more likely to assign blame to the ‘accidental transgressor’ character who threw away the bag. These findings provided Killen and her team with the basis for what they call morally-relevant theory of mind – or “MoToM” – which connects the human ability to intuit what others know about the world to their ability to make normative moral and social judgements about their actions. All the children displayed some kind of propensity and disposition to make judgements – moral judgements – about the situations they were presented with. However those who were better at intuiting the worldview and intentions of the transgressor, and at integrating this intuition into their judgement-making process, made what we would consider to be "better" judgements about culpability and the desirability of corrective punishment. (See Nobes *et. al.*, 2009)

Clearly this relation could shed some light on the role that perception plays in ethical judgement, especially if one were interested in the development of the ethical self. However, in order to serve the present investigation, I wish instead to remain at a remove and focus on the overarching concern of human nature and the way it is formulated as a theoretical construct. In that respect I think the relationship between ToM and judgements further demonstrates something that has been touched on previously – the way that different capacities, abilities and dispositions interact *within* this particular schema of human nature theory. Human nature is – to the (motivationalist) philosopher and the ethologist alike – a complex and multi-tiered conglomeration of different aspects which interact and combine as a matter of course in many different ways.⁵⁸ The schemas, as I have divided them up, are rather large and encompassing, so there are obviously people and perspectives subsumed under the motivationalist schema that vary in the degree to which they analyse and talk about human nature in this way – just as there are disagreements over how similar or dissimilar humanity is to other apes. However I would contend that a distinctive mark of a motivationalist conception of human nature is some degree of sophisticated sensitivity to this internal interaction.

The development of capacities for judgement over time – and what is more, the

58 This was touched upon in the section on ambiguity at the beginning of the current chapter.

way that theories within this schema accommodate and even embrace this development – also creates an interesting tension in the way that human nature is thought about. Rather than a set of instincts which come “programmed” into the human being, much of human nature might well be developed in certain ways and show discernible patterns and commonalities, but it will emerge subtly different across individuals and crucially take time to emerge. (Nobes *et. al.*, 2009; Cushman, *et. al.*, 2013) This highlights how what is given about the human may not be readily apparent at birth, but instead be constituted by certain developmental pathways and a form of “directionality” over the early life time of the individual. As a side note, there is a sense in which this state of affairs might be expected, as plasticity and flexibility are not only desirable traits in themselves – allowing those who possess them to adapt to short-term challenges – but these developmental routes are also more efficient methods of ensuring a creature displays appropriate or desirable behaviours for its species. It would be biologically impractical and wasteful if certain activities were hard-coded into the genome of an animal, but dispositions that steer them towards certain situations, coupled with an ability to learn, would over time result in responses appropriate for that animal’s environment. A simple (if anecdotal) example of this is the idea that house cats and other felines are not born with the ability or knowledge of how to hunt, but instead are predisposed (“programmed”) to pounce on small moving objects – thus putting them in a position to *learn* how to hunt. This ensures that as adults they will *acquire* the ability to hunt through the possession of a set of impulses towards engaging in a particular behaviour, rather than a complete set of information that covers appropriate responses to hunting situations.

We can see another example of the interaction between innate components of an animal’s nature and its actual instantiation within the world, in respect to sensitivity to group belonging. This brings us to one of the most far-reaching kinds of judgement an individual might make, the capacity by which the said individual distinguishes between those who are a part of their community and those who are “outside” that community. Whilst previously I described how, within this particular perspective, human beings are seen as naturally cooperative creatures, there are other factors which it is believed can affect or alter the ways such beings cooperate and who they do so with. One such factor is this “in-group/out-group” distinction. This divides people according to certain kinds

of attachment or allegiance, and appears to have an effect on whether certain others are seen as fitting recipients of one's altruistic acts or not. Rather than a hard rule that all organisms of a given type possess, the in-group/out-group distinction is more akin to an ability to divide the world into different kinds. Associating different individuals with these kinds has to be learned and appears to be context-driven. (Otten & Moskowitz, 2000; cf. Durkheim, 1995) (Trivially, we might consider the idea of young animals "imprinting" on the first thing they see as an example of something similar to this.)

Here we have an opportunity to see how some within the motivationalist schema utilise a more hermeneutic - or at least less empirically-dependent - approach to the subject of human nature beyond the sphere of ethics (although ethics still makes an appearance). This is itself an interesting avenue of investigation since it revolves around the idea that personal psychological impulses can be connected with higher-level socio-cultural phenomena in a meaningful way. Specifically, some theorise that there is a connection between the in-group/out-group distinction and the communal social role played by religion. On this view religion serves as a guarantor of a number of necessary social relations, and a protection against exploitation by selfish manipulators.⁵⁹ (Henrich, 2009: 246-247; 253ff) Most important is the way in which it does so. According to philosopher John Teehan, religion does not exist as an autonomous, *sui generis*, cultural entity; but nor is it merely an emanation of human nature, some kind of epiphenomenal expression of a deeper instinct (as early sociobiology held nationalism to be of animal territorialism). Instead it serves as a locus of communal activity, providing as it does a number of methods by which individuals display their belonging to a shared community. (Teehan, 2010: 43-45, 137-141; Atran, 2010) This interpretation is connected to theories that explain religious observances in evolutionary terms - within an evolutionary framework these activities appear costly, for little or no evolutionary gain. The hypothesis is that these observances - rituals, prayers, particular forms of dress and so on - are forms of "signalling"; they identify the practitioner as a member of a certain community. (*Ibid*: 89-91, 129-131; Henrich, 2009) Teehan and others like him consider this approach to be useful in explaining the evolutionary utility and psychological value of religion. According to this view socio-cultural structures and conventions can be read with consideration to how they interact with an evolved

⁵⁹ Noticeably one such relation is one which we have already examined before: cooperation.

cognitive psychology. (For example see Powell & Clarke, 2012) Religion connects with in-group bias by signalling allegiance to a particular (moral) community, which in turn is tied to our predisposition to aid those closest to us rather than those to whom we have little or no relationship. In the absence of an abundance of disposable resources, religion acts as a badge of belonging, part of a conceptual apparatus by which an agent judges whether another individual is worth cooperating with and likely to reciprocate altruistic acts directed towards him or her; they are worth the agent expending its energy and resources on, because they are viewed as "one of us".

Such judgements are not automatically binary ones since, as we saw with de Waal's concept of a 'floating pyramid', it is sensitive to context. We might, for example, aid someone in the out-group if we have sufficient resources and/or do not feel threatened. This is what distinguishes the floating pyramid from Singer's expanding circles – it includes an element of feeling and perception rather than strictly utilitarian calculations and resources. Such distinctions are also sensitive to learning; most notably in that young children often have to learn the types and categories by which they assign belonging to others. The tendency or capacity to make in-group/out-group distinctions may be natural, but the *contents* of such distinctions are often conventional, the most easily made ones obviously being the clan, tribe and faith (moral community).⁶⁰ Others are more transitory and quasi-arbitrary (here I am thinking of things such as cliques in schools, allegiance to a sports team and their fan base, as well as, perhaps, race and ethnicity, insofar as they are deployed to indicate community membership). Hence Richard Joyce, in his metaethical work on *The Evolution of Morality*, notes the importance of emotion in our motivational psychology, whilst simultaneously making the point that innateness 'must not be thought to imply *inevitability*.' (Joyce, 2006: 226-8)

Of course, as mentioned above, these distinctions do not always spring unbidden from our genetics or neurobiological makeup. Instead they are subject to external stimuli and standards – religious gestures and dress, for example, are not biologically determined; likewise a person may convert (most noticeably in comparatively modern religions less connected with a specific tribe or location) and thus become part of the

60 These three are likely to be intimately connected in any case. In early man it would be almost certain that any group living together would share the same set of spiritual practices, making the link between tribe and ethical community organic and almost inseparable.

shared moral community. (See Teehan, 2010: 130-131) In addition we might also note how the capacity to make distinctions between different things we see is subject to a training effect. We can see how this is investigated by returning briefly to child developmental psychology. Within this field some researchers have identified what they call the “other-race effect”, a term used to describe the supposed difficulty members of one ethnic group will have in distinguishing between different individuals of another ethnic group. Of note, however, is the presence of what is called a “training effect” in this situation. One team of researchers found that the other-race effect was not observed in three month old infants and that repeated testing showed no development of this effect. (Spangler *et. al.*, 2012) They speculate that repeated exposure to even just a limited sample of faces from another ethnic group was sufficient to retard the development of the other-race effect. In essence the other-race effect represents an acquired simplification or limitation of the means by which individuals distinguish between others they encounter. (Ferguson *et. al.*, 2009) This suggests that if skin tone or some other noticeable physical feature is radically different what the perceiver has come across before they appear to have a tendency to make this a crux of their differentiation between individuals, and those that share this (perceived) radical variation get lumped in to one large subgroup. On the other hand, if such a variant feature were regularly encountered in the perceiver’s development it would be automatically incorporated as one among many different variations (of skin tone; ear, nose or mouth shape; hair colour; or any other such feature) by which that individual differentiated between the people they know and meet in the future.

Other cognitive research shows how such distinctions can alter an agent’s perception of the world. These categories seem to have a deep, intuitive, affective relationship to how individuals view and assess the world; rather than being rational categories into which a reasoning agent sorts other beings. For instance, Adam Waytz and Liane Young (2012) investigated people’s perceptions of socially- and morally-relevant attributes such as responsibility and “group mindedness”⁶¹ when assessing different kinds of group. Their results indicated that in many cases respondents would

61 Waytz and Young use two terms: ‘group mind’, meaning a perceived tendency on behalf of a group to act, make plans, etc. as an entity itself; and ‘group-member mind’, meaning the perception of the level of mind (/individuality) on behalf of the members of a group.

attribute less individuality to members of highly cohesive groups (although this could vary depending on the nature of the group in question). As the authors observe this tendency could '[shed] light on the psychology of dehumanization.... The inverse relation between group mind and group-member mind suggests that perceived group cohesion should predict a willingness to dehumanize individual members of that group.' (*Ibid*: 84) Whilst it seems simply common sense and a self-evident fact to assert that our treatment of others can be altered by our perceptions of their group-identity, elements within this schema often look into precisely *how* these socio-cultural distinctions tap into our core emotive and affective capacities. (Cuddy *et. al.*, 2007: 643-5)

Victimisation of an out-group, or inclusion of an out-group as a subset of some other, larger in-group, may be just as related to the specific affective responses elicited by different group allegiances in the human individual as they are to political or social expediency (the need for a scapegoat, etc.).

We can in turn think of this in terms of the ways in which philosophers such as Joyce or Jesse Prinz emphasise the interrelated roles of emotion and motivation within ethical theory – within this schema there is a strong belief that emotion and disposition are bound up with an agent's affective world. Owen Flanagan makes a similar case when arguing for the psychological reality of ethical virtues:

A virtue, if it is accurately ascribed, names a real and reliable pattern among relata (normally comprised of states or processes in things – in a person and the world).... A virtue does play a causal role, and it is mostly inside the person. But it is not totally inside the person, and it is not a thing. Instead a virtue, like all other character traits (if there any [sic]), is a reliable habit of the heart-mind. (Flanagan 2009b: 60-1)

He argues that 'the ascription of a virtue or a vice is normally an ascription of a disposition that reliably activates the desired sequence [of ethical affect and action].' (*Ibidem*)

Thus, for Flanagan, virtue is both something that depends on psychological dispositions *and* which can be both culturally contingent and in need of cultivation. I interpret this to mean that we may have certain sensitivities, but we do not always react to them reliably, or in ways that a historically specific culture deems appropriate.⁶² He notes that different schools of thought have their own opinions on what the virtues are – we are, for example, disposed to obey "purity norms" to prevent contagion, but what

⁶² Or perhaps we react to them in a way that our culture deems appropriate, but that is not altogether healthy from a psychological point of view.

counts as contagion or impurity might vary over time and context. Thus it is possible to argue that a number of types of virtue ethics can be understood in the light of how the virtues they identify relate to innate dispositions and ways of thinking (Flanagan, 1991; 2011) and Flanagan has even gone so far as to say that a naturalistic understanding of the self can aid in the attainment of a modern version of *Eudaimonia*. (Flanagan, 2009a, 2009b) Likewise, for Prinz the expression of moral sensibilities is similarly linked to the interaction between ‘embodied emotions’ and their socio-cultural stimuli. (Prinz, 2003) Although an empiricist, Prinz’s line of thought can thus be thought of as a kind of soft-nativism when it comes to emotions.

To give one more example of this “openness”: the anthropologist Christopher Boehm is interested in the ways that cultures have interacted with what he considers the varied set of dispositions innate to their constituent members.⁶³ Whilst he generally adopts a position similar to that of many of the gene-centrists – in that he feels that evolution has endowed us with an strong disposition towards ‘egoism and nepotism’ rather than widespread altruism – he nevertheless sees ‘extrafamilial generosity’ as a real and definitive part of human nature in need of careful analysis. It is not just a phenomenon that can be explained using the logic of brute Evolutionary Psychology to ground it in the genetic interests of the individual acting generously; nor is it a cultural artefact, something used as a corrective to a corrosive human nature. Human nature does not flow from the cold programming of evolution and genetic interest, though evolution plays its part in creating it. Instead this generalised altruism is taken by Boehm simply to be fairly weak when compared to other, more self-serving impulses, but nevertheless on a par with them. (Boehm, 2012: 7-11; 54-57)

He considers this to be illustrative of how human nature and culture intertwine. Much like Teehan, Boehm believes that certain cultural artefacts and practices reinforce some behaviours and can diminish others, by providing outlets for conflicting and ambiguous human dispositions. The innate inclinations of individuals are canalised by their social environment towards certain typical human ranges.⁶⁴ In the case of altruism this is accomplished with the culture’s morality, or ethical code, which reinforces their

63 And this will tie in to the comments on the incorporation of flexibility made in the section immediately preceding.

64 Within these ranges, of course, there is a high degree of variation between cultures, say between highly communistic and highly autonomous societies or between rigidly hierarchical and very egalitarian ones.

altruistic dispositions to the extent that their society becomes a cohesive whole. (Boehm, 2012: 235-236) This socialisation occurs in what he characterises as ‘predictable’ periods of development (i.e. the early months and years of life in which those child psychologists previously cited find regular, repeated patterns of development), and in fact represents the refinement of those faculties which make society function.

Boehm theorised that a similar arrangement explains much about our tendency to form hierarchies (and to resist them). According to him humans encapsulate dispositions that lead them to dominate others, to be (or at least appear to be) submissive towards social dominants but also to resent their domination. He attributes these tendencies to our human nature but describes hierarchy – and what he terms “antihierarchy” – as part of our political nature, distinguishing between those things that can properly be attributed to human agents and the socially instantiated relations they generate. On this view, the ambiguous social dispositions that all humans have result in a variety of possible social forms. Thus both hierarchical and egalitarian societies are equally natural, as they are both based in Human Nature. (Boehm, 1999: 10-13; 38-41) Subordinate members of a group can use social ostracism, gossip and ridicule to undermine their leaders when they try to exert too much power, and will also deploy the same social techniques to penalise “upstarts” who try to set themselves above other members of the group. Unsurprisingly, Boehm concludes that egalitarian societies are achieved not through the elimination of hierarchy, but through the constant, active rejection of dominance, as a mediation of Human Nature. (Boehm, 1999: 72-81; 2012: 246-250; cf. Barclay, 1990)

This may have even had consequences for our evolutionary ancestors. Boehm’s theory is that dominant alphas – our chiefs, kings and other leaders – can be essentially reinterpreted as bullies since they very often secure their power at least in part through the submission of others, as well as accruing to themselves rights over access to sexual partners and food. In response the lower status individuals may band together to depose (and often kill) the bully and reopen a more favourable access to desirable items within the community that were previously monopolised by the alpha. The result of this is the lessening of the alpha’s reproductive advantage (or even the complete cessation of reproduction) and thus the potential lowered prevalence of “bully genes” which promote

the desire to dominate, and a converse potential increase in the spread of dispositions towards hierarchy-attenuating and/or cooperative activities necessary to a) depose bullies and b) guard against the rise of bullies. Boehm and his colleague Jessica Flack argue that historically this created evolutionary niches where egalitarian dispositions could thrive and become part of the possible range of human social relations. (Boehm & Flack, 2010; Boehm, 1999) These niches are created more by selecting *against* certain members of a population (bullies) rather than *for* any particular trait. This is the consequence of a recursive relationship between what happens at the cultural level and the level of population genetics. Thus over (evolutionary) time a commitment to egalitarian cooperation may become not just a beneficial survival strategy, but a highly common and widely preferred one. The upshot is that human nature, as we find it, consists of hierarchical and anti-hierarchical dispositions – both with their intertwined evolutionary pedigrees – existing in tensions intra- and inter-individually. Consequent to this we find, across a subset of differing human cultures, socio-political practices and tactics deployed to limit the power of group leaders and to prevent any one individual accruing sufficient prestige or power to dominate the rest (and in other cultures, hierarchies ranging from loose to incredibly rigid). These are the cultural mediations by which these tensioned dispositions find their equilibria.

Limitations

The preceding elements of human nature just identified should not be confused with the kind of modular view of the psyche espoused by EvoPsych. Although there are similarities in the historical character of their explanations for the origins of the human dispositions and capacities identified, the thinkers in this schema understand those elements as a gamut of interacting parts that result in complex inter- and intra-personal(/-organism) relationships. That is the defining characteristic of the schema which they represent. The (evolutionary) history which gave rise to this human nature (if it is invoked at all) simply stands to give a fuller, more rounded analysis.

Many such elements are themselves understood to be the result of simpler processes (processes that many of the experimental papers cited here attempt to

penetrate and understand) or dispositions – such as empathetic intuition – which cut across a number of the capacities examined so far. As we saw at the start, ethics and morality are seen as being themselves evolved aspects of our nature, but are not isolatable as specific behaviours, and certainly not as single “instincts” or regions of the brain. Of course, attempts to understand the ways in which we think and act, and the reasons that we do so in those ways, could fruitfully pay attention to the evolutionary context in which they arose. But this is in addition to the cultures and traditions in which thinking and acting takes place. Furthermore ‘it is equally necessary that [we] should be capable of dealing with the foreground – of abandoning the long perspective and looking directly at the motives of individuals.’ (Midgley, 1995: 135, 149n.10) Hence motivations, interactions between individuals and a limited incorporation of context are all central to a “motivationalist” concept of human nature. (Of course in the perspectives that, in this chapter, act as ciphers for the whole schema there are two contexts: the social and the evolutionary.)

It should be clear by this point that a notable feature of this schema is the focus on a kind of sociological quasi-individualism or hybridism. That is, individuals and their activities serve as the crux of the analysis, whilst simultaneously there is a recognition of the role of social dynamics “built-in” to it. A recognition of how, in Scott Atran’s words ‘people are predominantly social actors rather than individual performers....’ (Atran, 2011: 35) I would argue that this kind of socially-situated-individualism is a strength, since any coherent theory of human nature would have to tackle the idea that that nature is instantiated across a variety of unique, diverse individuals acting under their own power but nevertheless in strikingly similar ways and with a markedly sophisticated understanding of their relations to one another. For instance we might be able to say that humanity is cooperative in nature; but this is so because of (and revealed in) the pro-social dispositions of individuals, canalised and mediated by their (innate reactions to) experiences of group belonging (see above).

Those writers and researchers who might be grouped under this schema tend to locate human nature in the emotional and psychological dispositions underpinning the actions and choices of individuals and their interactions with one another. Even the anthropological materials we have considered (rather briefly, for the sake of brevity) are concerned with how individuals and their culture interact: how culture reflects or

reinforces certain human dispositions which are strongly linked to individual agency, and yet are universal (if not exactly uniform, and not *necessarily* thought of as innate) across human individuals. Evolutionary anthropology could thus be understood as analogous to the in-depth and long-term field work amongst wild ape populations that considered in the section on empathy, whilst the developmental psychology studies I examined previously correspond roughly to the same kinds of experimental tests carried out on apes' cognitive and social competencies. My contention is that this makes them even more amenable than is already suggested by their sharing a common scholarly object (humans and their competencies/abilities), since there is the same possibility for synthesis and cross-comparison as exists in the treatment of other species.

However this same quasi-individualism may also lead to a limitation.⁶⁵ As Dan Sperber notes, we can draw a distinction between level and scope when talking about social ontology, and this seems true of human nature also (especially since we might consider human nature itself to be part of that social ontology). (Sperber, 2011: 67ff; cf. Thigpen & Downing, 1987, De Sardan, 2015: 133ff) If we attempt to untangle level and scope in this situation, we can start to further distinguish some of the areas of overlap between this and its neighbouring schemas. When discussing altruism and cooperation I made note of the higher level of focus “motivationalist” researchers have taken – focussing on our psychological regularities and commonalities, with the evolutionary mechanics relegated to a supporting role. At the same time the scope is widened in many places, notably in experiments where human or primate subjects are tested in their interactions with others (mostly of their own species), and in philosophical reflections on what such research tells us about traditional concerns within ethics and cognition.

Yet there is still a question of how much of an extension of scope this really represents. A number of the spheres of existence treated by this schema are also shared and examined by the schema to which we shall shortly come. The major difference here is again scope; the motivationalist schema appears to cover some of the interpersonal and social levels that are distinctive to the contextual schema. However it might be a fair objection that it does so in a limited or selective way: that its “scope” is limited. The motivationalist schema incorporates an understanding of the socially situated character

65 Further to this: when we examine an empirical subject we are looking at – and when discussing hypothetical subjects, positing – individual instances from which we are attempting to extrapolate the generalities and regularities which are the substance of human nature. Here I am suggesting this kind of ethological/anthropological individualism has an advantage in doing this explicitly.

of human nature, especially in those enquiries concerning the social competencies of apes and humans, as well as those more anthropological investigations just considered. However these still take in only a limited aspect of the social context: researchers consider small-scale interactions, over discrete (even if extensive) periods of time, often with a specific scenario in mind.

Some of this limited scope will be readily apparent in some of the disciplines that constitute this schema. Primates tend to live in small groups, and thus this is what our ethological observations have to deal with, and although they take part in collective hunting and grooming, when researchers devise structured tests of their capacities they most often focus on one-on-one interactions. Similarly, child psychology and cognitive psychology experiments typically study social groups much smaller than the culture-wide social group (and sub-cultural subsets) in which their subjects live their day-to-day lives. In addition, as has been mentioned briefly above, in many experimental scenarios researchers are looking at one or two specific characteristics, tendencies or capacities rather than the totality of human experience.⁶⁶ This is a limitation based partly on the methods of investigation used by these particular disciplines but there is something similar happening in the more philosophical aspects of this schema. Ethical philosophy attempts to understand this kind of nature in terms of how it relates to our morality and metaethical concerns about realism and anti-realism, whether it approaches the issue from a more reserved basis such as the emotion-based morality of Prinz (who we should remember disputes the idea that human nature makes us what we are, but nevertheless holds that we can ground ethics in a naturalistic emotional repertoire), or utilises a more elaborate system which directly connects evolution, social group dynamics and moral psychology together, such as Joyce. Whilst ethics thus seems to be working with a more concrete or day-to-day aspect of human existence, its scope can still be construed as narrow since it only examines this one particular facet.⁶⁷ Ethics is far-reaching but not all such ethical theories necessarily try to relate the subject to politics, culture or even economics (although virtue-based theories will almost certainly have ready relevance to

66 Again, this is a limitation rather than a criticism. Few, if any, such researchers pretend they are doing otherwise. Many of the papers cited in this chapter either conclude by raising questions about the further implications of their findings, or else attempt to synthesise such findings based on previous research into a more complete picture of their human or animal subjects, either as review articles or using new, more complex experimental scenarios.

67 Metaethics is especially narrow and hence difficult to reconcile with the more practical aspects of human life.

such topics), and thus limit their scope in terms of how many of the aspects and activities of human nature and society they encompass. As Jared Diamond notes: ‘[a]nthropology, education, psychology and other academic fields have their own ideologies, which at any given time focus on a certain range of research topics, and which impose blinders on what phenomena are considered worth studying.’ (Diamond, 2012: 174) Even certain aspects of the anthropological contribution are, it could be argued, somewhat narrow. For example Boehm and Flack’s work on hierarchy is highly focussed on a few key factors surrounding hierarchy and antihierarchy, although it bears remembering that the work is synthesised from more extensive anthropological investigations undertaken by themselves or others, and the wider context is drawn in when comparing the particularities of hierarchies in different cultures.

Nevertheless, we should also keep in mind Diamond’s observation that modern western society differs so greatly in scale from traditional societies that it radically alters certain contextual elements. He notes, for example, that western societies have different perceptions of strangers than traditional societies since we tend to come into contact with unknown individuals, whom we may never meet again, on a regular basis. Similarly, we are used to the idea that friendships can be transitory and not always with people we will interact with on a daily or even weekly basis, whereas such friendships would be quite alien to many traditional societies. The mechanisms and interactions – such as loyalty or cooperation – may not change much, but how friendships are formed, and with whom, do. Anthropologists like Diamond believe such comparisons are important and interesting, since even the best designed psychological surveys carried out in the “west” will be skewed towards WEIRD⁶⁸ participants, although he cautions against taking direct normative inferences. (Diamond, 2012: 6-9, 174-176; Henrich, Heine & Norenzayan, 2010a; cf. Lillard, 1998; Henrich *et. al.*, 2006)

Yet whilst these researchers do draw upon and use studies that examine whole cultures, these cultures are typically rather small – they lack the global context and internal complexity of what we tend to think of as “contemporary” society. Indeed this observation might be pushed to the limit and used to claim that such societies cannot possibly tell us anything about humans in the “modern” world since, for example, they can be thought of as representing a pre-historical stage of development. But to make

68 i.e. Those from White, Educated, Industrial, Rich, Democratic cultures.

such a claim seriously would require claiming that such people are thus of a very different kind of being when compared to other humans, a claim which few would wish to make even if it were sustainable. Furthermore, if taken as one component of a wider intellectual tradition (as I do here and as is the case at certain interdisciplinary conferences) it can be seen that such anthropologically-centred accounts are situated within a group of viewpoints making similar, connected claims.

The result of this is that someone might claim that some element of the human experience is a part of our nature because it is simultaneously present in our nearest evolutionary cousins, in different human cultures who live very much like our ancestors, and in the very young offspring of our own species and society. Recalling the criteria established in the introduction, such an element could be considered both regular, in that it reliably occurs across a range of contexts, and pre-cultural. However whilst a motivationalist human nature theory of this stripe has undoubted advantages in approaching what is natural and innate about human beings, and the regularities it identifies are located closer to our everyday, lived experience, it is still not able to encompass the entirety of our complex social environment, much less the totality of all possible or extant social environments which people find themselves in. A full, comprehensive account only emerges as part of a synthesis of multiple different viewpoints within (and without) the schema presented here – motivationalist human nature cannot be complete in and of itself.

Nevertheless, or perhaps in part because of these considerations, I consider this to be an exemplary starting point for a theory of human nature. It presents us with something rooted in individuals and therefore (potentially and ideally) within the actual individuals encountered in our empirical and everyday experiences. Yet at the same time these are just the indicators of something we collectively share: each individual acts both selfishly and selflessly, but they do so because it is part of their shared humanity; each culture has its own customs and values, but these retain their primordial role as part of the way we demarcate belonging and kinship (the intrinsic connections between these individuals). We are prompted to dig deeper into these various instances to discover the unifying continuities and how they come to be expressed differently in subtle and less subtle ways. What we want is a fuller accounting of the role of mediating

agents in this variation of expression.

3: The Context

If the problem with the human nature theories examined in the preceding chapters was that they did not make sufficient account for the way in which their subject is interrelated with its context, then the present schema embraces this factor in the way we actually encounter human nature. The key feature of this schema is the dual character of its human nature. In one aspect human nature appears as a core or “kernel” which appears as the fundamental, innate component of our humanity. But this nature is not static, it is instantiated in a variety of structures and processes; so deeply that it cannot be understood outside of them. In short, human nature is transformed by its context, and so human nature, properly understood, must be the outcome of that transformation, not merely the core. Consequently theories that fit within this schema do not view human nature as synonymous with some innate properties nor of natural facts-of-the-matter. They do not, necessarily, deny that there are some universal consistencies between human beings, but such aspects are not assumed to be the principle factor in shaping what it means to be human. Rather, human nature can only be fully considered in relation to the context in which humans find themselves, either in terms of early experiences or in the ongoing structuring of their lives. The emphasis is very much on the way that human nature is what we find human beings to be, and that the environment they find themselves in has a crucial role to play in governing what that will be.

I would contend that a great many contemporary theories fall into this category: a set of attributes set the scene, but these are not enough for the theorist to flesh out what it means to be human, nor does it reflect how they think and act as humans. Such an approach has a great deal of merit: in discussing human nature we want to consider

the “finished product”, not just the raw material.⁶⁹ This can only be done by a consideration of the social and/or political sphere.

Given how general this structure can be it would be difficult to give a fair hearing to every single paradigm within even a broadly representative sample of disciplines. Instead here I propose to expound on the characteristics of this schema by looking at two foundational thinkers who – whilst outside the historical frame of the other chapters – have impacted on the intellectual climate of the twentieth century in a variety of disciplines. These are Karl Marx and Sigmund Freud. Both have proven influential to a range of fields within sociology, political philosophy and critical theory. As such they are fitting exemplars or representatives of a more general approach. Both can be characterised as seeing the human essence as a matter of processes. Their human nature blurs the line between the natural and the political, given that whatever is natural is always-already mediated by an individual’s experiences (usually either of the culture, or of their socialisation).

Thus the emphasis is robustly on the context, and we can call this variety of human nature theory a “contextualist” one. There may be some mild controversy on this point, in that Marx appears to repudiate the idea of human nature in emphasising the role of socio-economic forces in human life. However I think his nascent conception of human nature actually reveals itself in the way he deals with the transformative process undergone by consciousness. In fact Marx and Freud could be said to represent two poles *within* this particular schema, of how sparse or full the core or kernel might be. In Marx’s case it is rather loosely defined, a position in keeping with his assertion that human beings are first and foremost historical beings. Freud provides a much fuller conception of what underlies human nature in the form of a psychological cosmology of structured form and desires, attempting to explain how this inner world is in turn transformed as the individual matures and becomes socialised into their culture.

The central characteristic of this schema, however, is the transformative aspect:

69 Another way of thinking about this is that we are considering the ways that the raw material is being transformed. Think, for example, of the perspective described by Abu Bakr Ba’askir to Scott Atran, considered in the introduction. There human nature is an inherent property, ‘an innate propensity to [*tauhid*/oneness with God]’ but one that can be changed or distorted by the conditions under which we live. According to Ba’askir only living in accordance with Islam can this nature (*fitrah*) remain unchanged and intact. (*op. cit.* Atran, 2010: 14-15) Many religions have paradigms within them (dominant or otherwise) which propose similar human nature theories, or theories in which human nature can flourish under the correct conditions. Unsurprisingly they tend to claim only their religion provides these conditions.

the notion that human nature is a synthesis of a being and its world. In essence the nature of a thing, in this case a human being, can subtly shift depending on the situation it finds itself in. However elaborate or minimalist their idea of the core may be, thinkers who fall into this third schema will be characterised by the way they relate human beings to their context; for them human nature can only be analysed *in situ*. As such our discussion shall retain a strong focus on the role of these transformative processes.

Marx

This general perspective can be manifested in Marxism and Marxist approaches in quite significantly different ways. One interpretation is to simply claim that human nature has no “natural” component worth speaking of, and that the essential characteristics of human beings are all provided by the particular culture said humans find themselves in. This is certainly the position taken by Louis Althusser:

Let us recall the Sixth Thesis [on Feuerbach]: ‘The essence of Man is no abstraction inherent in the isolated individual. In its reality, it is the ensemble of social relations.’ In the history of Marxism, this brief dictum has met and continues to meet, every day, the most edifying and the most absurd fate imaginable. Calling it obscure and unintelligible could create a scandal. Everyone considers it clear - because it is comprehensible. Not only does Marx say, in black and white, that man is not abstract, is not an abstract essence of which ‘the isolated individuals’ would be the subjects (in the Aristotelian sense) but he says something that ‘rings true’: the human essence is the ensemble of social relations. (Althusser 2003: 253-4)

Althusser goes on to argue that, in the passage he quotes, the term ‘Man’ does not refer to “a given individual” – in fact he takes issue with the term itself as misleading (as not what Marx *really* intended to say), given that it is very open to interpretation – but instead to a generality embodied in human society.⁷⁰ (*Ibid*: 254ff) For Althusser what is problematic with Marx’s Sixth Thesis is not the assertion that human beings are socially determined, but the invocation of an essence which might be thought of as residing in human beings themselves, even if Marx’s intent is to disprove such an essence. It is somewhat distasteful, in his view, to talk about individuals in relation to the basic tenets

70 Much of Althusser’s *The Humanist Controversy* is devoted to purging the foundations of Marxism of any vestiges of such “idealist” concepts as individuals and subjectivity.

of Marxian theory, since they have no bearing on what he feels to be the most important insights of Marx's "scientific" historical model.

However this is not the only, much less the definitive, interpretation of Marx. It does not necessarily follow that there are no universals in Marx's theory of human nature: on the contrary, for Marx there *are* definable universal structures and laws which govern the formation of the socially-determined human being. These can be divided into two parts. The first is the way that the mode of production governs the formation of human identity (consciousness) whilst the second is the dialectical, law-like development of history itself.⁷¹ This development is, for Marx, primarily about the way in which humans produce things within their society: the historical progression of the mode of production. This in turn is based on Marx's assertion that humanity reproduces itself, or produces the means of its own subsistence. (Marx, 1994: 80-1, 123-5) At its simplest this means furnishing oneself with the bare means of survival through agriculture and tool use (as opposed to foraging, for example), but it also incorporates all the trappings of civilisation which are constituent of Marx's and our own societies. In terms of technological and industrial advances – as well as innovations in trade and financial tools – these more sophisticated expressions of this idea represent an increased efficiency in the *way* that human beings reproduce themselves. Throughout history the methods by which human beings have secured their existence – through food, shelter and so on – have become increasingly sophisticated and efficient, in turn affecting the ways that people live their lives. (*Ibid*: 148ff; cf. Sayers, 1998: 50-3) This effect on people's existence is so pronounced that the idea that they reproduce themselves extends even to social and cultural practices – not merely their physical bodies. The social and political structures which spring up around these increasingly sophisticated modes of production are themselves continually replicated and maintained by the productive process. This process, after all, furnishes the material base for their existence: a modern state could not exist in a subsistence farming culture, nor would it have any reason to. Similarly it conditions the consciousness of the population: a monarchic system would make more sense to the inhabitants of a feudal world where "organic" productive relationships constituted by tithes are the norm; whilst the nation state with

71 Here I shall mainly focus on the former, since this is the main factor in describing what human beings are in terms of the history that unfolds via the latter dialectic.

representatives and waged civil servants seems to reflect a capitalist mode of production predicated on piece-work and payment in symbolic currency.

From this it might fairly be said that for Marx human individuals are not the bearers of their own nature – that job falls to their (historically determined) culture. Peter Loptson describes this in terms of a collective human nature: that human nature is not something imbued in human beings *per se* but in humanity in general. (Loptson, 2006: 125-6, see also Fromm, 1966:49) For Loptson this means that Marx is best described as an “organicist”, since human individuals are not formed by their society (a social-constructivist account of human nature in which human beings would be mere ciphers for their culture) but are instead inextricably bound up in their social relations throughout their existence.

(Minimalist) Human Nature as Production and Creativity

We should pause here however and note that there is a positive assertion about human nature contained within this system. Marx definitively views humans as producers of their own existence. In his earlier work this was subsumed under the philosophical notion of human beings as ‘species beings’. This was a more specific notion of humanity as being something that produces in a universal manner – in other words human beings produce things which are usable by any given human being, not just the producer for their immediate need. For the “early Marx”, in its fullest development, species being would entail being conscious of this fact – human beings would be aware of their full potential (and thereby be fully realising it). (Marx, 1994: 90-3, 172-3) This realisation of our species being thus relies on our freely producing the means for human existence in the sense that we not only create objects where the end user is interchangeable, but where we are also conscious both of this universal nature of the objects and of the connection this implies between us. In his later writing Marx ceases to talk about species beings; leading some, such as Althusser, to posit a break between the young Marx and the old Marx. (see Lewis, 2005: 568; Althusser, 1979) Instead this positive element is pared down to the simple fact that human beings reproduce themselves. It remains, however, a transhistorical universal element since this assertion simply refers to the way in which humans secure their own material existence. (Stevenson, Haberman & Wright: 2013: 197; Sayers, 2003: 107-8) The mechanism

through which human history proceeds and culture changes over time – the mode of production, the means by which this existence is secured in a given historical context – is outside of human beings themselves. As such, in order to understand this explicitly stated aspect of Marx's concept of human nature, we really only need to consider human individuals to be the producers of their own existence, and to construe their existence sufficiently broadly to encompass their contextual world, not just their physical being.

This leaves Marx's approach to human nature in a somewhat unusual position. Given this initial grounding his perspective appears very similar to the schema I outlined in the first chapter – that a fairly simple fact-of-the-matter about how the world works can account for the way that human beings are. In that chapter it was a set of rules about how evolution worked (and in EvoPsych, how that evolution is supposed to have driven our early adaptation), here it seems that an account of human beings as self-producing takes on this same algorithmic aspect. On the other hand, his stress on the development of the means of production, and thus of social life more generally, is often taken as validation of the view of human nature as a cipher. As a result some take Marx to be a source from which to argue that humanity is a blank slate ready to be turned into whatever capitalism or socialism would make of it. However, Marx's main assertion is that the material basis for life determines the cultural and mental life of individuals, and thus it is here that the nuances and complexity of his position on human nature are to be found. The nearest thing to an innate and transhistorical element to human nature may be incredibly minimal, but human nature as a whole does not flow inexorably from it. Instead depth is added to this nature by regular and identifiable (exogenous) patterns of determination. Neither element constitutes the totality of human nature: instead, Marx's 'concept of human nature is a dialectical composite of essence and existence.' (Tabak, 2012: 3)⁷²

It might seem strange to talk of human nature in this way. In a folk-psychological understanding of the term, Marx's human nature might appear to be simply that element which first leads us into this arena of sociological determination – i.e. our habit of reproducing ourselves and the simple fact that this involves interacting with the material world. The rest would seem to suggest that human nature is

72 A similar approach is taken by Rose, Lewontin & Kamin (1990) when articulating an alternative to gene-first Darwinism in the final chapters of *Not In Our Genes*, itself a work heavily indebted to Marxist critique and politics.

overwhelmed by culture; or that human nature is so changeable and ephemeral as to be meaningless, both as an actual phenomenon and a theoretical concept. All it takes is a technological change of sufficient scale and enough time for that change to initiate subsequent social restructuring to significantly alter human nature. However Marx insisted that individuals can only be considered in their “concrete” state, rather than some “abstract” (i.e. contextless) state, since no actual individual ever conforms to this latter, hypothetical picture of what a human being is. Sean Sayers (1998) outlines this position as one in which human nature can be considered to be *real* and yet *transient*. There is something constitutive of the human being, but given the great deal of socially determinative input involved this something changes throughout history. This is no less real than some kind of “fixed” or transhistorical concept of such a nature since there is still a generally stable “nexus” of determination – a thing being determined – in the sense that in whatever historical period and under whatever economic structure individuals live human beings still exist, they still have similar kinds of relationships with the world: they have desires and needs; they have methods of perceiving, understanding and interacting with it. These relationships vary depending on socio-economic circumstance, and so human nature, for Marx, varies accordingly in relation to those patterns of determination alluded to previously.

Chief among these patterns are those which impinge on the way in which humans experience their world. Notably this involves the way they relate to one another and to the process of production (indeed, it involves the way they relate to one another *through* the processes of production and exchange). For Marx these relations often consist of misattributing permanence and reality to what are actually abstract historical contingencies. Because certain things about the way we live our lives are so ubiquitous in our culture and so central to the way that the current system works we mistakenly interpret them to be necessary conditions for existence. Property relations and methods of exchange lose their contingent character. In reality they are only necessary because they constitute the mechanisms by which the current system operates. (Marx, 1994: 124ff; 177-9) One of the best known examples of this is probably his concept of the fetish and fetishism. In short, by treating our products as commodities to be exchanged we lose some sense of our own power. Products are not made to be used, but to be either sold or exchanged for an agreed upon wage (and so even a person’s labour can be

considered a commodity to be exchanged). The human mental and physical activity that went into making an object becomes secondary to that object; commodities and the means used to produce them become fetishes imbued with illusory power which actually belongs to the people who made them. Thus in modern cultures – particularly with the development of capitalism – humanity experiences a world in which it is in the thrall of impersonal forces that, Marx argues, only have their power because their human origins are obscured. (Sayers, 2005: 613-5) Not only that, but their relations with one another are mediated by these products and by the money used to trade for them. Human sociability itself becomes operationalised in terms of value and exchange. The end result of commodity fetishism is a world in which people produce goods but do not recognise those goods as the result of their own capacities and creative potential. Instead individuals' activities are directed towards an end dictated by the product to be made (and ultimately exchanged for something else), not themselves. Humanity thus finds itself in a world where objects – and the process by which those objects are produced – appear to have power over it.

Human nature is therefore completed or concretised by the relationships humanity has with its material world, in accordance with predictable and identifiable patterns.⁷³ The *particular* human nature that Marx describes is of nineteenth century capitalist society. He presents it in the process of analysing the economic relationships between individuals and the way that objects mediate (and so obscure and direct) those relationships. (Graham, 1994: 68-9) Thus much of Marx's concept of human nature is identical to – or identifiable through – the sociological and economic foci that served as Marx's main area of analysis (since, apart from his transitory attempt to outline our species being, Marx does not give an explicit account of any kind of human essence). This concept of human nature is almost entirely historical, legitimised by the fact that human attitudes and actions – basically, human consciousness – vary throughout history in ways that are concurrent with changes in the socio-economic systems within which they are enmeshed. This is the sense in which human nature is a collective property, not something *within* or *constituent of* individuals, since it is only realised within the socio-historical context, experienced alongside other human beings. Consciousness – people's 'modes of thought and outlooks on life' – are governed by shared socio-economic

73 I have focused here on Marx's idea of the fetish, but there are others.

circumstances. (Marx, 1996: 56-7) In the form that Marx analyses, it expresses itself as an exploitation of disenfranchised workers with still unfulfilled bourgeois and upper classes (since these latter still experience life mediated by objects which are not their own, they merely have more of them and a greater illusion of control).⁷⁴

Teleology, Potentiality and Consciousness

There is an Aristotelian element – or at least interpretation – latent in this formulation. Throughout Marx's work there is a tension between the way things are and the way they could or should be. Humanity finds itself disenfranchised, in an imperfect world. However Marx's theory of history purports to explain how, through the logic of exchange, capitalism arose and how it can be replaced by a more satisfactory social form (communism). It appears as if there is some potentiality to this human nature towards which history is proceeding; a form of society in which the productive processes which characterise human existence (including of course humans' production of themselves and their own subsistence) are developed to their fullest and most universal extent. Like Hegel's concept of history this state of affairs comes about via the internal inconsistencies of the great historical epochs, whilst like Aristotle's pursuit of *eudaimonia* there is also an intra-level dynamic between social agents and the historical situation they find themselves in. This ties into Loftson's characterisation of Marx's conception above as a *collective* human nature. History is the process by which we collectively learn (about ourselves and the world) and reveals our true potential.

Going back once again to Marx's earlier writings, the source of this directionality is much more obvious and the teleological component much more pronounced. It is simply part of our species being to produce freely in such a way that the human end of the product is clearly visible, not obscured by commerce, vast production chains, and wages. If we can do this we will have proven to ourselves our essential humanity and our free existence in the world. As such, species being provides an ever-present measure for the state of society, as well as acting as a catalyst in the historical development of humanity. The human experience of the world is

⁷⁴ Arguably, human consciousness is identically determined in each historical age – the variation between individuals within that age is attributable to each person's position within society and their relation to the productive process, i.e. by their class. The class structure is itself a kind of epiphenomenon of the economic ordering of that society; the determination of consciousness is similarly skewed even though this determination happens in the exact same fashion.

unsatisfactory, brought about by a consciousness left malformed by people's alienation from the product of their labour and from one another: a thwarted expression of species being. The development of this consciousness reveals the unsatisfactory nature of socio-economic reality in general – the cruel contradiction that whilst humanity has become more productive and therefore finds it easier and easier to support itself, most or all of humanity actually lacks control over this productive capacity, becoming trapped. For the Young Marx species being, finding itself frustrated and imperfectly expressed in this way, due to the economic relationships of previous ages, drove the progression of human history forwards through this build up of disaffection, leading to revolt or revolution. (Marx, 1994: 48-50; 165-8) Inevitably this process, he believed, would cause us to realise the impoverished state of humanity under capitalism and rebel, leading to a social form (communism) in which our species being could find its true expression.

In his later works a similar picture still remains, however the condition of our mutilated consciousness is further revealed by the introduction of a mature concept of fetishism. Additionally, much of the progression of history is now located in the socio-economic structure itself, in the form of internal contradictions which, when resolved, supposedly lead to a restructuring of society. Such is the power of this process that the Communist Manifesto actually praises the role capitalism and the bourgeoisie play in the unfolding of history, as the immediate precursor to Marx's classless utopia and the destroyer of feudal property relations. (Marx & Engels, 1959: 46-52) Capitalism itself will be superseded, however, as its own internal inconsistency creates fractures in capitalist societies. Whilst it increases the productive capacity of the economy as a whole, it also concentrates the capital proceeds into the hands of a small minority. (Marx & Engels, 1906: 685-9; 691-701; Cohen, 1978: 306-7, 309ff; Graham, 1994: 79-80)

This is not to say that there is no felt element to this process – that the entire driving force of social change is situated in the mechanisms of the economy and this disconnect between the wealth produced and the number of people to whom it accrues.⁷⁵ Humanity will still feel frustrated at the impositions of an inhuman system. The

⁷⁵ The apparent problem of how to explain why the functional and systemic features of capitalism should prompt their own overthrow is explored by Andrew Chitty (1994). He tries to address this by reconnecting the "functional" and "phenomenological" strands via the idea of the worker's frustrated sense of self.

sentiment that human potentiality is being denied is reiterated in *The German Ideology*, when Marx expressed it via the declaration that people ‘must overthrow the state to achieve [the] *fulfilment of their personality*.’ (Marx, 1994: 172-3 [emphasis added]) Subsequently, in the Communist Manifesto, Marx and Engels went on to condemn the ‘monotonous’ character of labour under capital and point out that working life ‘has lost all individual character, and, consequently, all charm for the workman.’ (Marx & Engels, 1959: 54) Human agents will, they argue, feel a deep disconnect with their world, brought about by the realisation that value and wealth are continually being created but few actually experience the benefit of this growth. The task for revolutionaries like Marx and Engels is to organise the dispossessed and help them realise the connection between their sense of alienation/frustration and the structure of society – in other words, to realise that they *are* alienated, and that this alienation stems from the very basis of contemporary economic life. The alternative they offer, communism, is itself a social system, like capitalist democracy, and thus realises in its constituent members a certain kind of human nature. However the version of human nature communism realises is more positive – it realises a supposedly more consistent freedom, bringing an end to domination of man by man and of man by capital, thus allowing individuals to fully express their potential and creativity. This might be regarded as a form of flourishing, in that living in this way we supposedly realise our full potential. In order to make this claim we require a standard by which to judge the resultant human natures present in a given historical period, which itself implies an abstract notion of what humanity ought to be. (cf. Trigg, 1999: 130-2) One can of course argue that Marx is simply describing how progressively higher forms of society and sociality arise out of the contradictions of the *current* social order, and that the possibility of former gives us grounds for critiquing the latter. (Sayers, 1998: 117-123) However this merely defers the problem, since it then implies there must be some standard for valuing progress – for describing one form as more advanced than its predecessor and simultaneously more desirable because of it. Sean Sayers suggests that this may be the development of needs and capacities, which represent ‘a growth of human nature, of human powers and capacities’; something he freely admits lends Marx a further Aristotelian inflection. (*Ibid*: 134-7; Fromm, 1966: 49-50; see also Sayers, 2003: 119)

Taken in this way, Marx's human nature presents itself in the form of a *resistance* to the fetishism and lack of control (autonomy) endemic within the capitalist system. Alienation is not merely a description of the state of the world but is something which is experienced, the evidence for which Marx finds in the rise of workers' organisations and unions. (Marx & Engels, 1959) Furthermore it is holding us back, tying us to a specific historical context we have the potential to outgrow. There is some aspect of humanity which is not fulfilled – some creative potential not being exercised – which can only be properly expressed in a society either where such alienation has been overcome, or our potential capacity as such can be given free rein. (Schechter, 2007: 11-7; 181, Loptson, 2006: 138; Stevenson, Haberman & Wright, 2013: 197) Even with the possibility of a “break” between the Young Marx and his later writings we can find continuity in this aspect of realising some human potential currently strangled by the contemporary context. (*op. cit.* Fromm, 1966: 75-6) Within the tension between the way things are and the way they should be we thus find a somewhat fuller account of what humans are, already bound up within Marx's socio-political analysis (just as he himself argues that humans are always already bound up within that socio-political context). (Tabak, 2012) Abstract or otherwise, the measure by which capitalism is judged to confound human freedom and warp human nature/consciousness, and by which communism is judged to correct these deviations, can only come from some core⁷⁶ around which historical conditions accrete and give rise to a certain form of (historically contingent) human nature.

We thus arrive at an understanding of what the structure of Marx's human nature looks like. Human beings as productive beings who exist within a certain relationship to the material world from which they gain their sustenance and create their lived world. Attached to this productive nature is a degree of creativity and an implied sociability which, although not the primary determinates of human nature, nevertheless interact with the realities of social existence to produce discord or contentment in the individuals of a given historical period. This second feature seems to point towards a fairly sparse psychology of inclination and expectation: ‘If human beings cannot be *happy*, feel *fulfilled*, feel that their lives have meaning or occasions of creative joy,

76 A core comprising certain ideas about the fidelity of consciousness and one's relationship with the realities of material existence.

without having work in which they express themselves, that will be a psychological fact about human beings, a matter of a certain kind of psychic need....' (Loftson, 2006: 133 [emphasis original]) However any such psychic needs will be intimately bound up with the material conditions inherent in a society:

In the social production of their lives men enter into... relations of production which correspond to a specific stage of development of their material productive forces. The totality of these relations of production forms the economic structure of society, the real basis from which rises a legal and political superstructure, and to which correspond specific forms of social consciousness. The mode of production of material life conditions the social, political and intellectual life-process generally. (Marx, 1996: 159-60)

There is no reason to suppose that these observations cancel one another out, or that one is prior to the other.⁷⁷ Instead what is "conditioned" by the relations of production is this minimal set of precepts: that humans beings produce; that they are capable of having a psychological connection with/to the object of their work (and hence to the work itself); that the nature of such connections necessarily affects their view of the external world; and that these connections and this view in turn mediate their relationships with one another and any sociable dispositions we may reasonably suppose them to have.

Marx's concept of human nature is therefore less bound up with the natural or ontological origins of "humanity" and instead involves a more theoretical philosophical anthropology. Insofar as Marx does consider humans naturalistically it is in order to situate humanity within a material context, as opposed to the Hegelian idealism to which he was simultaneously indebted and critical. He repudiates Hegel with the argument that since 'man is a *corporeal*, actual, sentient, objective being with natural capacities [this] means that he has *actual, sensuous objects* for his nature as objects of his life-expression, or that he can only *express* his life in actual sensuous objects.' (Marx, 1997: 325, emphasis original) Thus humanity's existence as a corporeal entity necessarily entails its existence as a historical entity, bound up as it is with the context of its mode of production.

The Core and (Human) Needs

⁷⁷ Although much of the prior discussion reveals that in terms of a Marxist analysis, interrogation of the social reality will take precedence and priority, as this is the element most given to change; both in terms of the present subject, human nature, and Marx's main interest, social and political experience.

Much of Marx's work is concerned with unravelling the effects of social, political and, especially, economic systems on human existence. Aside from the concept of species-being – which is absent from his later work and which he effectively repudiates in his theses on Feuerbach (Marx & Engels, 1976: 5-6) – the possibility of an innate component, what I have referred to as a kernel or core, is relatively unexplored. It might be that such a core consists solely of the tendency to produce, and yet, as Peter Loptson points out, much of the normative content in Marx's work suggests an implicit affirmation of a (limited) range of 'psychological fact[s]' and 'psychic need[s]'.

Sayers (1998) for one is prepared to take up the idea that there are innate natural aspects of humanity, particularly in the form of needs. However initially these needs are fairly minimal – food, sleep and other metabolic requirements – with additional and more sophisticated needs being furnished over the course of human historical development. These later needs are no less real than their innate physiological counterparts, but they depend for their existence on the extension of human capacities and desires entailed by the advancement of our collective productive forces and techniques, not on ingrained physical or psychological dependencies characteristic of our species. They are not objective requirements for survival, but felt, psychological or experiential states. Such needs constitute conditions which must be fulfilled or states which must be attained in order for the individual to gain a degree of psychological satisfaction (or, arguably, completeness) within their socio-political context. This is equally true for the humanist Erich Fromm, who sees in such needs a bleakness characteristic of capitalism. (Fromm, 1966: 54-6) In the capitalist context many of these needs have no reference to human capacities, they 'are not expressions of man's latent powers, that is, they are not *human* needs' but synthetic, created wants. For Fromm this all comes from one source: 'The need for money is therefore the real need created by the modern economy, and the only need which it creates.' (*Ibidem*) Sayers, however, is prepared to acknowledge a more varied set of real needs, in particular the need to work and the need for leisure. (Work here understood as activity directed towards some socially productive end. Often this involves the creation of some physical product.) We need to work not only to secure money, but also because we are disciplined and conditioned to view constant productive activity as normal. The need to labour is not simply created by the need to secure money with which to purchase necessities, but

becomes a psychological necessity itself.

Herein we can find room to question such a minimalist transhistorical core. Primarily this concerns what is included in or excluded from the core. By leaving the core so sparse, and much of its content⁷⁸ only dealt with implicitly, we risk misattributing certain features or phenomena solely or primarily to the context rather than to a confluence of human and contextual affects. Sayers' discussion of the need for work in capitalist societies, which he sees as the outcome of a particular mode of production, is one potential instance. Pre-capitalist individuals seem to have no such need to work – Sayers cites the opinions of early nineteenth century industrialists condemning their workforce for idleness, as these people were unaccustomed to the disciplined and regulated work habits that were expected of them. These industrialists derided the 'indolence' of their workforce, comparing it to the supposedly unproductive lifestyles of indigenous communities in the colonies. Meanwhile Sayers agrees that small-scale traditional societies are for the most part 'idle' (although not in the moralistic sense meant by the nineteenth century industrialists) and do not feel compelled to work nearly as much as modern capitalist citizens. (Sayers, 1998: 48-51) Conversely, individuals in a capitalist world feel compelled to work, or else feel unfulfilled. According to Sayers this is clearly shown by Marx to be the result of inculcating Hegel's 'habit of industriousness' or Marx's 'general industriousness' (*op. cit. Ibid*: 52) into the population (particularly the proletarian population). Whilst Marx sees this as being carried out under threat of coercion (revocation of wages, poor laws and most significantly the socio-economic structure of society where all conditions for life are subsumed under the capitalist productive model) he also considers its monolithic, all-encompassing character to have indelibly stamped human consciousness with the perception that this is a primary condition of existence; hence it becomes a need to work. As a result, here is a need clearly dependant on historical circumstance for its existence, even whilst it is a felt psychological (almost phenomenological) feature of human existence.

However, the 'modern need to work' may not necessarily be a qualitatively new 'historically developed need' (Sayers, 1998: 53) but instead the expression of a need for activity, itself merely the aversion to lack of stimulus. We might consider the mental

78 Creativity, productivity, socially-disposed, etc.

derangement experienced by both humans and animals when kept in confinement, especially when in isolation, as well as the aversion to ostracism in traditional and contemporary cultures. To be cut off from stimuli is deleterious, and we actively avoid it. “Traditional” or “Late-Pleistocene-appropriate” societies may well have more idle time, but they still find ways to fill it even if these ways do not involve “work” in this modern sense. Their time is filled – even if we discount such minor errands as light foraging, tool maintenance and fletching – with what we might ironically term “indolent activity”: with gossip (critical to monitoring communal threats), keeping an eye on children, grooming, fire-tending, and numerous other *social* activities crucial to the whole community’s way of life.⁷⁹ So Sayers may be missing something important: that these people are not so idle as his nineteenth century sources (with their derogatory label of “indolence”) believed. Although they are not working for as long or in as regimented a way as capitalist labourers, and do not appear to be producing any physical or intellectual products, these people are not as inactive as first impressions suggest. Perhaps this is what Johan Huizinga (1949) alluded to in his discussion of the play element of human culture – certainly he seemed to disapprove of the instrumentalised way in which play has come to be viewed in the past few centuries, as mere practice for other enterprises.

It may be that there is simply an aversion to inactivity which prompts us to do things like socialise, tell stories and play games. If this were the case what *has* been historically and socially determined is the pattern in which this aversion has been structured in the modern world. Capitalist man associates working with keeping itself stimulated, of avoiding isolating inactivity, and from there develops a need to work (no less genuine than the same need as Sayers articulates it). Other activities, we have been

79 According to Diamond some societies, during the night when we would expect people to be most inactive, regularly wake up and continue the discussions they were having earlier. (Diamond, 2012: 248) He also relates an instance of two men exhaustively discussing the amount of sweet potato and how much everyone had eaten, and speculates that such apparently idle gossip in fact has an important function – it helps people to monitor their food reserves. (*Ibid*: 273-4, 299-300, see also 290-2) Similarly Boehm has also described how gossip is a crucial tool, in some societies, for keeping the chief in line by subtly undermining their position, preventing them from becoming a bully.

I would hesitantly propose that the crass characterisation of gossip as a “feminine” activity may have its roots in a practice, developed in early modern and Victorian polite society, of male dinner guests retreating to another room for brandy and cigars whilst the women sat separately for their own postprandial activities. Here the men folk could pretend to themselves that a discussion of current events interspersed with observations of the activities of absent contemporaries was something other than “mere” gossip, whilst denigrating the social utility of the conversation of the “womenfolk.”

told, do not really count as activity. Similarly, the need for leisure arises because there is no enjoyment in this activity (i.e. it fulfils only one human need, a drive towards activity, and ignores others) and because it has been so over-structured.

Elsewhere, Sayers himself offers another potential candidate: a Hegelian idea that human beings have an impulse towards ‘self-realisation’ – that we transform nature and thus get a better understanding of what we are, through experiencing ‘all [of our] practical activity which has an effect in the world.’ (Sayers, 2005: 612-4, see also Sayers, 2003) We express ourselves through our interactions with the environment, and capitalism regulates and directs these interactions. Capitalist work – and its disciplined, regimented character; the experience of it as a need – would thus be a contingent historical emanation of a deeper impulse (of which there is a higher and more complete development). Read in this way such a determination of human nature would thus beg the question: do we think of the core of human nature as a set of dispositions and aversions, or do we suppose there to be some characteristic feature of human beings that can be either developed or realised, or is it something else? Furthermore if some facts excluded one or the other (or both) we ought to be obliged to drop it as a theoretical cornerstone and reassess whatever else relies on them.⁸⁰ In essence: if we can show that certain theoretical systems *do* make assumptions about human nature then we can critique – and even potentially test – such assumptions. This in turn may complicate, or provide new tools for, said theoretical system(s), beyond the question of their philosophical anthropology.

However, regardless of which candidate for the core that we find most compelling, we still face the same problem. That this need for activity would have been conditioned by the historical context into becoming a need for work – i.e. the individual becomes accustomed to the increased amount of activity entailed by the capitalist conception of work – certainly supports the idea that human nature is historically determined, but to say that this is the sole or primary determinate – and that human nature itself is therefore historical – would require ignoring the underlying impulse/need which has been thus transformed. I do not propose to provide a definitive answer here to

80 What I am implying here is that if Sayers (2003, 2005) is wrong – if there is no reason to suppose that human beings objectify themselves and their relationship with nature in their products – then we should not only question the *extent* to which a need for work is uniquely historical, but also reassess the traditional Marxist explanation for the phenomena he believes it pertains to (i.e. our alienation under capitalism).

the question of which, if any, of these determinates should be treated as primary, merely to raise an objection to the implicit attitude that the existence of one disproves the other.⁸¹ Both of Sayers' accounts propose a core sufficiently content-full that a strictly context-based account becomes problematic. What is at stake is not the presence of a need for work (or leisure, or spiritual fulfilment, or self-realisation, or whatever) versus the absence of such a need, but a shift in emphasis onto a relationship between an anterior need/disposition and its context: a move to try and resolve *what* is being determined and how.⁸² This shift would require a more nuanced consideration of the relationship between universal, innate components on the one hand and their social expression as part of a totality of human nature on the other than the declaration that 'human nature itself has been transformed.'

Freud

Sigmund Freud presents a rather more clear-cut example of this schema. Not only does his work centre on the ways in which human psychology is affected by its experience, but Freud also presents a highly developed idea of the innate structure of that psychology, along with the "drives" or "instincts" which form the basis of his human nature. These drives mean that the kernel of Freud's human nature is rich, especially in comparison with someone like Marx, whilst the clearly defined internal structure provides a relative determinateness to the way in which that kernel functions. In this process of transformation Freud also represents a contrasting approach, in that the focus is on the individual and his idea of human nature is more individualistic⁸³ than

81 This is reminiscent of one of the objections that can be made in response to Pinker – his "proofs" of the innateness of certain behaviours do not disprove any assertions that said behaviours are (also) determined by society, economic circumstances, cultural practices etc.

Nor is this objection strictly directed towards Marxism, but could conceivably apply to any thinker or school of thought that fits within this schema, or indeed beyond. We might, for instance, respond with nihilistic scepticism to vitalist claims that activity is the expansive expression of a metaphysical inner life force and ask whether it is not simply a naturalistic fact of the matter about any sufficiently evolved lifeform.

82 Within a strictly Marxist context, possible candidates already exist: Tabak (2012) sums up a Marxian position which tries to elucidate a formal relationship between a human essence and human existence, whilst Olson (2013) tries to relate Marxist political theory to biological and neuroscientific accounts of empathy, emotion and ethical awareness.

83 Here I mean "individualist" in the sense that its referent is the individual, rather than necessarily involving the self-interest/-assertion of any given individual, although this does feature in Freud's work.

Marx's collective human nature. This is hardly surprising given that Freud's psychoanalysis involved studying individuals' (pathological) psychologies, and so we might well expect that his idea of human nature has a similar emphasis on the workings of individual minds. This is not to say that he does not see particular characteristics and behaviours as symptomatic or emblematic of the way(s) in which particular kinds of society influence those who live within them. In this respect there are certain national characters, dispositions and degrees of civilisation which are dependent on common socio-cultural contingencies and therefore lend, if not a collective element, then a shared one to Freud's human nature.

Consciousness and Unconsciousness

Central to Freud's work – and to psychoanalysis in general – is the split between the conscious and the unconscious mind. On the one hand we are aware of our world, are capable of making choices and of analysing and considering those choices; on the other, say the psychoanalysts, we also have a repository of unacknowledged and potentially repressed desires and impulses that we may not even be aware of. This is hardly unique, of course – in earlier chapters the idea that prior impulses influence an individual's behaviour was taken as a given – however psychoanalysis seems to distinguish itself by considering the conscious and unconscious as two integral parts of a whole personality. In other words the latter is not treated as solely a primordial or originary source upon which specific desires or conscious thoughts are formed; it also serves as a repository of suppressed desires and experiences with which the consciousness is in near-constant interrelation. (Freud, 1991: 194ff)

Furthermore these two parts need not be in total harmony. Much of Freud's work as a practitioner was based on establishing the causes of supposed rifts between the conscious and subconscious mind which in turn led to his patients' neuroses and hysteria. Freud's human nature is not always harmonious and rarely guaranteed to be stable. In fact pathology is not only accommodated but it is almost to be expected, at least in some individuals. This lends a particularity to our nature as human beings since, although everyone shares the same basic psychological structure and primordial drives, contingent occurrences during upbringing or circumstantial obstruction of present desires can lead to peculiarities of individual personality. Extreme instances, of course,

lead to the aforementioned potential psychopathology. This variability and particularity is significant, inasmuch as – whilst perhaps not as context dependent as Marx’s view – Freud’s idea of human nature can only be completely thought about by incorporating external circumstances. This is the key feature of the present schema, and the division (and potential for opposition) between the conscious and unconscious mind simultaneously forms part of the basis for Freud’s context-sensitive approach whilst being a universal feature of human psychology.

Id, Ego & Super Ego

In addition to the differentiation between the conscious and unconscious elements of the psyche Freud divided human psychology into different arenas. This tripartite structure was the successor to the binary split between the conscious and unconscious, although it retained many of the key features, and Freud’s work on this subject retains the use of the terms conscious and unconscious in describing the general character of each part. Of particular note is the continuation of the idea that there are internal dynamics to human nature, closely associated with a similarly internal diversity. Firstly there is a division of the personality into sections dealing with inbuilt drives, self-awareness and idealised normative standards; in turn there may well be disparities between the demands made by the drives and by the normative standards. As a result the individual must mediate between internal and internalised impulses, and again this process may contribute towards an individual’s (i.e. a psychoanalytic patient’s) psychopathology.

Freud described the id (or the “it”) as the source of the internal impulses: essentially drives and desires. Largely unconscious, as the name suggests the id appears as an “other” – internal and yet seeming rather alien to our conscious awareness when its impulses make themselves felt. The id also contains the more primal and native elements of human nature: drives and instincts which are inherent parts of the human psyche by virtue of its constituent biological or vital basis.

It is the dark, inaccessible part of our personality.... It is filled with energy reaching it from the instincts, but it has no organization, produces no collective will, but only a striving to bring about the satisfaction of the instinctual needs subject to the observance of the pleasure principle. (Freud, 1985: 105-6)

As might be expected this implies that the id has a close connection with the human animal.⁸⁴ (Sulloway, 1980: 364-7; Freud, 1991: 308-10) The id ‘contains everything that is inherited, that is present at birth, that is laid down in the constitution....’ (Freud, 1969: 5; 1991: 378) This also manifests in his appealing to the biological/physiological foundations of life at several key junctures. For Freud there is clearly a link between the material substrate of the human being and its mental and psychological operation, even if he remains agnostic about the precise intermediary mechanisms involved. (Freud, 1991: 316-323, 385-8; Sulloway, 1980: 13ff; see also Wollheim, 1991: 20-24; Sulloway, 1980: 421-2)⁸⁵

The id is not, however, simply a repository or passive supplier of demands. It has a regulatory function, and in doing so works with the ego. Its primary motivation emerges from the ‘pleasure principle’, the requirement to lessen unpleasure (rather than simply maximising pleasure) through expressing certain drives (again, rather than reaching some maximum pleasure which it may not even be possible to attain). In pursuit of this the id itself has a hand in defusing or releasing ‘tensions’ created by the instinctual impulses it contains. (Freud, 1991: 387-8) As such even this underlying component, “hidden” from our day-to-day awareness, plays an active role in human mental life – in fact it plays a major part. (cf. Freud, 1973: 46) Crucially the foregoing also serves to highlight how Freud’s human nature is dynamic and spontaneous. Since the id not only provides a source of unconscious motivation, but is also involved in reconciling and expressing varied and occasionally conflicting drives, we can see how Freudian human nature is underpinned by something which changes over time, dynamically reacting to circumstance. In terms of psychoanalysis this might be thought of in terms of the deterioration of an individual’s mental health and, through the psychoanalyst’s treatment, the restoration of their psychological well-being. Such development also takes place naturally (non-pathologically) as the individual matures.

The ego’s function, on the other hand, is to act as the primary site of mediation: it attempts to reconcile the varied demands of the id, super-ego and external world.

84 Although this is a distant cousin to the ethological treatment of said animal covered in the previous chapter. Freud tends to discuss the naturalistic underpinnings of his psychoanalysis in terms of the necessities of life and the expression of vital energies inherent in biological beings (which we should also distinguish from the independent animating forces of vitalism).

85 At one point he appears to appeal to a Lamarckian theory of inheritance to bolster his ideas: ‘...when [experiences] have been repeated often enough and with sufficient strength in many individuals in successive generations, they transform themselves, so to say, into experiences of the id, the impressions of which are preserved by heredity.’ (Freud, 1991: 378)

(Freud, 1969: 5-6) As a function of this role it moderates the id's attachment to the pleasure principle by acting in accordance with the 'reality principle', meaning the impediments, constraints and opportunities presented by the real world in which the individual finds itself. (Freud, 1991: 278-80) In this regard the ego can be seen as the centre of the personality, since it is the part of the individual which interacts with the outside world. However it bears mentioning that it develops: the ego becomes differentiated from the id through the early stages of life. (cf. Freud, 1973: 3) Thus an individual's particular personality is also an emergent factor, unique to them and their situation (particularly, for Freud, their upbringing, although it also involves their cultural milieu). Given the centrality of the ego's role, its developmental aspect and its mediatory function it becomes clear that Freud's idea of human nature prohibits thinking of individuals in isolation from their context. Our conception of the human being is *incomplete* without acknowledging its gradual socialisation and the effects of maturation.

This is simultaneously emphasised and complicated by Freud's prominent interpreter and successor Jacques Lacan, for whom the ego is itself an illusory construct that gives a false sense of stability. In either case, the ego is the aspect to which people refer to when they say "I".⁸⁶ However for Lacan the ego is separate from one's subjectivity. The former is largely conceived of in terms of a fixed entity (comparable to the seemingly fixed and complete individuals surrounding the young subject as they develop), a conception reinforced by external cues, initially visual but subsequently verbal and semantic. (Lacan, 2006; cf. Bock, 2002: 23-4) The emergence of the ego is really the development of the subject's self-image of itself *as* an ego. This is less true of Freud's original conception; however his ego still needs to contend with the confrontation between the individual's view of itself as a stable "I" and the myriad competing (sometimes conflicting) demands placed on it not just by the id and super ego but also by the external world. Regardless of which interpretation we opt for, this psychoanalytic human nature is eminently controllable – through the psychoanalytic process – despite the hidden, primal "driving force" contained within the id. Although there is a powerful wellspring of universally occurring (dynamic) drives, Freudian human nature is amenable to change: through therapy analysing the ego's experiences

86 Hence Freud's name for it in the original German: '*das Ich*'.

and traumas, therapist and patient are supposedly able to find the root cause of psychological disruption. From there they can devise methods for sublimating and directing repressed desires, “ironing out” some of the contradictions in human nature. Our nature is thus not “fixed” in the sense of being static or unbending, since there are higher-order functions which can regulate and, with effort, even understand and control our deepest unconscious impulses.

The ego, however, doesn’t simply need to accommodate the id but also the super ego. In many ways the super ego represents the ideal self – in Freud’s system it represents the demands of morality, propriety and other normative standards. It contains a person’s “conscience”. Like the id, the super ego is an unconscious pressure; however given the influence of external cues, particularly from parents and other authority figures, it is much more particular and contingent. This is because the super ego gets its content from these external sources, as the individual identifies with and reacts to authority figures. (Freud, 1991: 370, 373-4; Bocock, 2002: 76-9) Over the course of development, as the super ego distinguishes itself from the id and ego, it internalises the standards set by society and by these authority figures which permeate the individual’s world.⁸⁷ (Freud, 1973: 60-3, 78-9) This role of the internalised voice of authority often makes the super ego domineering and repressive: its demands can be felt as overwhelming and excessively prescriptive. (Freud, 1973: 73; 1991: 376-9, 395-6; Critchley, 2008: 82-4) It will make demands and judgements which the ego, operating under the reality principle, cannot always fulfil or acquiesce to. Even if the ego does conform to these standards, if the super ego’s normative pressure cannot be redirected, sublimated or given a less toxic “ego ideal” then it will persecute the individual, subjecting them to violent feelings of guilt and anxiety. (Freud 1973, 68-70, 73-4; 1991: 392-400; cf. Critchley, 2008: 83)

Of course the positive role of the super ego should not be underplayed, particularly the role its normative standards play in encouraging consistency and moral development. However the main interest it holds here is how it highlights the way in which this schema can think of human nature as something flexible or mutable, even over the lifetime of the individual, and how this flexibility interacts with the outside world. The Freudian super ego is particularly significant since it highlights the reason

87 In fact this internalisation effectively constitutes the emergence of the super ego.

for Freud's inclusion under this schema. Whilst the super ego represents the incorporation of contextual pressures, it also remains an internal factor in the psychological ecology of the individual human being. (Critchley, 2008: 87) The human's openness or receptivity to contextual affects and influence is a component part of its personality and nature, as well as simultaneously playing a pivotal role in driving that aspect which Freud is especially interested in regarding human nature, i.e. its aberrations, its pathologies and the potential to treat them. Furthermore, outside sources do not regulate the individual; agents themselves have a crucial component which fills this role, created from internalised standards.

Eros, Thanatos, and Opposition Within Human Nature

Alongside this structural component we should consider some of the content of Freud's kernel. At the core of this human nature Freud and his fellow psychoanalysts identified a range of primitive impulses, which Freud attributed to two general sources: the creative (or erotic) libido and the destructive death drives (called Thanatos, in counterpoint to Eros, by some of his later interpreters). (Freud, 1991: 380ff) The first of these covers activities and desires associated with positive/constructive action towards some kind of end⁸⁸ such as continued survival and its necessary conditions, especially concerning sex – a notorious interest of Freud's – hence its association with the libido. The second is associated with aggression and domination when directed towards the outside world, although Freud also attributed to it a role in the pathology of repetition in neurotic and trauma cases, sometimes associating it with a seeking of symbolic or actual death. (*Ibid*: 308-9, 311) These twin forces, mutually opposed to one another, form the general basis for the internal dynamics of an individual's personality. They are, however, universal; it is the relationship between them and their interaction with the external world that are the source of individual specificity. As such they simultaneously represent the shared basis for human nature and play an explanatory role in describing the variability of individual natures.

Thus both Eros and the death drives represent a primitive, innatist foundation for human nature. Freud sees their origin as lying in deep-rooted instinctual influences inherent in living things themselves. However, whilst in his earlier work Freud connects

88 Although the outcome of such drives might not always be construed as "positive" in a normative sense.

instincts with biological imperatives he later became more circumspect and cautioned against being overly specific as to the nature of specific, ultimate-cause instincts. Since we can only really know general psychological trends via the specifics of individuals' experiences which have specific objects or goals as their focus these are what psychoanalysis must focus on. (Freud, 1991: 120-1, 179; see also Bocock, 2002: 37-8) Consequently Eros and Thanatos are not equated with specific or identifiable psychological imperatives which can be formally codified, but are instead general classifications of underlying impulses, only really glimpsed through their workings behind the scenes of a patient's neuroses or repressions. Given that they are so deep rooted, Freud concludes that these libidinal and death-seeking drives are effectively indestructible. They are eternal and universal regularities; not only prior to culture but also resistant to it. However they are, in everyday life, variously repressed, suppressed, redirected and sublimated, leading to a variety of outcomes that may be either healthy or unhealthy. This last point is a key factor in his therapeutic work – the treatment of various neurosis and fixations can be effected by actively sublimating or directing impulses towards more healthy outlets via therapy, particularly in instances where they have become intransigently fixated on certain objects, or have been turned in against the individual itself.⁸⁹ Nevertheless, these directing activities exist beyond therapy, even playing a role in the manifestations of religion, desire and morality, such that these innatist foundations suffuse human sociality in all its variety. (Freud, 1918; Lacan, 2006: 578-80; cf. Critchley, 2008: 71-2)

Alongside and in contrast to the foregoing, the opposition between these forces is a key factor in the lack of stability inherent in human nature as Freud sees it, since individuals carry within them a crucial antagonism which can potentially disrupt their psychological equilibrium. The opposing forces of Eros and Thanatos can also help drive the tension between the ego and the id. In Freud's writing the libido is often associated with both the id and the ego. (Freud, 1991: 308-14, 385-8) The erotic libido is transformed by its sublimation within the ego, via the ego's drive to master both the pleasure principle (originating in the id and serving as the id's own internal motivation), and the reality principle by which it attempts to steer a path through the vicissitudes of

89 As will perhaps be clear by now, there is a link between Freud's therapy (as psychoanalytic practice) and his theoretical formulations (as psychoanalytic "science"). (cf. Wollheim, 1991) This is all the more clear when we consider how he appeals to case studies – both his own and his contemporaries' – as evidence for his theorisations.

both the inner and external worlds. (*Ibid*: 75ff, 369, 386-7) This results in the ‘desexualised’ constructive impulses such as love and attachment, although it also contributes to narcissism. “Thanatos” is normally a preconscious ‘conservative’ directionality leading towards death. This death instinct can also, like the libido, be directed by the ego, leading to aggression directed at the outside world. It even makes its presence felt in the super ego as well in the form of aggression directed inwards on the agent itself, often as guilt. (See *Ibid*: 381-2, 395-6, 418) Whilst this is not an exact mapping it nevertheless contributes to the dynamism of the human psyche, which in turn helps anticipate the possibility of variability between different human individuals.

However it is important to note that the opposition mentioned above is not solely pathological. The aforementioned transformation and redirection of the two instincts on the part of the ego is indicative of the flexibility and spontaneity of human psychology, as Freud sees it, rather than an aberration. These contradictory forces are normal components of our nature and coping with them is simply a part of what it means to be human. It would consequently be misleading to suggest that opposition is necessarily harmful or even combative, a theme that extends into Freud’s more socially-oriented reflections. Opposition can be constructive and is even supposed to be crucial to the way the individual exists within their society.

The External World

This leads us to look more closely at some of the aspects of context only briefly touched on above, beyond the role of authority figures and normative systems in forming the super ego/ego-ideal. Most crucially is the opposition between society/culture and the more chaotic excesses of the primal drives. Society represses certain parts of the kernel of human nature as part of its own function. This is not some kind of imposition or problem, but is a beneficial and necessary occurrence. Freud, like others throughout history, saw a destructive side to human nature which the controlling forces of society help to contain.⁹⁰ This containment makes cooperation and sociality on any scale larger than a family possible – it is simply the role or function that society is “designed” to fulfil. Freud’s *Civilisation and its Discontents* (1973) lays out the idea that society works to direct aggression into socially acceptable avenues, but stresses:

90 The first world war was, for him, ample proof of this.

[I]t would be unfair to reproach civilisation with trying to eliminate strife and competition from human activity. These things are undoubtedly indispensable. But opposition is not necessarily enmity; it is merely misused and made an *occasion* for enmity. (Freud, 1973: 49 [emphasis original])

Additionally, conscience, guilt and fear of reprisals can all have a positive role to play in maintaining society, and socialisation is crucial to creating attachments and mutual identification (a shared sense of community). Thus, social conventions (internalised by the individual) place limits on inter-agent conflict and channel aggressiveness into socially constructive pursuits. ‘Civilisation,’ according to Freud ‘has to use its utmost efforts in order to set limits to man’s aggressive instincts....’ (*Ibidem*) Civilisation (and religion) keeps order by channelling erotic instincts into “love” and other forms of attachment, and by placing limits on the satisfaction of certain desires (via guilt and/or conscience) in the form of injunctions and taboos. (*Ibid*, 18-20, 32-5; Bocock, 2002: 79-83; cf. Freud, 1918) Whilst this is not *always* healthy, and can induce neuroses in those who find the demands of civilisation too demanding or repressive, it is nevertheless a critical factor in the emergence of modern society. This of course means that psychological particularities will emerge, depending on the social context and the precise taboos or injunctions (and the methods of enforcing them) employed by the individual’s society. Nevertheless any such social context will be contending and interacting with the same general forces that spring from humanity’s atavistic core.⁹¹ (Bocock, 2002: 82-9, 107-8)

We can see now that, given the inclusion of external influences, it is not surprising that there is a good deal of space for variability between individuals. Indeed, much of Freud’s work relies on the potential for variance, given that psychopathology can be thought of as extreme variance – as existing at such an extreme edge of the possible range of personality and experience that such existence becomes unhealthy. This is also anticipated by much of the above since the involvement of external factors will help determine how the internal dynamics of id-ego-super ego play out and how the competing demands of the libido and death drive are accommodated. As we saw when discussing the ego, what and who a person is changes over the course of their life, even if we all share the same basic drives. These drives act like a kind of energy which can be

91 It is worth noting, alongside this, that Freud’s pronouncements cover the generality of humanity, but are developed from ideas he has derived from a very limited source (namely, his well-to-do, Austrian patients and an assortment of his fellow psychotherapists’ case studies). (cf. Diamond, 2012: 174-5; Henrich *et. al.*, 2010)

harnessed: the kernel, as I have termed it, is a source of raw material, and the basis of Freud's therapeutic technique is the idea that by understanding this material therapist and patient can use it to create the desired result (i.e. a healthier psyche).⁹² This is again somewhat more individualist than the inclusion of variability found in Marx. In that case variability tended to appear between historical epochs and socio-economic modes of production. Human nature varied on a group scale according to the cultural and economic development of that group. Freud's human nature shows an increased variability between human beings, even though his description of the shared human kernel's content is more explicit and extensive (and therefore might be presumed to be more determinate and constraining).

The question remains whether the kernel – that aspect which undergoes this socialisation and acculturation – is an entirely accurate account. Freud outlines what he considers to be the core of our nature in much more detail than Marx does, as evidenced by his treatment of the internal structure of individuals' psychology. However this treatment is highly speculative, and is based on only a small sample of humanity (usually middle-class Europeans).

Whether part of this schema or not, any specific claims which are, at heart, about human nature, are hostage to the shifting grounds on which they are based. If a notion of human nature appeals to a core or kernel then, regardless of whether that kernel is supposed to be the emphasis of analysis or merely the raw, pre-transformation material, any new information which calls the contents of that kernel into question ought to be incorporated. If the resulting altered conception of the kernel no longer supports the higher-order claims made about human nature, its social significance or even society itself, then these too ought to be reconsidered/adapted where they depended on the original core for their foundation.

It is perhaps unfair to say that Freud does not revise his core concept of human nature at all. The transition from the unconscious/conscious divide to the tripartite model of the id, ego and super ego shows that he was able to develop his ideas and modify them in response to fresh information. However Freud retains a preoccupation with the libido – which he defines narrowly in terms of a sexual drive – to which he

92 Although he is not above categorising *types* of (pathological) personality.

appeals as an almost *a priori* principle.⁹³ He also holds an attachment to a rigorously divided structure, with primordial, atavistic forces flowing from the id, tempered by an ego which looks for reassurance from a super ego. By contrast, in the previous chapter we saw human innateness arranged as a set of interpenetrated capacities and dispositions.

It might possibly be that sociological, anthropological and ethological studies explain much the same phenomena as Freud does using the superego – the inculcation of certain standards which create a group identity with notions of right or wrong action. However this does not necessarily mean that they support Freud’s articulation, rather they supersede it, using more stringent evidentiary standards and more data, just as oxygen-based theories explaining combustion superseded the phlogiston theory.

Further Examples

This is not the limit of contextualist human nature theories, obviously. Other scholarly perspectives may describe similar conceptions of human nature through the articulation of some ahistorical (and not necessarily biological) essence which is central to the way that humans fit into and interact with their context. Here I focus on the idea that this essence is tied to our capacity for representing and communicating our ideas. Human nature emerges as the social-historical contextualisation of our kernel of communicative and/or linguistic competencies.

For Jürgen Habermas there is something about our deliberative and communicative capacities which characterises how we go about living in political communities. He argues that our speech is always directed towards the goal of mutual understanding (including, presumably, those instances when what we wish the other to understand is in fact untrue). We consequently have certain expectations of the claims made by others (that they be true, made honestly, and are “right”, i.e. normatively correct) which we must have since they are the basis of what Habermas thinks of as

93 Although we don’t deal with him here, close contemporary Karl Jung diverged and criticised Freud on precisely this issue.

communicative action – the basis of everyday discourse. (Habermas, 1987; cf. Moss & Pavesich, 2011) This has critical implications for reason and rationality, which assume paramount importance in his sociological theory. According to Habermas, human society depends on our capacity for *giving* reasons and being capable of recognising and assessing the reasons given by others.

His idea of rationality has been characterised as ‘a formally defined procedure of argumentation’ and ‘the *use* of knowledge in language rather than... [being] a property of knowledge.’ (Cooke, 1997: 38) As such what matters is our ability to understand and assess what matters within certain frameworks. We have what might be regarded as a *communicative* essence, a shared, universal capacity that underlies our collective endeavours and makes both society and rational discourse possible. What characterises the existence of human beings is the inherent structure of their interpersonal relations – a collective property – and insofar as this refers to anything internal to individual human beings it is to their ability to engage in these relations; their ability to understand and make themselves understood. As such ‘this perspective suggests no more than formal specifications of possible forms of life... it does not extend to the concrete form of life....’ (*Ibidem*) The closest we get to a human nature, *sans* culture, is this raw capacity, this framework with which to engage in social life. All content is “filled in” by culture; what makes us human is the capacity to use deliberative reason and to act in such a way as to communicate our reasons and transport our cultural mores; this intermingles with the ideas that compose society and culture.

Semiotist Paolo Virno serves as a second, similar such example. Virno affirms Chomsky’s idea that our natural language faculty provides us with a universal grammar, but notes that there is no intrinsic linguistic content to it. He uses this as a starting point from which to argue for a human nature of possibilities. His social thought dwells on the ‘difference between language faculty and languages, inarticulate potentiality and well-structured grammars, world and environment....’ (Virno, 2009: 99) The latter are specific instantiations, orderly and rule-abiding, whilst the former reveal the underlying potentiality of human nature. However Virno extrapolates from language to human nature more generally. (Virno, 2015a) Specific contexts and social environments give rise to particular instantiations of our human capacities – particular languages, particular relational norms. However none of these are the actual capacities themselves, none of

them are the “actualisation” of our nature. ‘The [language] faculty is a generic disposition, exempt from grammatical schemas, irreducible to a more or less extended congeries of possible statements. Language faculty means language *in potentia* or the power of language.’ What defines us as human – what he terms ‘the biological invariant’ – is a *lack* of specialisation (an absence of adaptation to specific circumstances that characterises other species). (Virno, 2009: 96-7) Instead we are a constant well of alternatives and possibilities.

Moreover, Virno’s notion of human nature is not mute, nor a way of arguing that our nature is so malleable as to warrant ignoring. Instead it interacts with society, and helps us understand what Virno calls our natural history – a kind of mingling of history and natural history as it is more commonly understood. (*Ibid*: 95) Indeed for Virno human nature has taken on a new significance in our modern, ‘post-Fordist’ world. For one thing, our inherent flexibility can be seen as a positive virtue with regards to the present social order. According to Virno, neo-liberal capitalism depends on the disposability of workers and the precariousness of work. Our flexibility allows us to adapt to this precariousness, but, crucially, this does not mean that capitalism is necessarily the logical result of this human nature, nor an ideal context for it. (Virno, 2015b) Our characteristic potentiality means that things could always be otherwise, and there is no reason to presume that because capitalism puts our flexibility to use it is therefore somehow the realisation of human nature, let alone a good. In this way, Virno offers us a de-valorised human nature; human nature as a morally-neutral resource. What we see in Virno is a human nature that could never be complete in and of itself (since it can never be actualised) but rather depends on the particular, transient historical environment for its expression. It could, in fact, be leveraged to critique and oppose the *status quo*.

Too Little Content?

Yet we still see the central issue emerging. If the previous chapter dealt too much with natural human proclivities and was unable to account for the full range of their social instantiations, this schema places all the emphasis on the context and leaves its kernel *underdeveloped*. The emptiness and lack of detail with regards to the kernel still raises questions. Recall the impetus of the motivationalist human nature. There are

internal dynamics to that human nature which are not considered here. We might have a communicative essence, but what if our communication, or the idea we are trying to communicate, is affected by other natural features, such as pro-sociality or cognitive bias? There is something unsatisfactory to this, as though relevant factors were being left out for theoretical simplicity⁹⁴ – in order to proceed to the important work of contextualising human nature we are presented with a *précis* of whatever dispositions, structures or relationships the contextually-minded theorist deems most relevant.

Furthermore though they may focus on the realisation of human beings in their environment, there are still ideas about what human beings are – naturally and before the particularities of their conditioning (i.e. the non-cultural, eternal/universal aspect of their being) – that inform these theories. There is still a central point in human nature, dictated by the kernel, that makes some aspects of the political world hold more significance than others. Humans are basically productive, or communicative, or endowed with psycho-sexual prerogatives, and hence we can best understand society via appeals to those areas of particular societies or cultures which reflect these prior features. We can test assumptions such as these, either empirically or theoretically, to determine their accuracy. If they turn out to be inaccurate then it is possible all we have is a proposed philosophical anthropology which works well as the component of a socio-cultural narrative, but fails to reflect what social and political agents are actually doing. (On the other hand if they turn out to be accurate accounts of human nature then this will lend additional credence to the political analysis – if not necessarily the political recommendations – to which they are attached.)

94 Virno, in trying to describe the ‘biological invariant’ even goes so far as to say ‘the following annotations are merely offered by way of orientation: nothing more than a road sign. Whoever doesn’t share them, or thinks they fall short, can replace or complement them at will.’ (Virno, 2009: 95)

4: Human Nature and its Critics

In each chapter so far we have considered various issues or limitations facing particular human nature theories. For the most part these are specific to their schemas, but there are other criticisms that may be levelled, either against some human nature theories or against the concept itself. Obviously, any discussion of human nature must deal with the question of opposition to the very concept at stake. At the very least such concerns form part of the backdrop that informs the analysis of whatever themes a particular author has chosen to emphasise. In cases where theories are presented in an attempt to demonstrate the variation and kinds of human nature theory on offer, opposition is usually construed as a part of the general variation in approaches to human nature – as the argument that humans just are whatever culture, politics or history makes them. (See for example Stevenson *et. al.*, 2013) In other instances the treatment of sceptical theories concerns the thematic implications for human nature theories in general. In Loftson's case, criticism of human nature is principally framed around the issue of essentialism which, introduced in the introduction and revisited in the conclusion, poses a challenge to the particular theories he discusses. In turn he attempts to deal with such criticism by considering the themes and principles raised in the process of contemplating these theories.⁹⁵ (Loftson, 2006) As elsewhere, however, this approach is expressed in part in the selection of theories chosen for dissection. Hence feminism and existentialism are analysed as, if not human nature theories themselves, then at least as theories that concern themselves with the question of human nature. So far I have adopted a similar approach, but have grouped human nature theories into generalised schemas, of which individual theories are (contemporary) representative samples. In accordance with this, in the present chapter I intend to attempt to generalise about some of the ways that human nature has been called into question as a reputable intellectual concept. In short I shall generalise about the more critical views of human nature and human nature theories.

As an extension of the preceding point, we might regard criticisms of human

95 In essence he believes, as do I, that an interdisciplinary approach better grasps the topic of human nature than attempting to subordinate the study to any one particular approach and that, furthermore, such a theory must be pursued as an ongoing project subject to continual revision.

nature as a continuation of the main theme of this thesis: the question of where certain theorists locate human nature. In this sense, outright denial or rejection of human nature can be interpreted as an argument about what makes us human – effectively an argument that human nature is just whatever external circumstances make it. We can easily regard criticism of the human nature concept as an extension of the taxonomy of approaches with which I have ordered the previous chapters. Such arguments can be thought of as part of an extended continuum, representing a set of approaches which locate human nature in a sphere almost completely removed from humans-as-creatures, and instead finding the answer to what human beings are entirely within areas of interpersonal and social/political activity. In essence, these attempts to encapsulate and describe what it means to be human consider the levels most deserving of attention to be wholly within the socio-political realm. As such, human nature resides within human culture(s). Thus an argument against the existence of human nature still adopts a position on human nature. We have in front of us a *fourth* schema. This is hardly a novel way to think about this: for example, Leslie Stevenson is happy to include Sartrean existentialism in his survey of theories of human nature. (Stevenson *et. al.*, 2013: 227ff)

This reinforces a point made in the introduction: not all theories locate human nature wholly (or in this case even in part) within nature, much less view it as instantiated in actual humans. At least some of these criticisms, in rejecting a human nature of intrinsic, internal faculties and/or dispositions, posit an idea of the human where any faculties/dispositions actually originate externally. Furthermore, if culture makes us what we are, human nature transforms constantly in step with changes in the cultural sphere. (By a logical extension, such a human nature is far more protean and malleable than any of the others yet considered – to change human nature all one must do is change the culture or other external circumstances governing its particular character.)

As we proceed we should also be willing to consider the influence that theorists' professional experiences might exert on their formulation of human nature. Specifically, human nature is not a field unto itself, but rather an area of concern which might be affected or affect a wide range of scholarly disciplines (to say nothing of the political implications it may have). Thus human nature theory is not the purview of any one discipline, and human nature might be approached from a variety of perspectives.

Consequently it is likely that certain disciplinary standards will be applied to an area outside the usual concerns of the discipline itself. I would therefore suggest that the perspective from which a scholar comes is likely to affect – although by no means fatalistically determine – their attitude towards human nature and where it is appropriate to search for something that might be called “our” nature. Of course here we shall be exploring a doubting approach, and as we shall see disciplinary attention informs at least some of these approaches. Notably the biologist critics of gene-first Darwinism have some sociological affiliations and influences (in particular Marx); similarly Midgley comes from a philosophical position interested in truth and social construction, and so she views theories as partially-cultural artefacts. Later we shall come to objections raised by anthropologists and social psychologists, fields accustomed to studying culture and viewing human beings as bearers of that culture, and hence fertile grounds for criticism of human nature.

Of course there exists a wide range of objections and challenges to the idea of human nature, likely due – at least in part – to the variety of disciplinary positions. The aforementioned existentialist tradition is one possible example, given that the idea that “existence precedes essence” easily lends itself to the idea that human beings are determined only by themselves and their ability to consciously direct their own actions. At most, humans are enmeshed within their context (their existence within a realm of systems the only thing imparting meaning to them) but even then humans, as consciousness agents, have an awareness of this and the concurrent ability to dynamically define themselves beyond these contextual confines (thus either accepting the determining influence of culture or rejecting it for some meaning of their own). We shall see a similar, if somewhat more general, instantiation of this idea later on. Althusser’s adaptation of Marx effectively makes the same argument within a structuralist context, arguing that humanism is irrevocably tainted by essentialism. By his reckoning, attempts to talk about human individuals will tend to enshrine a contingent instantiation of human relations and consciousness as something universal, when in reality any such (extrinsic) essence is – as Althusser concludes from his reading of Marx – the result of historical systems and processes. Essentialism itself stands as a possible charge against human nature, although not necessarily one that accommodates the fact that most – if not all – of the perspectives we have so far examined articulate

some awareness of variability and malleability into their ideas of human nature.

Essentialism is a charge that can be laid against those theories of what makes us human that reduce the complex phenomena available to a simple distinctive essence, although it has a problem confronting human nature theories that deal in tendencies and varied and variable properties. (see Machery, 2008)

Some criticisms might be regarded as sceptical objections, arguing that if there is a human nature, we can never really know it. We saw a specific version of this in chapter one, where Lewontin and Fox Keller argued that the causal complexity of genetic expression and the interrelation of biological and cultural influences makes a genetic human nature epistemically unknowable. Nature and culture could not, in this instance, be untangled thanks to the complexity of their interpenetration. I should note that specific objections to particular human nature theories need not concern us terribly much, except as examples of a general problem that might conceivably face any human nature theory. Certainly the argument that this or that theory is clearly affected by a political bias, or reduces humanity to a simplistic caricature, could be argued to fatally undermine that theory, but this is not necessarily so, nor need it apply to other theories (except where they make the same mistakes).

Still, there is limited space in which to consider all the possible objections that can be made with regards to human nature. We might be concerned that a particular voice is being overrepresented in our perception of human nature, a prospect that Loptson (2006) cites as the case for (some) feminist scholars, but which may have some other, more general incarnation (we shall see an example of this below). It has even been suggested that human nature is an incoherent concept on abstruse metaphysical grounds. (Hull, 1989; Buller, 2005) Hence here I shall focus on a limited selection of criticism, selected specifically from those whose implications centre on the methodological processes of attempts to discern what human nature may be. We will consider the implications that what we are examining – and the way in which we approach it – is situated within a social and/or historical context which affects the concepts that we develop from our analysis. The issue here is the potentially tainted or inadequate outcome of our theorising based on the limited perspective we adopt when thinking about human nature (or the possibility of such a thing). I then turn to the

argument that what we are is simply the outcome of culture, and that “human nature” is really the result of social forces. In this case the concern lies in the way culture obscures any innate qualities that might be considered our nature, as well as how the complexity of cultural expression renders any such innate qualities virtually powerless or meaningless, reducing them, in the long run, to negligible factors in describing what it means to be human. We shall also consider the problem that politics poses for human nature theories. This is not simply the charge that this or that conception is wrong because it is based on bad politics, which could easily be an objection itself based more on politics than analysis. Instead the real challenge is posed by the prospect that our very conceptions of human nature are hostage to political game-playing, and therefore in some way epistemically compromised.

Metaphysics

First we should consider an objection that supposedly refutes the very possibility of human nature. Here we will encounter an argument that there can be no human nature since there is no metaphysical construct on which to secure one. David Buller presents a particularly interesting attempt at this. Although his main target is ostensibly Evolutionary Psychology, in this instance his focus shifts and his argument becomes one about human nature *per se*. Buller is concerned in this instance with the degree to which members of a species can actually be said to share the same characteristics by virtue of their nature.

His first step, drawing on the work of David Hull and Michael Ghiselin, is to argue that a species is not a natural kind – it is not a simple grouping which can describe all of its possible members. There is variation within species, and some species may have members which are radically different from one another in terms of a variety of characteristics. Conversely, there may be creatures of different species which outwardly appear to share characteristics but are not of the same kind of creature. As a result species are not natural kinds in the way that an element (such as gold) is. (Buller, 2005: 439-41) Instead, Buller argues for the position that a species is a type of individual. By this is meant that species are a) spatio-temporally located; b) spatio-temporally

continuous; and c) ‘unified, cohesive wholes.’ So species are bounded by their location, exist in an uninterrupted time frame,⁹⁶ and constitute a whole by virtue of each member’s representing a part of a shared gene pool and ‘held together by the organisational glue of reproduction.’ (Buller, 2005: 447; cf. Hull, 1989: 11-24)

Accordingly, members of a species are in fact not bound by their possession of certain characteristics, since such similarities are due to homologous phenotypic expressions of a shared genotype, rather than some more fundamental ontological relation. Instead, creatures are bound by their relationship to a shared ancestor/ancestry and share characteristics by virtue of this temporal heritage. This is taken to follow directly from the way we understand and study biological organisms, so that ‘*as biologists understand them*, species don’t exhibit the feature of natural kinds. (*Ibid*: 442, emphasis original; Hull, 1967) Hence Buller’s approving quotation of Ghislen: ‘What does evolution teach us about human nature? It tells us that human nature is a superstition.’ (Ghiselin, 1997: 1) Buller interprets this to mean that ‘[s]hared characteristics are not *definitive* of belonging to the same species, they are *incidental* to belonging to the same species.’ (*Ibid*: 450, emphasis original) Furthermore, because species are not natural kinds, they are not subject to laws of nature, since laws of nature ‘are exceptionless universal generalisations’ that ‘apply to individuals only insofar as those individuals exemplify the natural kinds over which the laws generalise.’ (*Ibid*: 451-2; cf. Ghiselin, 1997) Laws of nature depend on individuals possessing certain properties by virtue of the class – the natural kind – to which they belong, and therefore do not apply to individual members of a species nor to species themselves, since their shared properties are incidental, the result of a shared evolutionary history.

This, thinks Buller, has implications for human nature, since if we are attempting to describe human beings and/or human psychology in terms of regular, discernible laws – which, he notes, is the ambition of Evolutionary Psychology – we can never achieve our goal. Laws of nature simply do not apply to human beings in the necessary way. No law of nature describes the uniquely human psychology – ‘since *Homo sapiens* is an individual, not a natural kind, [thus] individual human beings are not human beings by virtue of instantiating the natural kind *Homo sapiens*.’ (Buller, 2005: 452-4) The natural

96 Any such disruption, such as an extinction event, meaning that any apparently identical species that emerges at a later date will be considered a separate species, likely having emerged via convergent evolution.

kind at stake here is the natural kind of species, since *a* species only shares certain properties with any other species because they fall into this category, and individual conspecific organisms likewise only share properties because they fall into this category *plus* share an evolutionary history. According to Buller there are consequently ‘no scientific laws exclusive to *human* psychology.’

For, if there were psychological laws that applied exclusively to humans, those laws would have to generalise over natural kinds, and those natural kinds would have to be human psychological mechanisms (or aspects of their functioning). In other words, in order for there to be psychological laws, human psychological mechanisms would have to be natural kinds. But, since psychological mechanisms are phenotypic traits, the question of whether psychological mechanisms form natural kinds is really the question of the logic underlying the classification of phenotypic traits. (*Ibidem*)

This, he obviously thinks, rules out psychological mechanisms being natural kinds on the basis that, seeing as they are phenotypic traits – that is, shared characteristics of individual human beings subject to variation – they are similar or “the same” only by virtue of our shared heritage, not our ontological classification.

Accordingly, given that there cannot, on Buller’s view, be laws of nature which describe a peculiarly human psychological world, human nature cannot be a reasonable intellectual pursuit since no formal set of regularities that describe the human *qua* human exist. He holds on to the prospect that psychology in general may be able to discover laws of nature pertaining to psychological functioning, and that as a result some degree of description will be possible of human psychology (as a subdomain of the psychology which captures these general laws) but a specifically human psychology will only ever be conditional and constrained in scope. (*Ibid* 456-7)

Here we see an inherent problem with the abstract scholastic argument Buller puts forwards. The only human nature he considers valid is one based on natural laws which apply exclusively to human beings. He defines human nature in an incredibly narrow way, not reflective of any of the theories considered here. Furthermore this is not an approach to the concept that captures what is interesting about it – the socio-political import of the question of what we are.⁹⁷ Buller approaches human nature as a question of definition, not one of self-knowledge. The kind of human nature he denies is not what anyone else is actually pursuing. Ironically this is because Buller starts from a

⁹⁷ And yet, as with many other scholars, Buller appeals to this implication in order to highlight why he feels it important to discuss human nature.

highly algorithmic viewpoint: human nature, if it exists, will be found at some point of ultimate, foundational and universal validity. Failing to find it here he discounts all human nature theories, since the regularities they identify are not properly real: they are not “natural” in the way he has *a priori* defined the term. This does not, in fact, render it impossible to talk about what humans naturally are, in terms of reliable, pre-cultural regularities. There are other ways of construing human nature that do not depend on narrowly defined theories of natural law. (See Machery, 2008)

We should note how this is itself rather reductive. In fact there are strong similarities between this argument and the approach taken by those in the algorithmic schema. Both look for the defining element of human nature in a universal law or axiom (or narrow set of such axioms) from which that human nature unfolds. However in this case no such algorithmic basis is found and so the possibly existence of human nature is discounted. This bears similarities with the work of some biologists who adopt a radically different perspective on human evolution from that of the gene-centric version of “neo-Darwinism” examined in chapter one. On this account genetic inheritance does not strongly tie members of a species since said genetic inheritance reveals individuals to be non-identical. That is, they will have differing genes which nevertheless express themselves in similar fashion. A species is in any case fluid (it evolves, in certain instances it may even interbreed with other species and so on) and what unites its members is more a case of higher-order traits. Again, this is itself a reductive view – it narrows down the question to particulate genetics – but its conclusions subsequently remove *human* nature from any strong association with *biological* nature of the human species.⁹⁸

On an stringent reading of this reductive approach, no-one could be said to be the same when compared with another unless they shared the same genetic material organisation – in other words unless they were fraternal twins or clones. We would balk at saying there is no similarity between people, however, or for that matter that one lion were unlike any other lion. Certainly there are differences and each specimen is (genetically) unique, but as comedian Bill Hicks pointed out, ‘your children are not

98 Ullica Segerstråle relates an interview where Lewontin is described as being as reductionist as anyone in his genetic research, but in relation to human nature and society he resists this approach as unsuitable for the sphere in question. It is worth bearing this in mind when I come to discuss his sociological approach to human nature below.

special’: when we talk about human beings or any other class of object we do so on the basis of shared similarities. Critiques of human nature theory that thus address it as a reductive matter of definition thus miss their mark, insofar as they do not address the descriptive endeavour – the comparison of similarities and differences, with especial emphasis on the former – which constitutes the most important aspect of human nature theories.

Biology and Culture (Co-)Evolving

Alternatively, even those who subscribe to a reductionist (a possibly even gene-centric) understanding of evolution may come to view human culture as superseding human biology in terms of defining the human experience (and thus their human nature becomes as protean and ephemeral as any of the other theories discussed in this chapter). This is so in the case of some of those subscribing to the concept of meme theory, the idea that culture, ideas, and knowledge can be considered to evolve in an analogous way to biological species. This is (the reductive, atomistic conception of) selection extrapolated and taken to an extreme. Certainly this is the view of Susan Blackmore, who views memes as effectively colonising human minds and determining their actions. The main environmental factor of which memes replicate and spread throughout a population of human agents is therefore other memes with which they are in competition with. These memes supposedly direct the human machines in much the same way that genes were supposed to do – so so long as a collection of memes contributes to its host’s survival they themselves will proliferate, regardless of the wishes of the hosts, their genes or other memes. (Aunger, 2000; Blackmore, 2000a, 2000b) The psychologist Gary Cziko (1995) viewed it as an extrapolation of the principle of selection, which he saw as a new model for understanding all adaptive complexity, including learning and cultural advancement. Clearly we have found the border between the algorithmic schema and culturalistic explanations for human nature.

Whilst meme theory is largely defunct as a paradigm, the general idea – which in any case preceded meme theory – persists. Evolutionary theorists Robert Boyd and Peter Richerson view culture as a niche that the human species carved out for itself, and which now largely exists at a remove from genetic or biological imperatives. Interestingly, they use some of the same reductionist (remembering of course that

reduction need not imply *reductive*) models as many evolutionary theorists, including the gene-first Darwinists. (Boyd & Richerson, 1995, 2009; Sterelny, 2012) Thus human beings, as we find them, are a composite of natural evolution and cultural evolution – *including* those adaptations acquired in the course of exploiting the niche the species created for itself. (A niche being, put simply, a part of the environment the species has carved out or created for itself – think of the alterations made by beavers and their dams to the local ecology, or more broadly, the niche of hematophagous, parasitic insects which mosquitoes effectively evolved for themselves.) Human nature has its roots in evolution, but is resolutely connected to cultural forms, and modern humans consequently act and think in a variety of ways that primarily reflect their cultures. (Boyd & Richerson, 2006; cf. Sperber & Claidère, 2008)

As a caveat: in adopting this stance Boyd and Richerson, and those like them, approach a form of contextualism – a naturalistic form – being somewhat less sceptical of the power of evolution to provide some insights into human nature but in no way dissuaded that humans are first and foremost socio-cultural agents. For them, evolution could be said to have generated the core of our human nature. It explains our natural history, up until the point complex cultures emerged. From there, however, culture has assumed the deciding role in human nature, given how fast it changes in comparison to biology, requiring us to adapt using our agency (consisting of things like creativity and the capacities initially developed for use in cooperative scenarios). This is only compounded by the aforementioned notion of culture as humanity’s evolutionary niche. For a good deal of time the biology of the nascent species *H. sapiens* was shaped by our burgeoning socio-cultural structures, growing a more sophisticated suite of flexible, socially-attuned capacities that made us less predetermined than other biological things and more cultural. The two strands, biology and culture, “co-evolved”.

The Political and Moral Authority of (Human) Nature

An alternative is to criticise human nature by referring to the manipulation of its normative significance. Making an argument based on the naturalness (or indeed unnaturalness) of a certain phenomenon – whether a trait, behaviour, disposition or

otherwise – is often used to lend that argument extra weight in social or political discourse. This is neither a new occurrence nor one strictly limited to human nature. Rather, it has a tendency to appear in discussions employing the idea of nature as such, and of the natural order, throughout history. We already saw in the introduction how nature can be imbued with a rhetorical potency, given that it sets an apparently objective standard. (see Daston & Vidal, 2004; Malik, 2002a: 21-5) We also saw how both Hobbes and Rousseau used nature as a litmus test for how humans ought to live. Rousseau, in particular, held the natural order to be an ideal condition. Similarly, Denis Diderot, in his *Encyclopédie*, defended and praised the pursuit of pleasure based on its naturalness and natural utility. (see Kramnick, 1995: 265ff)

Nature sets an Apparent Objective Standard

As a result the prospect of a political valencing of human nature inevitably leads us to a problem with human nature theories intimately bound up with their role in justifying political positions. To this end we can return to the work of Steven Pinker, and in particular his thoughts on the relationship between human nature and politics. This is, after all, the essential focus of *The Better Angels of Our Nature* (2011) and, to a lesser extent, *The Blank Slate* (2003). We saw in chapter one how Pinker views the implications of human nature (or at least the human nature he describes) as unavoidably necessitating a form of liberal democracy. Here this can be unpacked in order to demonstrate the possible pitfalls of putting forward such a position. Obviously my intent is not simply to single Pinker out as a unique problem. Here, as in the challenges that follow, a particular example stands in as a cipher for a more general problem facing any attempt at conceptualising some kind of human nature. The worry is that human nature is simply nothing but a rhetorical device, leveraging the potential of nature to bestow authority on an argument. Pinker, after all, sees human nature as something dark and conflicted that requires proper control. We are inherently self-interested which, in true Hobbesian style, leads us into confrontation with one another where our interests inevitably collide. This requires an organised and stable political formation capable of controlling and balancing the self-interests of its subjects – and Pinker thinks that the nation state is just such a political formation. The precise form it takes, however, should involve modern liberal democracy, and this recommendation too is made with reference

to human nature.

Pinker does not view human beings as entirely corrupt. His earlier work discussed how human beings are characterised by a capacity for communication and language which simultaneously separates them from animalistic atavism and deeply impacts human experience. (Pinker, 1995) These “better angels” can be cultivated by, firstly, curtailing our destructive impulses, and secondly by accustoming human beings to higher standards of behaviour and citizenship. (Pinker, 2011) At its most basic, the argument is that a functional democratic nation state balances individual interests and, in so doing, provides a protected grounds for each citizen to pursue some of their more positive impulses without the worry that they will be imposed upon by others. As proof of this Pinker points to the reduction in violence in and between democratic polities over the course of the twentieth century. There was, for him, no miraculous overnight transformation, but the reduction was nevertheless rapid and radical, taking place over the relatively short period of the twentieth century. As we saw in chapter one, various institutions and practices, all connected with a modern democracy, are given credit for this.

However in chapter one we saw John Gray call this account into question, by pointing out how violence and conflict are still very present in modern states, directed both outward at other polities, or inwards against their own citizens. We also saw Ferguson (2013) argue that Pinker overemphasised humanity’s natural proclivity for violence: that we are not as prone to violence as required by Pinker, if we are to believe that violence has dramatically decreased. If this is an intentional manipulation then we obviously have an example of the deployment of the concept of nature for rhetorical effect, to bolster and lend credence to a political end. In this case the role of nature as a provider of grounds from which to derive values (positive or negative) comes to the fore, being employed to support an argument in favour of liberal democracy and its role in the progressive development of human history. Yet this is still present if – as I am inclined to believe – this is not always an entirely intentional act (although it does still suggest poor scholarship). There is a real prospect that bias, conscious or otherwise, will actually alter someone’s perspective and presentation of human nature. Pinker, after all, believes himself to be emblematic of a rationalistic, reason-based approach lacking an ideology or agenda, but such belief does not appear to be warranted. (Pinker, 2003;

2011; *op. cit.* Olson, 2013: 39) This logically invites the charge of inaccuracy (and the suspicion of inaccuracy even where bias cannot be proven) masquerading as objectivity. Given the moral and political valencing of human nature, any human nature theory will thus have to contend with the prospective use of human nature as a tool of political legitimisation.

Human Nature as Political Resource

This opens up the possible charge that human nature is being used solely for its rhetorical and legitimising power. It is undeniable that human nature is a contentious idea, given that it evokes a sense of permanence and solidity, insofar as these qualities promise the prospect of a source of objective value. We can more easily imagine changing culture than we can nature, and so the claim that something is in our nature easily becomes – or appears to be – a rhetorical device. We have just seen how human nature can be used to justify and valorise the *status quo* and lend it an air of objectivity. But this role can also be used in order to push forward a particular political agenda. Thus making a claim about what humans are invites concern about what that claim entails and what motivates those making it. The suspicion that human nature is being used to give force to certain normative political claims is itself a reason to be sceptical of the concept on offer. Certain forms of criticism can therefore be viewed as coming from opposing political traditions which find human nature to be (just) another space of confrontation. As a consequence politics becomes both a grounds for a critique as well as a motivation – a possible defect in theories of human nature as well as a reason to question them.

In recent history such debates have often focussed on the idea of human nature as a resource for the political right. In particular there has been controversy surrounding intelligence testing and the connection with race. The dispute over the infamous content of *The Bell Curve* was in part over the extent to which it appeared that a particular metric was being used to justify social stratification along racial lines. At the very least it appeared that the authors were explaining this stratification in terms of a natural – and by implication inevitable – difference between people. (Herrnstein & Murray 1994; Fraser, 1995; cf. Segerstråle, 2000: 308-9) Furthermore there was the prospect that the arguments represented a ‘missionary purpose’ for revitalising a program for eugenics,

clad in a statistical gloss.⁹⁹ (Fraser, 1995: 2-5) Likewise there was a similar controversy surrounding Hans Eysenck's linking of intelligence to race and ethnicity. According to Eysenck the two were inherently linked by heredity, including a selective pressure that lead to the descendants of African slaves having an intrinsically lower IQ. (Scarr, 1981: 62-4; Eysenck & Kamin, 1981; cf. Gould, 2007: 411) This obviously invites a charge of political bias and ulterior motivation, notably from fellow psychologist Leon Kamin (of *Not In Our Genes*) but also those who draw attention to Eysenck's association with right-wing and far right groups and publications. (Eysenck & Kamin, 1981; Kühl, 1994; see also Buchanan, 2010: 26-30) Whether this is particularly indicative about human nature, as opposed to the predilections of particular proponents and critics, is questionable however. It is possible to argue that the political implications were not part of a malign intention behind the theories but rather were attributable to problems with the science itself. (Segerstråle, 2000: 236-8) At least with regards to Eysenck, his biographer attributes his connections with right-wing organisations and ideologically suspect publications to political naïvety and spreading himself 'too thin' professionally. In trying to cover a vast range of topics and ensure his ideas found themselves in the public domain, Eysenck supposedly ignored the implications that could be drawn by those with an ideology to support. (Buchanan, 2010: 324-6) Of course this is harder to sustain in the case of Richard Herrnstein and Charles Murray, given that their arguments about intelligence in *The Bell Curve* are bundled up with arguments against welfare provision and affirmative action.

This trend repeats itself in the contentious dispute between the camps of Richards Dawkins and Lewontin. Specifically, Lewontin, along with Rose and Kamin (1990) make the case that gene-first Darwinism and sociobiology before it (since they often portray the two as one and the same) are indelibly stained by a particular ideological standpoint, to the extent that a casual reader could be forgiven for assuming that they believe gene-first Darwinism to be an intentionally crafted legitimising front for a (classist, and almost certainly racist) political position. They argue that there is a political drive to categorise people into groups which, wittingly or otherwise, thereby legitimises existing social structures, and that modern biologicistic accounts of human nature represent an extension of this drive. (Segerstråle, 2000: 202-3, 284-6) They also

99 Arguably reflecting a historical preoccupation with the intelligence of "lesser" social groups. (cf. Gould, 2007: 559-60; Segerstråle, 2000: 271n3)

assert that there is a vested political interest in portraying human beings as individualistic, self-interested and predisposed to conflict. Such a concept of human nature would serve to justify and reinforce a prevailing political hegemony; to give the impression that there is no alternative to capitalism and competition since they are “just part of human nature.” Gene-first Darwinism, these critics claim, helps to create this picture of self-interested human nature by repeated appeals to human and genetic “selfishness”. (Rose, Lewontin & Kamin, 1990; Sahlins, 1977: 72-87) Of course it is rather problematic that in fact Dawkins does not celebrate or venerate the selfishness supposedly inflicted upon us by our genes, but urges us to rebel against the genes. (Dawkins, 2006: 198-201) He argues that all he presents are facts (again making a claim to reason and objectivity much as Pinker does), and that it is a mistake ‘to derive our values from Darwinism, unless it is with a negative sign.’ (*Ibid*: xiii-xiv)

However this recommendation that we learn to control our human nature has its political implications as well. It has obvious similarities with an intellectual heritage that opposes a “fallen” or destructive nature against the moderating (possibly even redemptive) effects of culture. Not only does it follow a rather Hobbesian structure, it also reflects the antecedent (Augustinian) narrative of Original Sin – the idea that our origins are tainted, and we must struggle against our atavistic nature. (Stevenson *et. al.*, 2013: 115ff, 137ff; Jackson, 2014: 138, 139; cf. Sahlins, 2008) It also closely matches a prevailing notion that human activity is intrinsically disruptive and needs to be limited. Certain measures need to be put in place to restrict our nature, but not so strictly that such restraint becomes intolerable. This presents a strong resemblance to certain branches of contemporary democratic and capitalist politics, whereby individuals should be free from constraint except where this freedom would conflict with that of their fellow citizens. Pinker (2011) explicitly affirms this interpretation, of course, and takes it to be evidence of the manifest superiority of liberal democracy – it adequately controls human nature without suppressing it. As a result it seems that the charge – that human nature is being used and portrayed in such a way that it supports a political position – still stands. A less conscious – and therefore less obviously disingenuous – way for preconceptions about the world to affect conceptions of human nature confronts us in the following challenges.

Obstacles to Human Nature

Parochialism

One commonly occurring charge that the critics level is that most or all human nature theories suffer from a problem of personal reflexivity.¹⁰⁰ That is, that those putting forward theories of human nature are influenced by their context,¹⁰¹ and that this influence makes itself present in what they envisage human nature to be. The implication being that any theory of human nature is therefore simply an expression of the prevailing concept of human nature in the culture in which the theory is formulated, or else an expression of the theorist's own particular interests (in either case the suggestion is that this precludes the resultant theory being an objective statement). (Finlay & Gough, 2003; see also Wilkinson, 1988; Flanagan, 1981: 380-3) This is the accusation we often see levelled against Hobbes: that he lived in a climate of political chaos and civil war. He saw humanity in vicious conflict with itself and thus the human nature which he describes in the opening chapters of *Leviathan* is one inherently given to conflict, discord and ultimately violence. A number of critics of the *concept* of human nature thus focus on how human nature theories encounter this potential pitfall.

To use one of the theories considered previously as an example, this the essence of one argument that is often levelled against gene-first Darwinian conceptions of humanity. Specifically there is a contention that preconceptions about politics, society and individuals influenced the direction in which the gene-first Darwinian picture of human nature was developed, particularly with regards to the metaphor of a genetic conflict by which traits are selected. Indeed, this forms the crux of Midgley's thesis in *The Solitary Self*. (2010) There she argues that the idea that humans are basically "out for themselves" (in that everything they do is ultimately in the interests of their genes), is actually rooted in a political perception of essential individuality. This constitutes a

100 It should be noted, given that there are various types of reflexivity, that what is referred to here is not the epistemic reflexivity prevalent in anthropology and the social sciences, which consists of a recognition of the effect of researchers on the subject they are studying (effectively an explicit awareness of their own analysis as itself an intervention).

101 Whether that be historical, socio-economic and/or cultural. Parenthetically, this shares similarities with the legitimisation problem discussed above, except that there human nature is being inserted into a political narrative (and so "trimmed to fit"), whilst here political experience is influencing the development of a human nature theory. The legitimisation in this case comes from the circularity of the relationship between human nature and politics.

slippage between the picture of individual's roles as political agents and their agency more generally. Midgley is proposing that political conceptions of personal agency have infiltrated a more generic conception of human agents: the idea of "one man one vote" has, she asserts, become generalised in socio-political discourse as a picture of human beings as individualised decision makers. As a major contributing factor, Midgley believes there has been an intellectual assimilation of a certain idea of the individual in scholarly circles, particularly in the sixties.¹⁰² This she traces to a Nietzschean concept of heroic individualism as a struggle against cloying conventionalism, a trend she believes was exemplified and introduced into popular discourse by R. D. Laing. (Midgley, 2010: 36-40) Of course this is a highly romanticised notion of the individual, an individual that is self-contained and self-directing and not an altogether accurate model. Midgley finds two things wrong with such a picture. Firstly it results in other facets of human nature being ignored or treated as subordinate and secondary to the central dictates of the supposed evolutionary algorithm. Secondly, and contributing a great deal to this former point, there is another slippage, this time between the picture of human individuality and the treatment of genes – the units of Darwinian inheritance – as individuals themselves. The developers of gene-first Darwinism (and sociobiology) are therefore primed with what she thinks of as a Hobbesian conception of human nature – they expect people to conform to a pattern of rational self-interest bearing a striking similarity to Hobbes' philosophical anthropology in *Leviathan*.

This is also the line of reasoning followed by Rose, Lewontin and Kamin (1990) as well as by Gould. For them, the self and individual benefit emerged as the main focus of gene-first Darwinian human nature theories because those were the basic elements of folk psychology at the time.¹⁰³ They note that the prevailing social and political world of the eighties – when the concept of the selfish gene, Evolutionary Psychology, and gene-first Darwinism more generally were first elaborated – was dominated by an emphasis on individualism, economic competition and the rhetoric (but not necessarily the practice) of meritocracy. In turn they point to the isomorphism between this and the gene-first Darwinian emphasis on inter-gene and inter-individual conflict as evidence of a (possibly unconscious) biasing of the science to fit preconceptions about human

102 Perhaps significantly the period during which Dawkins was studying as a student.

103 Although there is also a suggestion there is also a *moral failing* at work here. (See Segerstråle, 2000: 41-2) This charge revolves around the idea that Dawkins and those like him are culpable for failing to reflect on possible extraneous influences on their theories.

nature. In essence, because individual competition was the “common sense” view of what humans are, it inevitably, say the critics, influenced how the gene-first Darwinists viewed the interaction between genes, which is predicated on the view of genes as individual units of selection and therefore analogous to individual actors within a system. This, they argue, has led to a reductive approach to inheritance focused on atomised units, the prioritisation of intergenomic competition, and is even reflected in the emphasis on adaptation. (see Levins & Lewontin, 1987) Human behaviour in turn comes to be viewed through the lens of a genetic conflict between evolutionary replicators, much in the way that social interaction was (and in many ways still is) viewed as the outcome of the conflicting interests of individualised agents. Gene-first Darwinism therefore construes human agency as being oriented towards safeguarding and transmitting the individual’s genes and so, at least according to Lewontin and his colleagues, reflects and reinforces a contingent cultural view of humans as self-interested rational actors.

As an example, cooperation can be – and is – then construed as “merely” the outcome of selfish actors at a more fundamental level (see chapter one), much in the way that cooperation within a capitalist economy is viewed as an equilibrium state resulting from the rational self-interest of individuals. Hence pro-sociality is seen as limited (in addition to being open to the charge of being a mere epiphenomenon of something more real) and competition and self-interest are seen as more important, in turn reinforcing the prevailing attitude towards human beings as self-interested individuals. At the very least there is a perception of antagonism between cooperative and selfish impulses, a dissonant character to human nature which can itself be interpreted as evidence of a ‘dark’ side to human nature. (For example, Pinker, 2011) Of course whilst this is interwoven with their objections to the science of gene-first Darwinian thinking – the methodological and evidentiary roadblocks which undermine the gene-first Darwinian case – here the intention is to highlight the cause to which critical observers attribute this blind spot (or, less charitably, stubbornness) in their opponents’ reasoning. Lewontin (2000; 2011) continues this line of attack, pointing out – on the basis of identity politics and critical social analysis – that much contemporary evolutionary theory reflects, or at least closely parallels, the preconceptions of the *status quo*. (Lewontin, 2000: 199ff) He argues that the resultant picture of human nature is

skewed, given that feminist and subaltern perspectives are marginalised, and so have little opportunity to give their interpretation of the evidence or to challenge the prevailing interpretation.

The core criticism here is that as a consequence this human nature is highly parochial. This theory – and theories like it – do not really reflect human nature, or at least not an unalloyed human nature, but rather human beings as they are conceived as being by the theorists. This conception in turn is the outcome of a scholar's social circumstances. So it becomes possible for critics to argue that human nature is simply a reflection of the way someone sees human beings, as a result of prevailing attitudes on the matter.

It is (also) possible, with reference to the idea of disciplinary attention outlined above, that gene-first Darwinian atomism in fact represents something about the way its proponents approach human nature: from the starting point of genetic biology and/or reductionist psychology. Rather than social and political “common sense” being reflected in these theories it may be the scholarly assumptions of theorists' academic and professional fields. For one, Dawkins is an evolutionary biologist with an emphasis on genetics. The attempt to understand human beings through the logic of evolution is simply an extension of the project of evolutionary science. (Dawkins, 2006: xvi-xvii, 1-3; cf.: xix-xx) Approaching the complex world of human behaviour from this perspective would seem entirely natural to someone whose scholarly career is predicated on that perspective. Likewise psychology is a varied field and psychologists span a range of reductionist and holistic approaches, (see Flanagan, 1981) so it should be no surprise that some like Pinker, Tooby and Cosmides should develop ideas and affinities that deconstruct human psychology into component parts or an underlying functional logic. After all, Freud attempted to do something similar by breaking human thought into constituent areas each with their own domain and set of priorities. It is an even shorter step for them to start viewing what we might term human nature in terms of this deconstructive framework. Thus it is possible that previous professional pursuits have helped shape this particular atomistic approach towards human nature just as much as inadvertent political conditioning, akin to the way in which Wilson attempted to apply his entomological experience to more complex creatures in *Sociobiology*.

If we move beyond gene-first Darwinism, we can see an interesting parallel argument being made with regards to WEIRD participants in psychological and behavioural research. Joseph Henrich, along with colleagues Steven Heine and Ara Norenzayan, argues that by relying on participants who come from Western, Educated, Industrialised, Rich and Democratic (WEIRD) backgrounds many psychological studies will be skewed towards results influenced by one particular context. (Henrich, Heine & Norenzayan, 2010a; cf. Sahlins, 1993) In chapter two I briefly pointed out how this makes reliance on psychological studies problematic in determining or describing human nature: the sample of subjects actually represents a relatively narrow band of humanity. To elaborate, Henrich and his colleagues obviously do not dispute that culture has a profound effect on human behaviour and perception (none of the scholars considered thus far would seriously argue otherwise). However this has methodological implications that call into question the extent to which psychologists can generalise about their findings. Lack of variation in subjects – not just in terms of the “civilisation” or cultural milieu they come from, but significantly in terms of a specific subcultural grouping – makes it difficult to distinguish between the relative influences of culture and nature. We might naturally be concerned over which psychological features are products of cultural conditioning and which are innate. More importantly, perhaps, is the question of how we are to separate these influences with regards to individual psychological phenomena: the extent to which a particular behaviour or affect represents an underlying innate faculty (if any) and its conditioning/canalisation by a person’s experiences. If all subjects in a study have the same background then their cultural conditioning will have been remarkably similar, and there will be few variations to contrast in order to discern any underlying (i.e. “natural”) continuities.

This is not only an issue for the psychologists but also for those philosophers and associated theorists who wish to use such studies to further their own investigations. On this basis we find the call for, at the very least, caution in drawing generalised and universal inferences from research outcomes. However this is not to say that Henrich, Heine and Norenzayan reject the concept of human nature, nor the use of psychological investigations. Instead they are pointing out, from within the discipline, a *limitation* of much of the currently available material about our innate psychology. (Henrich, Heine & Norenzayan, 2010a; 2010b; see also Henrich *et. al.*: 2006) Instead of the charge that

an unconscious cultural preconception is biasing the way that the data are interpreted, the claim here is that an insufficient attention to the limitations of one's methodology introduces the prospect of error into the inferences one draws. Thought of in this way, parochialism may not be grounds for a refutation of human nature theories *per se*, but could be viewed as either a defect of particular human nature theories, or as a methodological obstacle or pitfall. To put it in experimentalist terms, one's view of humanity may simply be inaccurate if insufficient care is taken to accommodate culture as an uncontrollable variable. More broadly this might resemble the kind of iterative investigatory process Peter Loftson recommends his fellow philosophers and other scholars adopt in relation to human nature. (Loftson, 2006: 255ff) In such a process human nature is subject to an interdisciplinary cycle of formulation and reflection, wherein an accurate picture is (ideally) built up through the use of varied perspectives and continual scrutiny.¹⁰⁴

Historicism

It is not just that theorists may reinforce prevailing preconceptions about human beings – the inferences they draw about human beings may be entirely accurate, but specific to the context in which they find themselves. The error in such cases will be one of illegitimate generalisation of one's observations. If Henrich and his colleagues raise concerns over the social and cultural localisation of human nature theories, the concept of historicism raises similar concerns over the temporal contingency of such theories. Put simply, human beings are situated within points in time, and their behaviour and attitudes will be affected by the circumstances of that time. Both writers and the subjects they discuss will be contextualised in particular historical circumstances. The opinions of those writers and the observable behaviours (as well as their own reported opinions) of those subjects will be conditioned by this historical specificity. Generalising from descriptions of human beings under such conditions complicates the prospect of ascertaining something about human nature, if it makes no provisions for determining what is genuinely universal to all human beings and what is the result of social structures or assimilated cultural ideas.

An illustration, and a pertinent one, might come from Darwin's development of

¹⁰⁴ It is interesting to note that Loftson includes room for folk psychological intuition to make a contribution in its own right and identified as such.

the theory of evolution. Darwin was born and educated during the height of Victorian capitalism, which promulgated the idea that prosperity came through commerce and competition. This is taken to have had an effect on the emphasis he places on competition and natural selection as the primary mechanism of a species' evolutionary development. (Bowler, 1976; Young, 1985) Consequently the theory he articulated was similarly affected, influenced as it was by his own experiences and perceptual framework. It is possible to see in the idea of natural selection from a pool of competing individuals a reflection of the meritocratic ideal of nineteenth century British society. The "best" or "most fit" individuals come out on top. This reading of events gains weight if we consider that Darwin, Thomas Huxley and Herbert Spencer, despite seeing moral sentiments as part of human nature, all saw egoism as the primary and principle drive of human beings. (Sapp, 2003: 44-5) In turn this informed their views of what human morality is: a conditioning and ameliorating influence on human self-interest, in accord with contemporary received wisdom about ethics, economics and nature. However as Robert Young points out they go further, Huxley and Darwin both decrying slavery and the oppression of women but nevertheless reinforcing the prevailing attitudes that both were somehow inferior to civilised white males. (Young, 1985) Naturally, this fed back into the thought of those who saw Darwinism as a vindication of the social *status quo*, closing the (ideological) circle. (Bowler & Morus, 2005: 145-7, 426-7) Whites were more evolved – more "fit" – and of them the males were more robust and intelligent, and therefore had the right and duty to take positions of prominence in society. Hence what they find when considering human beings, as evolved beings, meshes with much of the common sense view of human nature at the time, but that calls into question whether it therefore represents a timeless truth.

In contrast, their Russian counterparts found a different emphasis to express in their nascent evolutionary science. They appear to have emphasised cooperation within species, and instead saw more significance in the struggle of the group with the challenges posed by the environment. Daniel Todes attributes this to two factors. (Todes, 1987; 1989) One is geographical: The British and Russian empires varied greatly in their geography and climate. Rather than the series of verdant islands that Darwin encountered, where resources allowed for rapid reproduction rates but where space was limited, the Russian empire was spread over a single contiguous landmass.

The climate was also harsher, and so the species Russian naturalists studied were only able to sustain small populations whose main threat was the environment itself. When the population did exceed the capacity of the local ecosystem there was always the option of migration. Thus the Malthusian insight on which Darwin relied failed to gain traction with a Russian audience. The second factor was more cultural. In contrast to the market-oriented British, the Russians were still for the most part feudal, and consequently there was a perception of a natural cultural bond. Value was placed on the community (and in most cases fealty to the feudal and imperial authority) rather than competition with one's neighbours. (Todes, 1989: 24ff) The picture of evolution built up by the Russians was thus more focussed on cooperation and overcoming adversity together (a view easier to assimilate for aristocratic and middle-class intellectuals who reaped the benefits of the feudal system).

Even if we focus solely on the interpretations of the evolutionary evidence we can see how different contingent circumstances appear to have coincided with divergent approaches to the concept of evolutionary struggle.¹⁰⁵ The British get a “British” evolutionary theory whilst the Russians develop a “Russian” one. The basic principles remain the same – development over time at the species level, a selective pressure that determines success and so on – but the emphasis changes in significant, if occasionally subtle, ways. Extrapolating from observations made within a certain historical context to general principles risks installing the effects of said context as part of a (supposedly and ideally) universal description. (Sahlins, 1977: 86-7; Midgley, 2002: 149-151) This is not so different from the problem that confronts Dawkins, Dennett and Pinker, in that the human nature they describe is not only (if we believe their claim) based on Darwinian principles, but also the context has not changed significantly. In fact market capitalism has only proliferated. It also allows us to better understand Midgley's attribution of the emphasis on self-interest in gene-first Darwinism to Hobbes: she notes that when Darwin's theory was first elaborated, comparisons to Hobbesian conflict were already being drawn. (Midgley, 2010: 41-2) As a result, the gene-first Darwinian and EvoPsych emphasis on individual self-interest, supposedly derived through objective consideration of evolutionary mechanisms, could easily be traced to a pre-existing

105 A prominent anti-Malthusian Russian who *did* explicitly apply evolution to human nature being the anarchist Kropotkin, and therefore something of an outlier amongst his respectable liberal and feudal peers.

social and economic system which emphasises individualism, rooted in nineteenth century convention. (Rose, Lewontin & Kamin, 1990; Midgley, 2002: xvi-xix; Sahlins, 1977: 4-7, 93ff)

Predictably, given his historical materialism, Marx also makes a related case in his theses on Feuerbach. Here he cautions that any discussion of human essence is problematic if one does not acknowledge the (in his paradigm material) context in which that essence is situated and which therefore affects one's perception of that essence. (Marx & Engels, 1976: 5-6) It is not only theorists who may be affected by their context and intellectual climate – the subjects they study are similarly affected by their historical context (recalling once more the analysis of Henrich and his colleagues). Althusser in turn used this reasoning to explicitly argue against humanism as a philosophical position and human nature as a respectable theoretical category. (Althusser 2003: 253-5) For Marx it in fact represents a degree of self criticism; the point at which he sets aside the concept of Species Being openly elaborated in his early work and instead constructs an idea of human nature out of what is given (about human agency and consciousness) in a particular historical moment (a move that I have argued left certain assumptions about human sociability implicit and under-defined). Yet there remains a heavy emphasis on productivity in his work on human beings that seems to reflect the economic concerns of industrial capitalism, although interpreted in a negative light. Marx principally sees human beings as “reproducing” themselves, that is, as creatures that produce the means of their own conditions for living. (Marx, 1994: 80-1, 123-5) The expansion of productive capacity fundamentally alters social relationships, and therefore human experience. As we saw in chapter three, Marx consequently saw production as that which defines a person's relationship with the world, and the particular system in which said production is organised thus determines their conscious awareness.

As such, production is a means to some form of self-realisation: it defines what it means to be human. (Sayers, 2005: 612-4; Wilde, 2000) Yet production does not appear to be the principle feature of humanity across all contexts. The social value placed on production, and the personal need to get satisfaction in work, appears to be a novel development that emerged with capitalism. (Sayers, 1998: 48-52) Enshrining this emphasis on production into considerations of human consciousness looks problematic,

even in the cause of criticising the co-opting of productive capacity in the service of domination and exploitation. This productive character is itself historical, and need not be shared by all of humanity, not even in the feudal societies that preceded capitalism. Thus Marx remains ironically open to historicist criticism himself. It is possible to argue that his emphasis on the means of production and the productive capacity of human beings is itself just as much a reflection of the prevailing orthodoxy of nineteenth century political economy as the economistic viewpoint of his capitalist contemporaries. (Baudrillard, 1975) We might, on this basis, go on to say that his idea of human (pro)sociality is constructed within the economic framework which characterises his political analysis, and thus is overly bound up with his idea of productive relationships.¹⁰⁶

Even disregarding the prospect that critics themselves are reflecting their social or historical context, does historicism really invalidate claims about human nature? Darwin makes an excellent example, since, bar creationists, few doubt that his account of evolution is true and accurate, even if it has been added to, refined, and augmented over the years. Darwin's theory may have been affected and inspired by his socio-historical context, but it captured something valid and verifiable about the process of evolution. Similarly, the Russian biologists were not conversely wrong: they too managed to represent something important about the interaction between a species and its environment, and the role played by cooperation. Thus whilst the phenomenon in question looks to be very real, the accusation of historicism does not automatically invalidate a given theory simply because it shows marks of having been a product of its time. We can inadvertently perceive our subject through the lens of our own context and still feel justified that what we say about it is in some way true or justifiable.

Strategies of Universality

If these problems seem to cast a sceptical light on the accuracy of our ideas about human nature, then perhaps we can find some grounds to give these ideas some security and devise means to measure their veracity. In short, we have to recognise the

106 Midgley argues that Marxism is a (or should we say yet another) system which attempts to explain a vast range of phenomena through a single heuristic; one of class and productivity. (Midgley, 2002: xxxviii, 5-7) Certainly it appears to lose much of its claim to universality.

need to universalise our claims, and that any discussion of human nature that fails to do so in some way is suspect. One attempt at this is visible in the work of Donald Brown, an anthropologist sympathetic to the idea of an innate human nature, who devised a concept of “human universals”, an attempt to theorise exactly what it would take for a feature or trait to be considered universal in the human species and, crucially, what such universals might be. Brown even goes so far as to describe the “universal people”, an anthropological description of the most basic currents in human life but lacking any specific content. (Brown, 1991: 130ff) Such tendencies are highly general, rather than limited *a priori* to just whatever can be connected to biological or psychological elements. So Brown’s universals include ‘moral sentiments’, facial and verbal communication, a sense of self and ‘fears’; but also such things as various kinds of classificatory systems, ‘myths’, ‘narratives’ and ‘personal names’.¹⁰⁷ (cf. Pinker, 2002: 435-9) This latter project is, by Brown’s own admission, tentative and presumed to be the first attempt at an ongoing project of proposing and considering possible candidates.

The appeal to such universals need not be made in such terms, of course. Brown’s psycho-anthropological formulation is simply a usefully explicit elaboration of the notion. Freud outlined his universals in terms of theoretical constructs which were not given any particular overall heading. Marx initially described his universals under the heading of Species Being, a borderline metaphysical essence. He later located human universals more fully in the interpersonal relations involved in production. By way of comparison: Aristotle held that rationality was universal, indeed for him it was the defining, exclusive human trait, although it presented variability in its expression (in other words, slaves and women were less rational and thus in need of the guidance of Greek men). Thus whilst what might constitute a universal is therefore not necessarily agreed upon, they do provide a way of making claims about human nature that escape accusations of parochialism and historical specificity.¹⁰⁸ The idea of universals – however one construes them – may provide an anchoring point for overcoming the problem of individual researchers’ situational and subjective limitations – which also underpins the charge of parochialism – a potential that Pinker has been keen to emphasise. (Pinker, 2002: 435-9) The possibility of establishing, to more or less general

107 So these universal people have a symbolic language; rituals and customs directed towards certain functions that are themselves perennial, such as conflict avoidance or childbirth; rules for membership and the ability to infer these rules; and so on.

108 Presuming, of course, that we can settle on a method for identifying them.

agreement, a set of human universals would go some way to solving objections of critics of human nature. However this comes with its own set of problems.

Firstly, and most obviously, it might just be argued that the methods used to find these universals are equally subject to the problem of reflexivity: the studies, analysis and discourse that are supposedly aimed at uncovering or reflecting upon human universals are themselves influenced by the context in which they are carried out. (cf. Feyerabend, 1993; Maso, 2003) We face the prospect of a kind of meta-historicity. How can we know that the universals we identify really *are* universal? The prospect that there exists some objective structures or facts that can underpin a theory of human nature is undermined if our means of discovering them is subject to limitations. It may not even be that the methods used are themselves especially problematic – they might in principle be perfectly sound and fit for purpose – but the questions asked are influenced by the investigators' own context(s) and so inherently prone to answers that reinforce culturally dominant suppositions about what human nature is (i.e., what features of ourselves will be construed as universal) or what spheres of human activity (production, say, or sex, or even evolution) are most relevant.

Secondly, appeals to universality can be construed as just that: as strategic appeals to the *principle* of universal properties, but which are in reality more rhetorical devices than examples of true objectivity. This is one explanation for the appeal of biological and evolutionary accounts of human nature in the contemporary literature. Those, like Pinker, who argue that there are identifiable genetic components which correspond to characteristics and proclivities, are appealing to genetics to provide universal grounding for their human nature. Thus, if we can identify the roots of our nature with our genetics, which we all share, then our concept of human nature will be universalizable. Freud could be said to have been doing something analogous, in his insistence that his work was intimately connected with the neurological field in which he began. (See Sulloway, 1980) John Rawls likewise makes discursive forays into evolutionary thought in defence of his idea that humans have a sense of justice, (Rawls, 1971:502-504) and Marxist political scientist Gary Olson appeals to neurobiology to establish a basis for innate human pro-sociality that is critical to his political project. (Olson, 2013) Similarly, members of the motivationist schema who attempt to draw comparisons with other primates – and especially those who suggest continuities and

similarities, such as de Waal – are clearly attempting to establish a ground for universality in their claims.

De Waal (who does not even explicitly mention universals) can be viewed as setting up the basis for universalising the features he identifies on the basis of a shared evolutionary heritage and basic genetic similarities. In doing so he sidesteps the issue of WEIRD subjects that hangs over the psychologists I include within the same schema as him, by broadening his research base to include humanity alongside the (other) two chimpanzee species. There is therefore the opportunity to avoid the critics' challenge by deepening (in the case of Pinker) or broadening (in the case of de Waal) the underlying foundations of a particular theory of human nature. This latter course is arguably the one being recommended by Henrich and his colleagues, who are interested in using cross-cultural studies to investigate underlying similarities. It is also clearly visible in Brown's argument that we cannot presume that 'universals, or features of human nature, are right on the surface of behaviour.... [W]e can only be sure by going abroad.... [W]e only discover the universal when comparisons of variations reveal underlying universal mechanisms or processes.' (Brown, 1991: 156)

However it still appears that the burden of universal validity has been transferred from claims about human nature themselves to some external standard which is meant to bestow validity to those claims. This connects with the arguments put forward by the critics of gene-first Darwinism, in particular Lewontin and his colleagues, since they effectively claim that the deficiencies they identify are imbuing contingent political opinions with the status of scientific fact. Yet this is also a source of the great intransigence in that particular debate: Dawkins, Wilson and their peers view such an argument as questioning their scientific integrity and objectivity. (Segerstråle, 2000: 216-9, 375-7; Dawkins, 2006: xiii-xiv) Meanwhile the critics consider themselves to be concerned with the purging of "bad" science in the name of objectivity and an accurate evolutionary theory. (Segerstråle, 2000: 200-202, 257) This is obviously significant, in particular for the scientists involved. The idea of investigating and representing nature without the interposition of one's self or subjective biases (the essential feature of early-modern and modern objectivity) remains deeply ingrained as a professional and personal virtue on both sides.¹⁰⁹ (Daston & Galison, 2010: 246-250) More broadly

109 Parenthetically, the 'epistemic virtue' of trained judgement is, according to Daston & Galison, an attempt to account for the unavoidable reality of subjectivity by incorporating an iterative and

speaking, the intransigence of the Dawkins/Lewontin debate reflects the circularity of the relationship between the critical perspective and the quest for an objective (universal) basis for human nature. There is a tension between the attempt to ensure one's theory of human nature has universal validity and the possibility that one is doing no such thing. To what extent is the appeal to some new universalising principle "good" science or philosophy, as opposed to yet another strategy *of* universalisation?

Raymond Tallis makes a similar sceptical case, in claiming that what really lies behind attempts to apply evolutionary theory to human behaviour is simply the fact that proponents of such approaches are overly enamoured with evolution and its explanatory simplicity, rather than any kind of appropriateness or applicability. Like Kenan Malik, he asserts that viewing human beings simply as natural beings that can be explained through reference to evolution or biology misses something crucially important about humanity – namely, our creativity and rational sophistication. Given that this is not restricted merely to biologists but is also a trend prevalent amongst psychologists and philosophers it becomes a charge which extends to "neurophilosophy" and ethologists like de Waal. (Tallis, 2011; cf. Malik, 2002a) According to this criticism, what really underlies the appeal of these approaches is a kind of intellectual fashionability, a confluence of (comparative) novelty, explanatory elegance and a veneer of scientific objectivity.¹¹⁰ Both Tallis and Malik want to say that there is something problematic in this, insofar as it represents an unhealthy enthusiasm for new and overly scientific techniques. But if it is really so then an evolutionary grounding would clearly be no guarantee of universality. In this regard, certain conceptions of human nature are historicised in the sense that the *techniques* used have a grounding in a particular time and place, turned to an old topic of discussion. Thus gene-first Darwinian, ethology or other naturalistic approaches have no more validity than Aristotle or Hobbes, they merely represent a new intellectual *Zeitgeist* and a new anchoring point for strategies of universalisation.

reflective attitude towards developing knowledge of the natural world. In short it reflects an awareness and affirmation of the necessarily ongoing nature of scientists' epistemic training. This, they argue, supersedes and builds on the attempt to achieve a ("mechanical") objectivity devoid of the illicit imposition of the researcher's self.

110 Of course, there are affinities here with the potential universalising power of evolutionary theory.

The Interposition of Culture

This leads us to another objection that potential critics may make, one that, appropriately enough, stems from another intellectual milieu altogether. Both Tallis and Malik are enamoured, not with evolution as a map to our innate nature, but with human beings' status as rational decision-making subjects. Approaching humanity from this position provides an alternative description of what it means to be human, one that emphasises culture and social constructs over anterior dispositions or tendencies. Such a description renders human nature analytically mute: it supersedes discussion of human nature in favour of discussing agents in particular socio-cultural situations, or else simply those situations themselves. A form of real scepticism starts to emerge, since, if there is a human nature, on this view we can never know it, since the ability of human subjects to determine their own being will continually intercede between it and our observations.

Human Nature is a Mirage

For critics of this stripe, culture emerges as the determining factor of human existence – indeed, of human nature – because it sets the conditions in which human beings make their decisions (not to mention its own susceptibility to modification through human choice). Obviously this is only one way of phrasing the situation. We could just as easily formulate this in terms of culture acting as an external force which conditions human experience. In either case, we are effectively and fundamentally shaped by our societies and social forces – an extreme form of the contextualism of chapter three. We perceive our world, and formulate our activities within it, through a prism formed by the myriad social influences acting upon us, and there are those who, in the light of this, argue that there is little to be said about human nature. Thus human nature theories as a whole are mistaken not because they make some error or are susceptible to some methodological trap, but because the end that they are aiming for is unattainable. In short human nature is a non-existent answer to the wrong kind of question.

For example, Malik (2002a) argues that there is something about the fact of human subjectivity that makes certain methods of analysis unsuitable. Humans have the

ability to choose, for themselves, from amongst the possibilities offered to them by their social context, and it is this moment of, and capacity for, choice which constitutes human existence. Analyses such as computer modelling fail to grasp the true complexity of this experience. It reduces decision making to restrictive calculations and lacks a proper appreciation for the capacity for understanding meaning and values which characterises human cognition. (*Ibid*: 294-304) Similarly, comparisons with other primates fail to account for the varied additional cultural factors that are unique to human social organisation, as well as the extra deliberative capacity and sophistication bestowed by our capacity for rational thought. (*Ibid*: 214ff) Attempts to model human behaviour algorithmically, or treat humans like advanced apes, *reduce* humanity to the status of – to use Malik’s terminology – zombie-hood. To truly grasp the full import of human agency one has to account for their special status as rational beings making use of the intellectual resources of their cultural inheritance. (cf. Malik, 2002b)

For Malik, and others, the nearest approximation to an innate human nature is some essential quality which in fact results in a *lack* of content. What makes us human, in this sense, is just whatever exceptional feature of the human being it is that elevates it above its natural origins and bestows it with some form of autonomy. This sceptical position with regards to human nature has some affinities with an existentialist viewpoint, in that there is supposedly a lack of determination which leaves conscious beings to direct their own activity.¹¹¹ These beings do not necessarily appear to be quite as undetermined as Sartre’s radically free agents, however, given that they are bounded by social circumstance. Still, human beings’ capacity to reflect on their actions and be aware of their own and others’ motives is taken to create a radical division between conscious subjectivity and the mere reactivity of other animals. Human nature thus dissolves in the face of our higher existential capacities, to be replaced with societal values and cultural meaning. It is effectively so amorphous or protean that it becomes whatever the agent itself makes it.

Culture Overwhelms Nature

Such a position is obviously attractive for some coming from scholarly disciplines – such as anthropology – that already concern themselves with culture and

111 For a fuller discussion of existentialist human nature see Stevenson *et. al.*, 2013: 227ff, cf. Lopton, 2006:4-5

its power over people's experiences. Thus it is that we see a similar position expressed in the work of Marshall Sahlins. Predictably, Sahlins was an early critic of sociobiology, seen as the use of evolutionary theory as a universal explanation for human experience. (Sahlins, 1977) Like Lewontin and his colleagues in the Sociobiological Study Group (in reality an academic circle critical of sociobiology), Sahlins emphasised the role of language and culture in people's lives. (Segerstråle, 2000: 141ff) These arguments, whilst mainly aimed at fending off the idea that a study of culture could work from a genetic basis, nevertheless have a knock-on effect for what it actually means to be human. Sahlins argued that biological explanations could not encapsulate the variety of behaviours displayed across cultures. Furthermore he contended that there is no good case to be made for universal constants underlying this diversity. Instead the cultural instantiation of all human existence necessarily means that humanity is inherently conditioned by culture and that, given that it is the primary source of diversity amongst groups of humans, it is also the primary influence over what and who they are. This is reiterated in his more recent pronouncements on the issue: human activities always occur within some cultural context or other, using that culture's modes of expression. (Sahlins, 2008: 109-111)¹¹² What this means is that human activity is always carried out within culturally determined domains of appropriateness and value, using the resources of the 'symbolic regimes' in which they occur.

Nor, of course, have rationalist conceptions of human nature escaped Sahlins' scrutiny:

However, material forces and circumstances always lead a double life in human societies; they are at once physical and meaningful. Without ceasing to be objectively compelling, they are endowed with the symbolic values of a certain cultural field. ...[I]t is by this symbolic value that the objective characteristics of gold, such as its natural geographic distribution in the earth, become powerful factors of world history. ...[T]his whole curious cultural scheme nonetheless appears to economists as the transparent effects of a universal practical wisdom. (Sahlins, 1993: 11-2)¹¹³

Similarly, the apparently universal character of human nature can only ever have a

112 Sahlins even goes so far as to critique the discussion of kinship in evolutionary theories of society and sociality (for example see Sahlins, 2008: 45-7). However his argument seems to be based on his applying an anthropological conception of kinship to the genetic relations referred to by the evolutionists, followed by subsequently glossing over the latter stages where they attempt, with varying degrees of success, to extrapolate their principles to social interactions between non-relatives.

113 It is interesting to note that here Sahlins deploys the Marxian concept of commodity fetishism, with a heavy emphasis on the inherent cultural contingency of such created wants.

semblance of stability. Given that any self-conception is itself articulated within a culturally-specific realm of meaning (and what else is human nature but part of an articulation of what one is?) it too will be subject to the contingent values of that culture, reminiscent of the problem of reflexivity we examined earlier. Furthermore, if we, as human beings, are realised and instantiated through our culture, then Sahlins' position also resembles that of Judith Butler's notion of performativity. For Butler human agency is exercised by acting out roles assigned to individuals by the socially dominant ideology. (Butler, 2003)

These roles, being the primary way that individuals experience their existence, come to be how those individuals define themselves.¹¹⁴ Human beings, in their everyday life in society, present themselves in ways that relate to that society. That is, they act in ways deemed appropriate to their class status, expectations of gender norms, familial relations and so on. (*Ibid*; Goffman: 1990) People are therefore self-constituting, according to their performative acts (the "performance" of a particular social role embodied in their actions). Erving Goffman describes this process in terms of the presentation of oneself.

A person may be said to *have*, or *be in*, or *maintain* face [self-presentation] when the line he effectively takes presents an image of him that is internally consistent, that is supported by judgements and evidence conveyed by other participants, and that is confirmed by evidence conveyed by impersonal agencies in the situation. At such times the person's face clearly is something that is not lodged in or on his body, but rather something that is diffusely located in the flow of events in the encounter.... [H]e must, to maintain face in this activity, take into consideration his place in the social world beyond it. (Goffman, 2005: 6-7, emphasis original)

Human beings feel they must control who and what they are in response to what they perceive to be the expectations that confront them in the exterior (social) world. This becomes the primary – arguably the only – way people experience themselves. Hence they may, through awareness or alteration of their performance, take control of this process and fundamentally redefine their own essence. (See Butler, 2010) Human nature is thus instantiated in and constituted by modes of social organisation and the ideals they embody.

In cases such as these the human essence that removes us from nature is culture itself, given that culture here is language, symbolic representation, and the cultural

¹¹⁴ Not as the occupiers of roles, of course, but rather as the kinds of being that perform the particular activities associated with the specific role(s) they occupy in society.

entities they embody like customs, rituals and the like. Any innate features are buried under cultural articulation, and hence variations in culture are the ultimate source of a person's character or behaviour. Here critics are using the mediation of human action via socio-political structures and symbols to argue that some other factor interposes itself between any putative nature and our actual experiences and behaviour. This mediation is so far-reaching it even gives us the mistaken impression that there is such a thing as human nature. (Sahlins, 2008; Malik, 2002a: 21-5) More mundanely, it shapes people to such an extent that there is simply no space left for nature. Jesse Prinz holds a similar view; whilst in chapter two he was cited as part of the emotivist school within ethics, in the broader scheme of things he holds that our emotional repertoire is conditioned by an accultured sense of appropriateness. Emotional reaction and expression are canalised by social pressures. (Prinz, 2013) As a result we can situate Prinz at the border of the sceptical and the contextualist camps. He comfortably locates human morality in the expression of our emotional responses, but puts forward a case for psychological empiricism based on the cultural morphology of those responses. According to Prinz, socialisation and cultural cues guide the individual moral agent in gauging the appropriateness and acceptability of emotional expression as moral action. This is because things like morality operate according to norms and linguistic communication, which do not flow from innate qualities but instead canalise them (direct them down particular developmental paths) and provide them with meaningful content (such as who counts as worthy of harm or protection, where exceptions might apply, etc.). (Prinz, 2008, cf. Flanagan, Sarkissian & Wong, 2008) Like Sahlins and Malik, Prinz sees the role of certain agential faculties, mediated via culture, as critically diminishing the determining role of whatever is deemed (or conceded) to be innate.

Fellow philosopher David Buller stresses the idea that culture may well have developed in parallel to, yet separately from, biological evolution in order to advance this position. For one, he is critical of the idea that human universals necessarily involve *innate psychological* universals, proposing that they may in fact be cultural homologies, similar across human societies but having no particular root in anything innate. Instead it is simply a historical accident that some of these features – usually in the form of analogous institutions or types of ritual – appear to have cross-cultural relevance. Buller proposes that a different explanation for these kinds of feature exists that accounts for

their superficial similarity across human cultures *and* their variety. This explanation is cultural evolution, the development of a society's structures and practices in accordance with the pressures experienced by that society. Marriage, for example, could be the result of an evolved desire to secure reproductive fitness, but Buller proposes a cultural-historical reading. He hypothesises that instead marriage could easily have emerged in an earlier human society and spread 'epidemiologically' rather than according to evolved psychological requirements, leading to the diverse forms – polygamy or the various positions on divorce, for example – displayed by diverse cultures. (Buller, 2005: 263-5, 466-7, 469-71)

Buller underscores this by also arguing for a new source of malleability in human nature – that of biological evolution. (*Ibid*: 471ff) He maintains that evolution, as an ongoing process, demonstrates the transient character of human nature. The continuous presence of adaptive change 'means that any psychological universals we might happen to discover – *if* we were to discover any at all – are temporally contingent. For any psychological universals we might happen to discover in the present did not characterize our species in the past and are subject to change as our species continues to evolve.' (*Ibid*: 477-8) As human beings are not finished products (they have not stopped evolving), we cannot meaningfully describe human nature without succumbing to 'temporal provincialism'. So whatever it is that makes something human, it will be contingent and cannot, on Buller's view, be some kind of "nature" given that 'even if those universals have characterised our species for 10,000 years' there is no guarantee they represent the summation of the human animal, past, present and future. However, can something be said to not really exist simply because it changes? This seems to require us to accept an unrealistically static understanding of what human nature is and can be. Marx certainly sees human nature as part of an ongoing process, changing in step with social forces. Surely we can legitimately adopt a similar position? We can say Theseus' ship exists even if its constituent parts have been replaced. The question of whether there is one ship or many is immaterial in this instance. We can replace an axe head without saying that the axe did not and does not *really* exist, or will not exist because at some point we will also replace the handle.

Furthermore, whilst Buller suggests that EvoPsych views humans as the final products of evolution, this need not necessarily be the case for any and all naturalistic

approaches. Taken together this would imply that it could reasonably be possible to describe human nature at a given time, even going so far as to take into account how it was in the past, without failing to be aware of such a nature's long-term temporal malleability. This appears to be an attempt to fend off the persistent prospect of finding pan-human similarities that could be said to be universals, or in some way innate, by defining nature as something metaphysically transhistorical. Buller could then easily concede the presence of general psychological features whilst claiming to deny that these constitute (part of) a nature.¹¹⁵

The Conceptual Persistence of Human Nature

To what degree do these objections definitively dispel the notion of human nature? Is that even the objective? If we take the theorists we have just considered, Malik and Prinz might better represent a position sceptical of a “hard” human nature; one which finds it necessary to look for the defining aspect of humanity somewhere else. Instead they want a more liberal and/or humanist human “essence” which fundamentally defines humans as self-directing agents. Sahlins and Buller, on the other hand, want no such traces of human nature left behind and deploy arguments such as we have examined in order to deny the legitimacy of the concept itself. None are, strictly speaking, suggesting a crude *tabula rasa* position, but the former pair sit closer to the contextualist schema than the latter. If we press this point further, it also appears that few critics have fully escaped the concept of human nature. This is a critical point – “human nature” still does work within various paradigms and theories. We are faced with Nietzsche's “eternal return of the repressed.”

As noted earlier, Prinz has appeared previously: amongst those philosophers who could easily fit within the motivationalist schema examined in chapter two. It might

115 Exploring this further, Buller *is* prepared to make claims in favour of some kind of innate system of reliable mechanisms. To continue with his discussion of marriage, he proposes the ‘relationship jeopardy hypothesis’ to explain differences in people's approaches to infidelity that serves as an alternative to EvoPsych models (his primary target). Rather than entirely disavowing human nature, (at least insofar as he seems to entertain some innate mechanisms) Buller appears to be emphasising an open-ended array of ‘more general features of the minds’ of subjects, mediated by cultural commitments. (Buller, 2005: 332-8) This only makes his explicit disavowal of human nature all the more confusing. Surely we could claim this is a picture of what humans are *now*, but that it need not necessarily apply in perpetuity?

seem strange then that here I cite him again for his explicit arguments against the very existence of human nature. Here we encounter an important factor that bears mentioning: many sceptics appear to still retain some idea of human nature. Though they may argue that there is no such thing, they still have a clear idea of some inherent property of human beings. Prinz stands out since he is explicit in what this is, and that is the emotional repertoire on which our moral psychology is based. For all the cultural direction of appropriate emotional expression and the conditioning of our moral sensibilities, the human species' possession of an innate range of emotions and emotional responses remains, acting as the raw material for this socio-cultural transformation. Taken in its totality Prinz's view on the moral psychology of humanity might sit closer to the Marxian end of the contextualist schema, even if we must ignore some of his disavowal of the idea of human nature.

For his part, Malik still finds the idea of a distinctively human essence appealing, whilst insisting that it is something other than innate qualities:

Another way of putting this is that human nature is not simply natural. An inherently ambiguous concept, human nature means both that which expresses the essence of being human and that which is constituted in nature. In non-human animals, the two meanings are synonymous. What dogs, bats or sharks typically do as a species, they do because of natural selection. But this is not so in humans. The human essence – what we consider to be the common properties of our humanity – is shaped as much by our history as by our biology. (Malik, 2002b)

His opinions expressed in *Man, Beast and Zombie* move the balance much further towards history and culture. (2002a) There the emphasis is resolutely on the role of humans-as-agents who get to define their own essence thanks to their subjectivity. There are certainly no drives here; no innate dispositions or faculties which might interfere with his picture of human autonomy. We are looking at a non-natural essence which is “to be an autonomous subject”, effectively cordoning off the possibility of inherent, pre-cultural elements we might regard as natural.

This is clearly connected to the way in which Malik articulates human nature theory within the context of a concern about the tensions between mechanistic materialism and humanism. For Malik, mechanism – and by extension, attempts at naturalistic descriptions of humanity – lacks an appreciation of the exceptionalism, irreducibility, and (although Malik does not expressly use this phrase) dignity of human subjectivity. Thus his central concern about human nature is how to resuscitate a

humanist conception of this “human essence”. Within the confines of this debate, the term “human nature” becomes nothing more than a part of the mechanist effort of self-legitimation via a rhetoric of naturalness, similar to that examined earlier in this chapter. (Malik, 2002a: 21-5) It is not that Malik has no picture of what humans, *qua* human, “just are” but that he avoids using the term human nature to describe what he wishes to advocate for, since “nature” for him implies delegating responsibility and control for at least part of one’s activity to some *exterior* wellspring of humanness.¹¹⁶ Instead he takes an elevated, idealist notion of agency as a foundational assumption – and essentially articulates merely a different kind of human nature theory.

Likewise, Lewontin and his colleagues’ response to gene-first Darwinism seems to be less about human nature itself and more about the inadequacy and inappropriateness of trying to approach it reductively. In *Not in our Genes* they present their own approach to human beings as one that escapes the dichotomy of reductive sociobiological explanation and holistic cultural determinism. (Rose, Lewontin & Kamin, 1990; cf. Olson, 2013: 32) Rather they see the human being as the outcome of both our species’ nature and its culture – biology still plays a (minor) role, but biology conceived of as a process that inextricably interrelates with the environment. This heavily implies that they *do* have some concept of human nature, however hazily defined; one which incorporates the sociological sensibilities of the contextualist schema of chapter three (no surprise, given their Marxist intellectual and political influences).

Concepts of human nature also re-emerge in less obvious forms. Although he repudiated species being and the notion of a fixed essence, even in its latter incarnation, Marx’s human nature retained an almost idealist emphasis on the importance of consciousness (it is this, after all, which is conditioned by experience of the productive process). Sceptics may themselves hold to similar ideas, retaining a concept of human nature that is hard to detect because it resembles something more abstract than precise qualities or essences. Obviously, insofar as they represent something characteristically and definitively human, rationality and subjectivity can themselves be categorised as this sort of human nature. The picture of an almost radically free choice-making that

¹¹⁶ And, without responsibility and control, we cannot have the kind of liberal agency he wants us to have.

underwrites these pictures of rationality and self-direction is another central presupposition, a founding principle. It is a form of human nature or philosophical anthropology used to orient what it means to be human within the theoretical viewpoint of its proponents. The point the sceptics want to make is that such a “nature” is effectively content-less. However it is possible to press the sceptical position further on this point.

Rationality and rational decisions have been cited as a capacity which removes human beings from innate capacities and predilections. This this can be coextensive with the assertion of the sceptical position just examined: human beings are intrinsically self-directing. We can choose from our available options – indeed, we are able to formulate and understand our potential options – and therefore are not subject to any form of atavistic or instinctive influences. In short our higher capacities render human nature mute. However just as parochialism or political deconstruction pose obstacles or problems for the formulation of a theory of human nature, but do not definitively refute all human nature theories, so rationality and subjectivity do not guarantee our insulation from intrinsic influences. At its simplest we can appeal to something like Habermasian rationality, and point out that the way we exercise our higher reasoning faculties is dependant on how those faculties work, both in relation to its mental functioning (how we understand) and its interpersonal functioning (how we communicate). Furthermore, rationality is essentially a problem-solving tool, and viewed through an evolutionary lens we might consider the contexts in which our rational capacity developed. Rationality evolved to make decisions based on highly limited and subjective information, largely in the short-term without much – if any – reference to outcomes several years or generations ahead. Simply put, rationality may be constrained itself – by evolutionary circumstance, the limitations on our ability to perceive the intentions of other agents, our own emotional states, and so on. We have no guarantee – indeed it seems unlikely – that rationality is some kind of *sui generis* phenomenon that elevates human beings from their nature. Instead, on this reading, it could be said to *be* part of our innate set of capacities – our nature.

This case needs to be developed further, however, and we can do so not only by introducing external considerations such as evolutionary paradigms, but rather by considering how these higher-level existential properties are being used by those

appealing to them. They are, after all, proposed as intrinsic properties themselves (even to the extent that capacities such as language are sometimes located within an evolutionary framework, the implication being that this is the moment of rupture, when our species removed itself from the constraints of other animals). For his part, Malik proposes that ‘[w]hat defines us as human beings is our subjectivity, our capacity for conscious, rational dialogue and inquiry.’ (Malik, 2002a: 390) But this is more than simply a lack of content – it represents a distinctive faculty, one which rather begs the question of degrees. (i.e. to what extent does Malik’s subjectivity respond to some anterior nature of the kind described by de Waal or by Freud?) Malik, like Sahlins, rather assumes that this represents an elevation from nature rather than something which works on a raw material. But is that not just a supposition? Human nature theories reappear as a set of assumptions about what subjectivity means, just what it is that culture is working upon and how it is relevant to actual agents. Similarly, for Habermas “being human” ‘must include a non-instrumental orientation *toward mutual understanding* without which flexible, normatively structured, social cooperativity would not be possible.’ (Moss & Pavesich, 2011: 149) They reveal themselves even in the way that critics decide on how much of a nature to allow and how culture does and does not condition human existence.¹¹⁷ The repressed human nature returns in the guise of subjectivity and agency.

In Sahlins’ case, he is happy to concede that certain bodily needs remain constant, but that their cultural mediation overrules their relevance to a discussion of what it means to be human.

As it is for sex, so for other inherent needs, drives or dispositions:
nutritional, aggressive, sociable, compassionate – whatever they are, they

¹¹⁷ Sahlins, for example, points to the different formulation of the self and personhood across cultures, which he takes to be proof of human variability. Different societies simply have different ways of conceiving of persons and selves, and this is down to cultural contingencies. Within some cultures ‘neither agency nor intentionality is a simple expression of individuality, inasmuch the being of the other is an internal condition of one’s own activity.’ (Sahlins, 2008: 48-51) Malik, on the other hand, thinks that though selves in some cultures may be interpersonal – i.e. these cultures construe individuals as members of a collective rather than as separate “Is” and “mes” – it is significant that individuals still operate *as* individuals. The functional idea of a “me” is thus a constant, as a prerequisite for agency, and what varies is how cultures collectively agree on the boundaries of what constitutes a self. Individuals remain subjects, even if they are not conceived of as individualised selves, able to be responsible for their actions and exercise moral agency. This is because of the centrality of self and subjectivity to his argument about the irreducibility of human activity. (Malik, 2005: 42-6) Hence Sahlins can make do without “individual agency” being part of his theory of human nature, but Malik positively requires it (and encourages us to be sceptical of Sahlins’ own account if he turns out to be correct).

come under symbolic definition and thus cultural order. (Sahlins, 2008: 111)

On this view, because human nature cannot be expressed outside a cultural context, and thus uses that context's means of representation, we are to conclude that culture is all there is to human nature. Furthermore, Sahlins looks to be conceding that such dispositions might well exist but is dismissing them as unimportant. Because we pursue any innate desires or obey any innate dispositions within a performative system – that is, within a system of culturally specific roles and representations – these aspects do not really have any meaningful bearing on what we are. (This despite the fact that many of them are implicated in taboos, mores, and other facets of social role-playing. For Sahlins the cultural determination of this role-playing is all that matters.) These 'needs, drives or dispositions' are not considered worth consideration in their own right *and are not regarded as directional or determinate*. That we might need companionship is not considered as interesting as the means by which that need is contingently expressed.¹¹⁸

This rather begs the question, however. Just what are 'aggressive' or 'sociable' dispositions? What if they are more content-full than Sahlins allows for? Moreover, why should we discount the idea that such dispositions do in fact have some relevance to our actions? The implication is that continuities (that is, human regularities) are not as interesting as discontinuities; that we can learn nothing from the former. (cf. Brown, 1991: 146-9)

We are asked to presume that this is the limit of such dispositions' relevance, whereas in chapter two we saw fellow anthropologists Christopher Boehm and Jessica Flack entertain the notion that innate dispositions were instrumental in both the emergence and sublimation of social hierarchies. (Boehm, 1999; Boehm & Flack, 2010)

There, whilst the specificities of a culture's hierarchy were dependent on its own history and context, and could not reasonably be considered outside of these, hierarchy itself (as well as egalitarianism or 'anti-hierarchy') was fundamentally a "natural" phenomenon, generated by innate human dispositions. Sahlins' position seems to suggest that we should ignore what appears to be the impetus coming from human nature, and focus solely on its cultural instantiation.

So it goes for Buller's treatment of cultural institutions and rituals. It is clearly

118 The thought that both might be interesting – and that there may exist a reciprocal relationship between the two that warrants theorising – is discounted in the drive to cut out from under Hobbesian and sociobiological accounts the entire edifice of human nature.

problematic to try to claim that any institution is natural, but what if Brown is correct and there are stable features – “universals” – which lie deeper? Buller’s alternative narrative of an evolving proto-ritual is tenuous and speculative. (Buller, 2005: 466-7, 470) It is no more plausible than other explanations, whilst obliging us to treat findings that imply innate psychological influences as of no consequence. To put it another way, the possibility of providing an alternative explanation does not in itself refute the initial proposal, particularly if it fails to successfully account for or dismiss the evidence on which that proposal relies. However much we may be marked out by an ability to create cultural institutions and practices, if these capacities are not fully independent but instead layered on top of pre-existing dispositions and/or evolutionarily constrained capacities then these latter could easily feed into what *kinds* of institutions and rituals and so on we create for ourselves, or otherwise influence their content. (cf. Flanagan, Sarkissian & Wong, 2008) This is exactly the kind of possibility that some of these critics wish to fend off, and the crucial factor over whether they are successful or not thus comes down to what extent we are prepared to entertain and affirm the degree of emphasis which they give to culture and/or agency. In short, it depends on the expectations we bring with us when we start to consider human nature.

Conclusion – Towards a Theory of Human Nature

Hitherto I have argued that a crucial factor is the way a given theory locates human nature – where it places human nature in the broader landscape of human existence. (This is in distinction to other means of dividing theories of human nature, such as whether they posit a soul or other non-biological essence; whether they posit any degree of continuity with other beings or not; or the position they adopt regarding the Hobbesian-Rousseauian spectrum.) There are, of course, other disciplines and approaches which can fit into the schemas sketched above – the intent here was to expound a taxonomy which can help us understand what characterises the perspective on human nature taken by different theories. I have, for example, left out many individual thinkers from chapter three who might have an approach similar to Marx or Freud (including their intellectual descendants), but whose idiosyncrasies make their theoretical orientation distinct. There are also a number of isomorphic, non-western traditions within Buddhism and Confucianism that treat human nature as something to be cultivated – encouraging the positive aspects/virtues and sublimating the negative – which would fit within the contextualist camp. Meanwhile, in chapter two I focussed more on the psychological and ethological side of the motivationalist schema, and dealt only lightly with anthropology and what might be broadly thought of as “neo-sentimentalist” ethical philosophy. Indeed, game theory is treated tangentially in chapters one and two, yet that interdisciplinary framework may well deserve attention on its own, seeing as it encapsulates and illustrates the rift which divides the superficially similar evolutionary viewpoints of the schemas in question – namely the question of whether we ought to think of human agents as acting in purely benefit-maximising ways. (Bowles & Gintis, 2011; Gintis, 2009) In the preceding chapters I have tried to sketch out the most relevant groupings of taxa, by way of an analysis of the most prevalent of modern human nature theories.

By contrast, critics of the human nature concept regard human nature as something of a myth – what makes us human can effectively be located almost entirely in the cultural and inter-subjective milieu in which we carry out our day-to-day lives. For them, the term is merely a fiction or label, one which is either irrelevant, suspect or

both. As may be readily apparent, I do not think that such an outright denial of human nature is warranted. This is the point at which we concluded chapter four. Clearly our existence is shaped by our social, cultural and economic forms, but having established the presence of an influence other than innate dispositions or tendencies does not establish it as an alternative explanation, nor a superior or superordinate one. To do so presupposes that culture is the only significant determinant of what it means to be human, that it is more powerful, or simply that its mediating effect negates that which is mediated, namely human nature. Sahlins' formulation, whereby the encultured performance of all activity necessarily means that culture is the only meaningful source of our humanity, reveals assumption underlying this. As one review of his *The Use and Abuse of Biology* commented: '[Sahlins] declares that culture is so independent that it cannot be studied in reference to anything but itself....' (Alexander, 1977) So whatever we do within culture cannot be, on Sahlins' view, anything but cultural in origin. This is predicated on the idea that we should give priority to culturalistic explanations, and see them as counter, rather than complementary, to explanations that work from any form of nature. However it is difficult to see why we ought to side with one over the other; and we needn't have to. After all, as we saw earlier, Mehmet Tabak characterises Marx's human nature as 'a dialectical composite of essence and existence.' (Tabak, 2012: 3) Yet in the case of criticisms like Sahlins' there seems to be some question-begging going on: there appears to be an assumption that we should consider evidence that culture influences human existence to be evidence *against* human nature. At the very least, cultural variations are assumed to be intrinsically more definitive than innate universals when it comes to articulating what makes us human.

Locating Human Nature is a Question of Framing

I believe this goes beyond the presumptions of a particular perspective on human nature, and instead illustrates something deeper that operates in the various ways that people talk about human nature. Where they believe the defining element of human nature lies is strongly linked to the disciplinary quirks, considerations and priorities of the person in question. 'Anthropology, education, psychology and other academic fields

have their own ideologies, which at any given time focus on a certain range of research topics, and which impose blinders on what phenomena are considered worth studying.’ (Diamond, 2012: 174) More to the point, these conceptual frameworks make research programs possible; they delineate what phenomena should be attended to and what should be set aside (otherwise every inquiry would attempt to encompass everything, and accomplish nothing). In short, what I am asserting above is that people like Sahlins’ position on human nature is shaped by their sphere of academic activity – by the kinds of things they are interested in and investigate. Having investigated human existence via its cultural and sociological instantiations, when asked to consider human *nature* such theorists do so via the cultural and sociological frameworks they have established.¹¹⁹ The argument here is that the emphasis on culture emerges from scholarly or intellectual (or political) predilection & tradition rather than from conclusive proof that culture-first readings are epistemically or ontologically superordinate.

Scholars simply do not engage with their work in a vacuum, and obviously their positions and opinions will be influenced by certain experiences. (Recall Jared Diamond’s quote above.) However, what I am suggesting is that the main influence will not be ideology but rather the niche – the taxon – one’s discipline occupies, *and that this applies to all theories of human nature*. This is not a simple attempt to deflate the arguments made by the critics. If you ask a scholar what they think human nature is, their answer will likely reflect their prior area(s) of interest and study. This is hardly surprising, but what I want to emphasise here is that the key mechanism behind this is the kinds of area in which they start looking for human nature (and if they find nothing there, well then clearly they have, or feel they have, justifiable reason to be sceptical¹²⁰). There is a disciplinary ecology in which debates about human nature are conducted between alternative perspectives – the schemas I have identified emerge from the ways in which they each approach the concept in question. I particularly want to distinguish this relationship from the influence of society that underlies the potential for parochialism, in that in this case it is specifically the way in which theorists become accustomed to the perspective of their discipline. They consequently develop their

119 These being intellectual frameworks that principally explain humanity through its cultural determiners.

120 The same goes for those attempts that look primarily in the social milieu and context and decide that the human regularities they have found are attributable solely to exogenous universals belonging to society and social structures. In their case they do not see Tabak’s dialectic, but an antagonism between nature and nurture in which one side will win out over the other.

ideas about human nature using the tools, terminology and theoretical constructs they typically employ elsewhere (replicating, in some sense, their original object of study). As with some modern discourse theory, the crucial factor in how an individual considers some generalised object of knowledge will be the way in which they routinely approach some objects more closely related to their scholarly interests. (cf. Keller, 2011) Power relationships, however, have little to do with this; rather we are looking at avenues of appropriate investigation guided more by collective tradition than a cadre of intellectual gatekeepers. Some of the important differences between human nature theories are, then, primarily due to, and can be explained by, the diversification, compartmentalisation and specialisation of our academic disciplines.¹²¹ As I shall argue below, in order to get a proper idea of what human nature is we must therefore get to grips with this disciplinary ecology.

Disciplinary Attention

If we continue considering the critics' position for a moment, we might better understand their approach when we see such objections as coming from a holistic standpoint. In other words, this is an approach that views cultures as 'consistent wholes' and situates individual humans within their cultural framework. This informs the background of many of the critics, whether from anthropology, psychology or the social sciences. It represents the way they themselves contribute to an analysis of the world. A paradigmatic position that is interested in the overarching mechanics or dynamics of culture (or in the way that agential individuals orient themselves within their ethical and political regimes) will be understandably sceptical of the idea that such dynamics could or should be broken down into individual pieces, such that they might be attributable to this or that human characteristic, trait or faculty.¹²² (Bloch, 2000: 197-200; Smith, 2000;

121 Discipline is certainly not the *only* measure of how scholars approach human nature, admittedly. Some of the critical approaches may well be *motivated* by concerns about the political motivations and aims of rival theories (as with Lewontin and his fellows) or by an overweening desire to restore dignity and responsibility to human agents (as in the case of Malik, see 2002a: 370-2). Ideology may also affect the extent to which someone will think human beings are inherently good or bad, or what we ought to do in response to this inherent goodness/badness – i.e. the content of their human nature. Yet I would contend that these extraneous considerations will have a less pronounced effect on the structure of a theory of human nature than *where* theorists begin to look for human nature in the first place.

122 Or whatever term we may want to use to denote a particular aspect or subsection of human nature. As previous chapters will have shown there are many terms that are employed across various disciplines.

cf. Laland & Brown, 2002: 148-9) At the very least, this means that human nature scepticism represents a valuable corrective to overly reductive conceptions of human nature. It also serves to highlight the way in which human nature is often approached from the “bottom up”, with notions of psychologies, the inherent structure of consciousness or individuality, or even the algorithmic logic behind all these, being posited and then fitted into the cultural context. However internally it means that when asked to consider the possible form and/or content of human nature these critics do so from a position that begins at the political level, and which sees individuals as defined by their socio-cultural experience.

Likewise the algorithmic schema reflects the general intellectual predilections of the theorists in question. By starting from the question of some basic component(s) of existence, they look for human nature in a realm of fundamental principles. This is particularly prevalent in the modern form examined in chapter one. Enamoured with evolution, the gene-first Darwinian theorists, when trying to articulate what human beings really are, start from the principles of evolution and the (as they see it) evolutionary agent, namely the gene-as-replicator. These are, after all, principally biologists or psychologists, interested in the fundamental mechanisms underlying human action: they are used to looking for the underlying principles and components that govern biological and psychological phenomena. Evolution is a powerful explanatory force for the origin of such mechanisms. It is therefore unsurprising that a gene-first Darwinian theory of human nature should describe a logic which can be used to explain why this or that disposition arose in the human animal, and thus reveals the “real” reason behind our behaviour. Meanwhile the most prominent philosophical voice, Dennett, also shares a fascination with evolution as an elegant formal system that does away with artificial constructs – his ‘universal acid’ dissolving *a priori* assumptions. (Dennett, 1995; cf. Cziko, 1995) I think this goes beyond mere “biological determinism”, the idea that we are just programmed to follow a set of rules. What really matters are the systems that inform what we are and can be – the way that evolution shaped the development of our dispositions, and the role that genes play in affecting our behaviour. In particular, they view humanity from the viewpoint of the supposed evolutionary beneficiary of our activity.

I would suggest that what this trend really reflects is an interest in the aspects of our being that might be described as “foundational” (in that they are the foundations of our nature, the basis on which everything else rests). It is significant that the biology they draw on is overwhelmingly evolutionary biology, accustomed to focusing on population dynamics and how traits emerge, persist and proliferate within a species. Dawkins, after all, regards genes as important because he has come to view them as ‘immortal’: individual humans may cease, but genes are copied from one generation to the next, changing only slowly and imperceptibly.¹²³ They figure prominently in this human nature theory because they are the material components of our own evolution. Evolution itself is likewise foundational, an impartial, universal process that shaped our species along with many others. It represents an identifiable, regular pattern in the human world that can be formally understood, which is what these scholars are looking for. In other words, genes and the evolutionary transformation of our genotype are of interest not simply because they are biological, but because they are the instantiation of our species and a product of its (natural) history. In a world without metaphysics evolution represents some of the most fundamental processes available for study. Biologists like Dawkins or Ridley, or Evolutionary Psychologists like Tooby and Cosmides, can trace gene expression (in concurrence with environmental factors) or theoretically represent the evolutionary development of a trait. When it comes to human nature, then, these are the most obvious places to start. Indeed, they are effectively already the start of their human nature theory, being (as they are) an attempt to grasp certain features inherent to human existence as such. For example the gene-first Darwinists are fascinated with the problem of altruism, and the gene-centric paradigm they espouse is supposed to explain the complexities of this pro-social behavioural trait.¹²⁴ Such theoretical excursions make Dawkins’ insistence that he is not trying to address human nature ring somewhat hollow. His *The Selfish Gene* and *The Extended Phenotype* attempt to consider human behaviour, what makes us human and what we are capable of (including a notable recommendation that we *rebel* against our selfish genes). Gene-first Darwinism as a whole presents an account of how species develop, and in so doing reveals the truth, supposedly as impartial as the evolutionary process to

123 Via mutation, which is really only a copying error which may or may not prove beneficial.

124 To the extent that I felt compelled to spend much of chapter two contrasting this view with that of the ethologists and developmental psychologists.

which its adherents appeal, about what we are.¹²⁵ This is clearly an articulation of human nature, and it comes directly from their area of interest; it is evolutionary biology and genetics being applied to humanity.

So it is with the other schemas. Marx retained a German idealist's interest in consciousness, but in regards to its relationship to, and determination by, its social existence. Freud was likewise interested in how people's unconscious experiences of socialisation could form the kinds of being they became – especially the way this mediates the development of the primal Id. In his therapeutic role this became a focus on those patients whose particularities made them misfits in their society, particularities that could be traced to their emotional and cognitive development. This squares with what we see when these scholars address human nature – it is something that is in part malleable, and that dynamically reacts to the world around it. It can do this because it is situated at the interstices of individual psychology and the social. The areas to which such theorists look when describing what they take human beings to be are the same ones they turn to to describe socio-political or psycho-social pathologies. Marx was concerned with the way in which consciousness reacts to changing (and increasingly unequal) social circumstances and, having concluded that consciousness is the result of socialised productive capacities, saw human nature as intrinsically bound up with how human agents produce goods. In particular this means those goods that are necessary for survival, in the first instance, and the continuation of their society in the second. (Likewise, Virno the semiotician sees human nature as the interpersonal potentiality embodied in language and learning.) This, as I have argued, came with a presumption of pro-social preference, in that Marx's nascent human nature is better served by productive practices in which the social end use of a product is visible and understood by the producer; the result being a healthier consciousness. Human nature, for the contextualists, can only be analysed *in situ*, and in this form incorporates external effects as part of the realisation of the human essence or nature (what I termed the kernel). It is not hard to see how those with interests in society – but who conceive of a parallel autonomy on behalf of socially-situated agents, that is, who maintain an important place for the individual in their thought – would adopt similarly contextualist

125 In its most austere formulation: just 'vehicles' serving to propagate genes.

approaches. The individual is, after all, the bearer of human nature, even if it is one fundamentally and unavoidably mediated by the political sphere.

When it comes to the motivationalist schema examined in the second chapter, we can clearly see the way that ethology, as a discipline, shapes the perspective of ethologists with regards to human nature. Having studied animal behaviour closely as their main focus when they come to think about humanity, they naturally consider it in relation to the similarities and/or differences that emerge in comparison with other species. Hence de Waal sees in human cooperation many of the same psychological mechanisms that he observes in chimpanzees and especially bonobos, merely in a more complex and sophisticated form. It is to these mechanisms and the dispositions that bring them into effect that de Waal looks in order to discuss the human condition. His human nature is, perhaps ironically, markedly non- or pre-human (as are gene-centric accounts). On the other hand, Tomasello sees a radical difference between the ways these three primates cooperate, one that marks human interaction out from other species; however, crucially, he does think that what makes human sociality unique is revealed by comparative studies with the other apes, as well as by psychological studies of infants and young children. The developmental psychologists of chapter two likewise have a clear sense of where human nature lies, as their research dwells on the earliest motivations displayed by human beings. Their human nature is one of motivation – what drives us to act in certain ways – and the inherent directionality of innate dispositions. Again, this is unsurprising because this is itself the area that their discipline usually concerns itself with – we could say their field of study is synonymous with their study of human nature. Hence much of chapter two actually directly describes the research they carry out and the way their findings have been interpreted.

Of course the discipline alone may not tell us much in each and every case. Some disciplines have a wide range of problems and approaches contained within their remit. Philosophy is a wide field and as such where a given thinker locates human nature may depend on precisely what problems they typically concern themselves with. Hume, to take an obvious example given his *Treatise on Human Nature*, was explicitly interested in the subject precisely because he was concerned with the relationship between perception, rationality and behaviour. His academic scepticism prevented him from making definitive statements about what human nature was, and he displays a

strongly contextualist streak, yet his conception of human nature emerges as something instantiated within individuals and their interactions with the world (largely due to his emphasis on the moral sentiments) – neither reductive nor a true *tabula rasa*. Similarly, the philosophers we have considered in the second chapter are predominantly ethical philosophers with a penchant for more emotivist and sentiment-based ethics of motivation.¹²⁶ Meanwhile Buller rejects the concept of human nature entirely whilst Dennett is an enthusiastic proponent of the gene-first Darwinian paradigm. Psychologists and anthropologists likewise run the gamut, individuals falling into a variety of areas with respect to where they locate human nature, and the distinction tends to emerge based on the kind of psychological phenomenon in which they are interested (developmental as opposed to social psychologies, for example) as well as their attitude to incorporating the findings of evolutionary theory into their work – naturally a question of appropriateness, rather than one about denying the facticity of human evolution. Thus particular problems and sub-domains within certain fields may tell us more than the generic discipline does about someone's position on human nature. So it is not so much that a particular discipline will obviously adopt this or that position with regards to human nature, but that where scholars locate human nature governs where they fall within the taxa and, given commonalities in interests and training, there will be a general (if not necessarily inevitable) similarity within disciplines.

This is illustrated by the case of Lewontin and Rose, and Boyd and Richerson, themselves biologists, yet largely opposed to the gene-first Darwinian project – certainly in regards to its approach to human beings. These cases seem, on the surface, to be counter-examples to the claim I am making. They in fact come closer to the contextualist grouping, and as we saw in chapter four they possess a robustly critical attitude to human nature. Boyd and Richerson, in particular, are keen to note the dynamic interplay between nature and culture in the human case. (Richerson & Boyd, 2006; see also Segerstråle, 2000; Sterelny, 2012)

This is a tempting opportunity to invoke ideology: Lewontin and Rose, at least are a part of a broadly left-wing resistance to biological (and in particular genetic) -determinism. This undoubtedly encouraged their break from other biologists more

¹²⁶ So too is Prinz, who as I mentioned in the previous chapter sits uncomfortably with elements that could easily belong in a psychological/motivationalist treatment of human nature (the emphasis on emotions) and a sceptical position (his position on the conditioning and direction given to these emotions by cultural sensibilities).

enamoured with the “gene’s-eye view”. However, whilst their Marxist affiliations certainly affect their approach to human nature, and especially their view of gene-first Darwinian human nature theory, I would still maintain that this is not an entirely ideological issue, such that their rejection of gene-first Darwinism could be said to be a direct result of their beliefs about the best kind of political community. Not least because previous generations of socialists were not averse to genetic approaches to human nature, in the rather more extreme form of eugenic theory, so there is nothing inherent to political Marxism which opposes (or promotes) said approaches. The resistance to the spectre of genetic determinism and sociobiology emerged historically within the movement. Instead the political convictions of someone such as Lewontin are linked to an analysis of the ills of society; the mutually reinforcing professional relationship between Lewontin and Steven and Hilary Rose (a sociologist herself), as well as Lewontin’s own writings (e.g. Lewontin, 2000), suggest that that ideological influence is already intimately bound up with a more robust, sociologically-oriented *scholarly* analysis of human experience. In effect, Lewontin is a contextualist when it comes to human nature. His emphasis, when discussing this matter, lies within the taxon we might usually associate with a sociological approach, reflecting his analysis of politics and society. He is not a “biologist” in this instance, much less a part of the algorithmic schema. This is because what actually determines where we can situate someone within the taxonomy of theories of human nature is their characteristic approach, rather than whether or not they happen to be a biologist, sociologist or behavioural expert. Discipline is merely a good indicator of where one’s interests will lie, and a strong but not unyielding or definitive influence on the development of one’s approach – individuals still define their own approach.

Certainly the political commitments of Lewontin, Rose, and those like them provide motivation, but I would suggest that what distinguishes their approach to human nature from that of more reductive biologists is the sociological emphasis associated with their Marxian viewpoint. Politically, they view individuals’ consciousnesses as inextricably bound up with their social experience, adopting an understanding of human experience that emphasises the socio-cultural dimension, and so Lewontin and Rose’s stance on the question of human nature reflects this.

Edge Cases

This creates the question of how easily we can really situate any discipline within a given schema. In reality, each schema can itself be considered to be a spectrum, or a territory unto itself. They are general spheres, potentially encompassing a range of theories that share some basic conceptual structures. Individual scholars or theories may put greater or lesser emphasis on certain factors that fall within the broader range of the schema's "topographical" boundaries.

For example Sahlins puts a much heavier emphasis on cultural formations than even fellow sceptic Lewontin who, as intimated in chapter four, retains a nascent sense of human nature that may originate in his more Marxian sociology, and an emphasis on the ins-and-outs of gene expression and developmental biology. Likewise, there are ideas that may sit on the borderlines between the schemas I have sketched out. There is the potential for hybridity in the porous boundaries between schemas. This is only to be expected, since the schemas are themselves only part of an analytic heuristic and their boundaries delineate the most common morphologies of human nature theory. Given Marx's emphasis on the social and economic transformation of consciousness, we might locate him in the more "political" terrain of the contextualist schema, and be unsurprised if those who draw inspiration from him side with the sceptics. Elsewhere game-theoretic models might be employed in a number of different approaches, certainly within the algorithmic and motivationalist schemas. The deciding factor in this case, for me, would be the way in which the models in question accommodate psychological dispositions into the decisions made by their hypothetical agents. Much game theory, especially in its early incarnations, rests on the assumption that agents are primarily concerned with their own interests, and will pursue just whatever best maximises these interests. This represents a kind of algorithmic approach to human nature, in that a simple set of rules – in this case benefit-maximising behaviour and the structure of the social scenario (the rules of the "game") – is held to describe or explain how humanity works, whether the end result be "rational" or otherwise. However others have made efforts to refine game-theoretic models, by arguing that agents are neither perfectly rational, nor are they motivated solely by their own concerns. Instead they may perceive gains made by a second or third party as valuable, which will influence

what strategies they employ to solve the problems game theory tries to model.¹²⁷ (Bowles & Gintis, 2011; Gintis, 2009) In short, how well a given theorist integrates an appreciation of real-world motivations into their calculations, and adjusts their model of agency accordingly, as a nexus of these motivations, makes the real difference in where they lie within our taxonomy. Grey areas exist between the delineations of each chapter, then; however the heuristic itself – the idea that there is a topographic distribution in how scholars and disciplines carve up the spheres of human existence – can still give us an idea of the characteristics of those approaches that fall into these ranges. The crucial point is that individual biologists, for example, do not find themselves expressing a certain kind of human nature theory *because* they are biologists, but because they locate human nature within a certain sphere of human existence, and their training as biologists will have had some influence over this.

Human Nature and Politics; Nature vs. Nurture

This brings us back to a point made in the introduction, namely the way in which human existence – broadly construed as the ways in which we simply exist – can be approached from two directions: nature and politics. We can regard human nature – in the sense commonly used; in the sense of being a description of what we really are – as likewise composed of two forces: an underlying, innate component – an “ur-nature”¹²⁸, perhaps – and an external component, which I have labelled politics for simplicity’s sake, subsuming within it environmental effects such as culture and economics. The first component is to human nature as the laws of gravitation are to the orbits of planetary bodies – neither is *necessarily* any less “natural” but the latter is more sophisticated and of a higher order than the latter. Meanwhile the second component represents a necessary accommodation of surrounding circumstances – the context(s) which affect human nature and accentuate or even give rise to particularities in distinct instantiations (in other words, specific individuals or the manifestation of human nature within a given historical period).

127 In effect, the argument is that traditional game theory has typically incorrectly estimated the pay-offs agents expect and value.

128 In the sense of being analytically “primitive”, prior, or an underlying thread, rather than “ur-” in the sense of something atavistic. It might also be regarded as the closest we can think of the *idea* of studying human beings in their “natural” state, given that such a task is virtually impossible.

Naturally, the taxonomy by which I have grouped particular human nature theories also describes a movement between these poles. Significantly, I take it that none of the schemas examined actually attribute the full human nature to one influence or the other. The obvious conclusion must be that many – not to say most – human nature theories locate human nature at least partially outside the realm of nature. Certainly there is conflation of the “ur-nature” with human nature as such at one end, but no one seriously takes the environment as entirely non-constitutive of the personalities, world views and behaviours of individual human beings. There are likewise few perspectives which attribute these things entirely to the external circumstances humans find themselves in; in some cases this involves an underlying assumption of what humans are, or what they are capable of, that informs their socio-political theories (even, at least on occasion, in the case of some of those most vociferously opposed to the concept of human nature). Instead the case is merely that those accustomed to working within political discourses about human existence, when asked to consider human nature, do so from the vantage point of politics; that is to say, from culture and society. Others will attempt to look for human nature in sets of principles about the human species, consciousness and so on, with an emphasis on their own particular areas of expertise. If asked to consider more socially-oriented problems and phenomena, they will proceed to do so in the light of what they have established about human nature (for example, de Waal’s *The Bonobo and the Atheist*).

We thus approach the question of human nature from one of two directions: nature (the nature of things or of the human being; the non-cultural element) or politics (broadly the social world in which humans find themselves). In fact this better represents the division between nature and culture, which are intimately interconnected. The borders between the two are profoundly blurred: we cultivate and protect supposedly wild nature reserves; environmental effects attributable to cultural or social phenomena might have epigenetic effects on fetuses in-utero. There is no stark cleavage between the two, but a kind of broad, fuzzy boundary.

However I also want to distinguish this from the more familiar notion of “nature verses nurture”. This latter division is a disagreement over the relative influences over what makes us human – the *direction of determination*. The dyad I am interested in here is the two ends of a spectrum along which human nature theories are situated – the

means by which people address the question of human nature. The two are obviously connected. The scholar who militates for nurture is effectively locating human nature entirely within the political realm. However this need not mean we should regard them as synonymous. Nature ↔ politics represents an axis along which humans objectively exist, and the two terms describe the poles of this axis. They are not the sources from which determination flows. The differentiation in human nature theories arises from where on this axis specific theories locate the quintessential aspect of what it means to be human: in other words, the area(s) in which they look for the presence of absence of human nature. Nature versus nurture represents the entrenchment of these options. It is the identification of particular theories with the pole with which they have the most affinity, and the imagined sense that these represent opposed sides divided by some border or no-man's land. It is the intellectual reification of this bifurcation of approaches.

Establishing Analytic Distance

Of course what this highlights is the problem of how we, as potential analysts of human nature, can study it from an objective viewpoint. How are we to separate ourselves from our own nature – to create a space between ourselves as analysts and as carriers or instantiations of the object of our analysis – in order to establish just what it is? After all, human nature is the prerequisite of our perception, so how can we perceive it? (cf. Virno, 2009: 93-4) This problem relates to two issues already examined: firstly the fact we exist along this spectrum of nature and politics (since pretty much any human being we encounter will already be bound up with their cultural and social experiences: their raw nature will have been transformed); and secondly the difficulty, discussed in the introduction, in defining what counts as natural (i.e. establishing the absence of human artifice or influence).

Typically we can separate ourselves from our object of study, maintaining a nonidentity of knower and known. Obviously this becomes problematic when the focus of our analysis is human nature, since our object is effectively ourselves. It appears difficult to experience human nature in a way distinguishable from all our other experience – our experience of being ourselves – with all the environmental influences that also entails. However theories of human nature have settled on various ways of

creating a distance, and thus a distinction, between the theorist and their object. In the algorithmic schema we see this distance being created almost literally. For the gene-first Darwinians human nature is invested in the genes and the impartial universal logic of evolution. They easily settle on a vantage point from which to study human nature, since they locate it in a sphere ontologically distant from that of human experience. We do not, after all, experience genes or evolution directly (i.e. immediately as part of our perception of the world). Obviously in the eyes of gene-first Darwinism's critics this attempt is unsuccessful – personal attitudes (such as the contemporary folk psychology or unconscious cultural bias) are read into this ontologically distant object, thus reifying those attitudes. This is related to the idea of translation: by rephrasing human behaviour in terms of evolution and translating it back in the guise of the evolutionary implications for human nature, we attain only a modicum of additional objectivity, and over-emphasis on this standpoint reduces that potential for objectivity to a mere gloss.

The other approaches might be characterised as the cultivation of a certain kind of professional virtue that effectively aims at securing an objective vantage point. The archetypal example of this would be the idea of “philosophical detachment.” By adopting a reflective position with regards to their own worldly perspective, some theorists attempt to overcome their own particularity. Many of the theoretical practices employed by Marx or the anthropologists (either the critic Sahlins or the motivationalist Boehm) represent attempts at thinking beyond one's own, limited cultural experiences, in an attempt to locate the truly universal systems that structure our existence. The professional virtue of the philosopher or the social scientist requires that they conceptually distance themselves from the object under discussion; that if they engage with particulars at all they do so from an abstract or universalising viewpoint. This would appear to be necessary, at least with regards to human nature, if they are to avoid justifying the accusations of parochialism and/or historicism. In adopting a practice of detachment it becomes possible to avoid such eventualities as the scholar removes themselves from their own particular instantiation of human nature.

In more empirical cases, especially those such as the ethologists or anthropologists, this detachment might be represented in an adherence to rigorous experimental protocols, aimed at removing individual bias.¹²⁹ By establishing a practice

129 Usually by laying their methods and results bare for assessment or to be compared with the interpretations they draw. In fact Freud's reports of his own case studies could be considered an

of keeping themselves, as researchers, insulated from their subjects (such as using third-party interviewers or recording devices to literally minimise contact with their subjects, or allowing their subjects a degree of autonomy) they create a distance between the human nature that they study their own expectations about it. By being transparent about these practices they attempt to approach a kind of discipline-wide self-reflection and -criticism. The pitfall appears when the entire discipline shares the same perspective and so, at least potentially, the same blind spots. Henrich, Heine and Norenzayan's argument is essentially an extension of this: a reminder that by relying on WEIRD subjects their fellow psychologists have not distanced themselves sufficiently from a particular cultural instantiation of human nature. (See pages 96-8, 146-7 above.) For one thing, contemporary psychology tends to study the same kinds of people as the psychologists themselves, from the same range of cultural practices and backgrounds, thus failing to distinguish between the (WEIRD) knower and the (WEIRD) known. Additionally this same lack of distance fails, through the relative cultural homogeneity of the participants, to adequately differentiate between nature and politics. Features might be taken to be natural and non-cultural simply because all available subjects are identically influenced by their environment – rather like the pseudo-wildernesses of Niven's *Ringworld* viewed solely from the perspective of the natives.

Of course the solution proposed by Henrich, Heine and Norenzayan is to expand the cultural diversity of human subjects. If we were to accumulate examples of human nature from across this diversity we might be able to better discern what elements are not attributable to a person's social experiences. Alternatively we might search for instances where human nature has not been affected by culture, and this is effectively what child psychology offers us. This is another sense in which human nature can be located at arm's length, save in this case the distance created is between human nature and the general acculturation of adult humans per se. By studying pre-cultural infants and young children there is the prospect of capturing something about human nature unobtainable through contemplation of people who, like ourselves, have grown accustomed to a political sphere of existence.

early incarnation of this practice.

How Can We Talk About Human Nature?

Having thus considered the trends suggested by the dissection and comparison of these theories of human nature, we can now ask: how well do any of the schemas addressed here really encapsulate what humans are? We have an idea of *why* members of certain schemas look for human nature in the places they do, but are any of them warranted? Resolving this question would go some way towards putting the preceding discussion to practical use. I want to make the case that we can locate an appropriate basis for a study of human nature, and perhaps even suggest how such a study might be carried out. In order to do so we ought to consider the relative merits of contemporary attempts to discuss human nature. Having categorised these theories of human nature according to where they place their object of analysis we can proceed to evaluate their suitability for the task.

In the first chapter we saw how human nature can be regarded as the result of an “algorithm” or cosmic, quasi-metaphysical logic. Here I also tried to demonstrate how, amongst other potential pitfalls, this approach risks falling into a reductive functionalism by which all understanding of human nature must make reference to the proposed algorithm. To be sure, functionalism is not restricted to the strata covered in that chapter – it can easily occur anywhere, and the productivist tendency in Marx amounts to such an occurrence – but it appears as an unavoidable consequence of looking for coherent ultimate causes that resonate immediately at the level of everyday life. In this way the algorithmic schema risks making significant portions of politics simply a function of the unfolding of nature, and therefore fails to adequately synthesise the two.

Furthermore there is something unsatisfactory about the algorithmic schema; it does not seem to add anything to our understanding of human nature. We are supposed to marvel at the way in which altruism is really the result of the logic of survival, embodied by the concept of the selfish gene, but what does this really do for our understanding of social behaviour? *Of course* such approaches will think there is something called human nature, since they study that which we all share – our human genome. But this really is quite limited. As I argued in that chapter, much of the gene-first Darwinian approach to human nature constitutes translating behavioural tendencies

into terms of genetic and evolutionary fitness, then proceeding to translate this back into the revelation that we have behavioural tendencies which could likely have evolved to serve the interests of a social species. This creates an obvious circularity. Trying to describe humanity in this way is like Borges' one-to-one scale map: it recreates what we are trying to understand, in terms of the tiniest details, and in so doing fails to help us orient ourselves. At best, at least in the modern incarnation discussed in chapter one, it tells us more about evolution than it does human nature, so perhaps this is not really the best way to try to say what it means to be human. This is made clearer if we make an analogy with physics: all living things are also governed by the laws of physics. So are all human beings. However explaining human nature via the lens of the physical laws their behaviours employ, or are bounded by, does not add anything to our understanding about what implications those behaviours have for human experience, nor does it reveal anything new about their place in the grand scheme of an individual's existence.

The motivationalist schema seems more promising. In chapter two I characterised such approaches as those that take motives seriously (hence the name). Its focus is on the ways and means of human (and animal) interaction and cognition. It is unsurprising some such approaches would explicitly consider there to be something to the idea of human nature, because this is precisely what they study. Killen and her colleague Marina Cords do just this when they argue that their field has revealed humanity to be much more cooperative than has conventionally been thought. (Killen & Cords, 2002) Such a claim equates to an assertion that one's research has uncovered something about human nature. Whilst the methods employed obviously vary – philosophers will tend to rely on the findings of the more empirical disciplines rather than running experiments themselves, but are freer to consider the interpersonal, political elements – a common thread is that mental states and dispositions come to the forefront, and are subject to discussions on whether and how they are affected by the situations actors find themselves in, particularly those involving other actors. In short this approach locates human nature within human beings themselves (as opposed to their component parts or extrinsic forces).

I would like to say that the focus on individual, actual human beings, as the nexus of their various histories and social commitments, makes sense, since these individuals are the bearers of their human nature. Unlike an algorithmic approach, the

individual's psyche is not approached as something generated by an anterior nature. Intuitively this is appealing: human beings are the instantiation of human nature individually, whilst collectively encompassing a broad range of possible outcomes. Nor are they either vehicles for their cultural artefacts or the ephemera of a more fundamental, algorithmic nature. Yet the motivationalist schema still has a rather tentative relationship with the political sphere: I also mention in chapter two how political considerations, when integrated, are often quite limited in scope. Such considerations are confined to the field of ethics, say, or anthropologists might limit themselves to comparative discussions of the development of a particular social phenomenon such as hierarchy.¹³⁰ When it comes to politics the schema's general approach is to trace the manifestation of some human faculty within differing contexts. As such, whilst the motivationalist schema represents an integrative and human-centric attempt to locate human nature, it only ever imperfectly accounts for how social forces can potentially mediate or even transform human nature, and as a consequence remains acutely susceptible to the problems of reflexivity and historicism encountered in chapter four.

Conversely, the contextualists leave too much unsaid about what they assume lies in the kernel of their human nature. This kernel's eccentricities or particularities are less interesting to these theorists than what happens to them out in the real world. The emphasis here is, after all, on how the context redefines or moulds human nature itself. Where Freud did revise his theories, it was to refine his higher-level theories of socialisation and psychoanalytical practice rather than to address gaps in his understanding of the material being thus transformed. He envisaged the psyche as a whole as having a trajectory of developmental stages rather than a number of faculties which develop semi-independently – which does not reflect the best current evidence – which of course affects his ideas of *how* the psyche (and by extension human nature) develops in the process of its social and interpersonal realisation. Similarly Marx, and later Marxists, had an intuitive grasp of human pro-sociality, but avoided a detailed discussion about what this might mean in terms of motivations and the mechanics of

130 An exception to this might be Diamond's *The World Until Yesterday*, which is far reaching and covers many universal phenomena as they present themselves via a vast array of distinct human cultures. Yet the focus there is not exclusively human nature – in fact it takes a back seat – instead the book is devoted to surveying the rich variety of human cultures that stand outside the modern western WEIRD mould. Additionally, it is not a purely academic text and does not go into every detail, yet still even the paperback comes in at over five hundred pages.

social activity. Instead, as I argued in chapter three, sociality (in the form of social production) became an end for political action; a standard we need to attain to reach a full, healthy consciousness. I think these two exemplars illustrate a more general risk inherent in the contextualist approach – that of passing up an opportunity with regards to their nascent concept of human nature. By leaving it under-defined they not only leave presumed something that might be open to more definite examination, they also lose a potential resource that could refine their political theories.

It seems unlikely that any single approach or schema adequately captures the totality of what is understood as human nature. My intent is not to say that any of these schemas are wrong. On the contrary, they each say something interesting about what makes us human. Rather, not every perspective is necessarily the correct *starting point* when thinking about human nature. In fact it remains unclear where we ought to start in such an endeavour. We are confronted with a division between, on the one hand, our situation within a specified historical, environmental and social context and, on the other, the internal physiological and psychological mechanisms inherited by virtue of our species membership. To talk about one inevitably runs into the problem posed by the other – the pressures of the second factor must be accounted for in our description of the first. This seems like an intolerable position, or at least a potentially circular one, given that we must explore one side in order to know how it will affect the other, but this cannot be done without an understanding of how this second side affects the first. Human nature theories thus fall foul of something akin to the Copenhagen interpretation: one can know where it is, but cannot simultaneously know what it is doing and *vice versa*.

The Copenhagen Interpretation of Human Nature

The problem is that we are obviously two things at once: simultaneously natural (at the very minimum, existing as biological bodies bound by natural regularities) and political (in the broad manner in which I have defined this term above). In terms of what characterises human beings, we are subject to evolution, we are reproduced via genes, we have psychological and motivational features, we engage socially with other individuals, we form and follow social norms, we codify and ritualise these norms *and* we form vast continent- and world-spanning civilisations that mediate these norms and

our interactions. There are too many aspects to account for all at once. More to the point, they are interpenetrated, the distinction between nature and politics being hazy and porous. This forces scholars to make a choice in what aspects to attend to, or at least to incorporate first. Do they pay attention to our socially-determined existence; the ways in which our existence is shaped by socio-political structures and cultural formations? Or should they first try to assess how people think and the innate dispositions that affect their engagement with one another and their society? Hence theorists make pragmatic choices about what to prioritise: they frame the issue as described above, and generally turn to areas within either the sphere of nature or of politics.

In reality we should be wary of entirely discounting one side in favour of the other, even if we realistically could. There are undoubtedly influences from each side which radically shape and determine what we, as humans, are, simply because they play such a large part in how we experience our selves and our world. Where we encounter difficulty is in trying to integrate our understanding of these influences. As a result we arrive at a situation not unlike that faced by subatomic physicists. Just as the uncertainty principle suggests that we cannot know, with equal precision, both the location and momentum of a subatomic particle, there is also an inverse relationship between how precisely we can describe our natural existence compared to our existence as political agents. We can, with some hefty poetic licence, describe this as a Copenhagen interpretation of human nature, since we have the tools to describe either the way our humanity is influenced by politics, or its innate directionality, but struggle to encapsulate both simultaneously.

The Question of Normativity

This thesis concerns itself with an analysis of human nature theories, with a view to sorting them and, ultimately, clarifying the means by which they in turn use human nature as an analytical tool. Of course this now leaves us with the question of human nature's normative import – that is, the way in which it is invoked to give reasons for why we *ought* to do something or pursue some course of action. In the introduction I emphasised the importance of the very concept of human nature by referring to its use as an anchor for certain normative claims and ethical and political recommendations.

This is what makes an analysis of this analytical tool so important: human nature is not merely an exercise in discovery, it is also a resource for reason-giving.

Aristotle offers a paradigmatic example of this. The human nature he describes in the *Ethics* shapes the kind of *polis* he recommends in the *Politics*. After all, Aristotle viewed human beings as political animals, and whilst particular states are a synthetic creation of human beings the *polis* is nevertheless the natural outcome of what makes us human. He thus subscribed to an ethical understanding of human nature: knowing what humans are (rational, intelligent creatures) can tell the philosopher what constitutes the good human life. For him this involved forming political associations in which people (or at least male property owners) could exercise their reason and therefore flourish. As such there is no particular conflict between human nature and society, since the *polis* is where and how human nature is fully realised. In a sense it is part or an extension of our nature. (Aristotle, 2000: see especially 55ff; see also Trigg, 1999: 17, 29-31) Instead the reasons that states fail – or a *polis* does not realise human virtues and goods correctly – is because of contingent failings on behalf of human beings themselves located in the culture. Such cultural malformations lead to bad kinds of state (namely despotism, oligarchy and democracy) and thus do not adequately realise human nature, which is prior to and less fragile than culture, but only realised in the (right kind of) *polis*.

Yet the rhetorical power of nature makes this usage a potential pitfall. Any normative implications must be self-evidently consequent to the theory of human nature in question, or else such claims about what we ought to be and do are *merely* rhetorical devices, employing the perception of nature as an impartial arbiter to give themselves weight. Can human nature legitimately be used to make prescriptions for how we should live? Many, even if only tacitly, seem to think so. Marx thinks we will be better off in a society where the exchange of goods is no longer instrumentalised and mediated by capital. De Waal thinks we ought to cultivate our empathy. Narvaez thinks we need to reorient our child-rearing practices. Dawkins – the supposed avatar of austere, deterministic science – recommends we ‘rebel’ against our selfish genes and act more generously, taking *negative* moral lessons from the supposed rapacity of our human nature.

Obviously we cannot simply say that whatever is natural is good, even if we can conclusively prove something is natural to the human being. For example if Aristotle is

right and it is natural for humans to be rational this does not necessarily mean that they ought to act so as to increase their rationality; nor does it mean there is automatically a moral failing intrinsic to irrational actions or decisions. This is somewhat similar to the “naturalistic fallacy” from within ethics, articulated by G. E. Moore, which claims that the good, or the quality of “goodness”, cannot be determined by some natural quality like being pleasurable. Moore’s formulation, however, requires that the (moral) good be non-natural in origin. Thus it is clearly of little help in determining what normative conclusions we *can* draw, and how we can draw them, except to constrain us to saying that either a) these conclusions will not be ethical or moral oughts, but some other kind of normative recommendation; or b) there are no facts about morality that are independent of natural facts, and thus no abstractly “real” moral principles/truths.¹³¹

The most coherent way of deriving normative recommendations from human nature (or natural facts in general), as I see it, is to take a functionalist or goal-oriented approach. That is, some approach to normative rules – including but not limited to morality – that takes the form of “if *x* is the desired outcome, we ought to do *y*”. The process or activity *y* may, of course, be limited or otherwise informed by what we know to be possible.¹³² This also applies to those theories that are, on the face of it, less “natural” than most naturalistic explanations (i.e. those particular examples examined in chapters one and two). After all, if Marx wants to claim that communism is more conducive to a healthy kind of human nature than capitalism, then he would need to substantiate the claim that the latter deforms consciousness. (And this is, unsurprisingly, the thrust of much of his philosophical work.)

So it might be that we can agree with the German philosophical anthropologists and their normativity (discussed in the introduction) – there are human needs/requirements, and they have intrinsic normative consequences. Yet such a claim can only be made on the same “if-then” basis. If we have an existential need (of whatever description) then that implies we ought to work towards satisfying that need. If that need is expressed in a sufficiently detailed manner then we might even be able to work out the best way of enacting that “ought” – the most propitious way of satisfying

131 This latter point is a matter for metaethics, falling outside of the present enquiry. (For discussion see van Roojen, 2015; Blackburn, 1993: 111ff, 166ff)

132 Thus: “If flying to America is the desired outcome, we ought to get on a plane – because humans are incapable of unassisted flight.” Or: “If we wish to combat terrorism, we ought to study anthropology – because terrorists are living human beings who make decisions based on many factors, not least emotion, not abstract rational agents.”

that need. However, no matter which human nature theory we select the normative recommendations we can make will only be as reliable and accurate as the picture of human nature we have pieced together.

Another consequence of the view I have put forward, however, is that – like Marx, Olson, and even Narvaez and de Waal – it treats human nature as a raw material which can be transformed, and thus one with which we might work. If we have an idea of how we would like the human world to look (and we can satisfy ourselves that such a world is within the bounds of human nature; that whatever requirements human nature places upon us are met) then we can look at an ethological human nature to give us an idea of how to achieve it. In other words, we can determine what dispositions we need to cultivate, or what faculties can be activated and developed in order to help us achieve that end. A blacksmith can either make better swords or better ploughshares if they understand the properties of the metals he or she is working with. Likewise, if we agree with de Waal and wish human society to be more harmonious and cooperative (perhaps because we feel it will result in individuals with healthier psychologies and a more secure sense of self; that doing so will satisfy some need or psychological requirement) then we can better achieve that end if we understand what human nature is and can do.

Justifying Normative Claims

There are potential pitfalls, even with this modest approach to normativity. In chapter one we briefly touched upon a position like this: that of Ridley and Pinker's assertions that capitalistic, liberal democracies are the most desirable form of government, being best able to accommodate human nature (as they see it). The argument runs thus: given that human beings have a variety of needs and impulses, any human society must be flexible enough to accommodate them all, whilst having the capacity to regulate and guide all these conflicting dispositions, opinions and desires. Ridley certainly holds this view: he expresses revulsion at the way people's lives are planned out for them in Skinner's *Walden Two*. (Ridley, 2004: 199-200) Grand plans to engineer society will be doomed to failure and tyranny, since social experiments will have to steamroller people's genetically programmed desires and differences. A society which tries to reconfigure human beings is intolerable, as it goes against their nature. The only real alternative is one in which human beings are capable of expressing

themselves (in a controlled and prudent way). (Pinker, 2003; Ridley, 2004: 185-188, 267-275) More to the point, the increase in availability of material resources, along with the control over our own lives afforded by the democratic process, allows us to sublimate our self-interest; to pursue our goals without encroaching on those of others. This undermines the overly flamboyant claim of some critics that gene-first Darwinists think we are merely the sum of our genes. Yet the ideal society, insofar as gene-first Darwinists have a concept of one, is very much (almost suspiciously) like the one we have now. As they see things, present-day environmental influences on our behaviour are not only reconcilable with a genetically-influenced human nature, they are in fact fully consistent with it.

The purported benefits of democracy also extend to better control over our “demons”. Pinker even argues that this civilisation has led to an overall reduction in aggression and violence, both within and between democratic states. He holds that human beings are forever beset by our conflicting interests. Yet in *The Better Angels of our Nature* (2011) he also recognises that we may have a disposition towards making pro-social choices; that there is some “moral sense” that means that humans do not simply see “good” as being whatever is good for them personally. The trouble is that this pro-sociality is limited, and in many situations we might find ourselves acting in ways that we might otherwise disapprove of. All too often our self-interested impulses get the better of us, either in the form of narrow selfishness or in terms of the ideas and groups we hold dear (such as people’s national sentiment and so on). Furthermore this internal conflict merely contributes to Pinker’s perception of human nature as dangerous, since human nature lacks internal stability. The internal dissonance is not only problematic but makes humanity inconsistent. His answer is democratic governance.

In Pinker’s view, with the rise of the liberal democratic state, war has decreased over time, partly due to the structural relations of such states, and their interactions and similarities with one another. He points to decreasing military sizes, less stringent conscription policies and an overall reduction in belligerent or jingoistic public rhetoric in order to ground this claim. (Pinker, 2011: 255ff) The welfare of individual states is more closely tied to their neighbours thanks in part to the expansion of trade and

commerce. In this, at least, capitalism is given some credit for making conflict a less attractive prospect, since war between trading partners damages both parties' economic prosperity. Our own self-interest actually restrains us from trying to take from our neighbours by force or indulging in revenge. Internal violence has also supposedly been reduced thanks to the stability of the modern state. Formalised and accountable incarceration practices have, according to Pinker, removed violent elements from society. This is both more humane (compared to, say, execution for minor offences) and more rigorous (with a well-funded and nationally consistent police presence capable of efficiently holding those who violate the well-being of others to account).

Democratic ideals have therefore given us, according to Pinker, an interconnected society in which each person is an individual, human life (as opposed to national honour or pride) is at the forefront of public discourse, and yet we are intimately inter-dependant and held together by mutually beneficial codes of conduct which we can recognise and abide by. It thus satisfies in us a need to belong, without the object of belonging becoming a reason to inflict great, ideologically-driven violence upon one another. It also increases our knowledge and understanding of one another, and thereby gives us the opportunity to become more ethical, as more people around us are automatically humanised and recognised as similar. What might be described as our more moral traits are consequently accentuated by education and the development of human civilisation. Pinker is not under the illusion that all our "evils" are gone, nor that we were ever entirely evil in the classic, moralistic sense. However whilst we may still rationalise the harm we do to others, and are tempted to ignore the wishes and intentions of those others to satisfy our own goals, democratic civilisation is so structured as to diminish (or repress) such impulses and certainly makes it harder, now that our interconnectedness is of a global kind, to condone violence within or between societies.

Philosopher John Gray has been all too ready to point out the political convenience of this position. To be sure, Gray does not actually argue against human nature. In fact he himself argues that we are more like animals than we care to admit, and the idea of human exceptionalism (which he also equates with humanism) is merely a cultural narrative that only serves to obscure something meaningful about human

existence. (Gray, 2003; 2013) (This might upset the notion of human nature as something unique or distinctive to human beings, of course, but this does not entail the negation of all human nature theories, nor is it disruptive of the way I have addressed human nature here.) The division between human and animal is an assumption that our species has used to flatter itself, runs Gray's thinking, and it must be rethought.¹³³

The idea that liberal democracy represents a unique progression, one that controls and improves human nature, is likewise a convenient and flattering narrative. Gray contends that the story told by Pinker is just that: a story, one that contributes to an overarching narrative of progress and perfectibility that suffuses and sustains "the West's" self-perception.¹³⁴ The idea that human nature is corrected by our modern institutions serves to justify those institutions and contributes to the impression that they represent objective progress over other, previous or exogenous, social systems. To reinforce this point, Gray also argues that the reduction in violence Pinker is so impressed by is in fact illusory. (Gray, 2011; 2015) Instead, violence still permeates the modern world, and still persists even in our vaunted democracies. There are still conflicts, some instigated by modern democracies, and terrorism represents an ever-present violent potential that cannot be tamed by democratic engagement since it goes beyond such engagement.

However, Gray has a tendency to cite powerful examples from non-democratic regimes – Nazi and Soviet purges of the racially or politically impure, for example. (See especially Gray, 2015) Where the democracies whose virtues Pinker (and those like him) extol do figure is in accounts of colonial conflict (largely historical, although still relevant given the timescale these advocates themselves adhere to) and proxy wars. Even coupled with Gray's citation of recent interventions in Syria and of course Iraq, much of the most explicit violence is laid at the door of "modern" but not "democratic" states, which would play into the hands of Pinker's argument that modern violence is exceptional, and unrepresentative of the true "progressive" historical development embodied by modernity. So, we might bolster Gray's case by highlighting the structural violence – embodied in the sweat-shops, imbalances of trade and so on – that the economies of modern democratic states rely on to manufacture growth and reproduce

133 Interestingly, Kenan Malik (2002b) argues that Gray himself also represents a certain anti-humanist narrative, no more reliably objective than that of Pinker's.

134 A viewpoint put forward more fully in his *Black Mass*, (Gray, 2008)

their social order. (cf. Olson, 2013: 38-40) Thus the redirected or obscured violence that Gray wants to draw attention to returns in yet another form.¹³⁵ A similar argument might be made in relation to Pinker's argument that fewer wars now result in territorial redistribution. (Pinker, 2011: 258-260) Today, globalised corporations control, extract and process many of our natural resources, alleviating nations of the burden of occupying significant tracts of foreign soil in order to secure access. Thus in war the victor can leave the territory sovereign, but insist that the defeated party allow open trade, which often means allowing the occupier's companies access to local markets or, as in the case of Iraq, access to previously nationally-administered resources. The liberalisation of trade – as a condition of loans or assistance from international NGOs – also accomplishes this function (and so represents another form of structural violence).

Gray also notes that Pinker endorses the American system of incarceration as part of a "recivilising" process, and that this cannot really be construed as a reduction in violence, not least because it actually constitutes violence directed by the state against its own citizens. (Gray, 2011) To add to this, he also raises questions about the appropriateness and effectiveness of the US penal system. In effect it does not address the causes of violence, but, as with its 'repressive' stance on drugs, principally concerns itself with palliative effects. As Gray acerbically notes of Pinker's analysis of the matter:

Highly uneven access to education, disappearing low-skill jobs, cuts in welfare and greatly increased economic inequality are also disregarded, even though these factors go a long way in explaining why there are so many poor blacks and so few affluent whites in prison in America today. (Gray, 2011)

Gray goes on to say

there is certainly an imprisonable class in the United States, largely composed of people that Pinker describes as decivilised, and once they have been defined in this way there is a kind of logic in consigning this category of human beings to the custody of America's barbaric justice system. (*Ibid*)

Clearly the charge here is that the contributory causes of violence are not discussed in the service of maintaining an image of the modern liberal state as a panacea for that violence (whilst ignoring the implicit violence of the incarceration regime itself).

135 This might also potentially sidestep the problem that Gray (2011; 2015) does not present statistics to counter Pinker's own. Gray could concede that violence, as Pinker measures it, has decreased, but has given way to more insidious forms of structural violence that Pinker does not even countenance.

All told, then, Gray accuses Pinker of being blind to the still existing reality of violence in human society, and of being willingly selective when it comes to his assertion that liberal democracy has contributed to a radical decline in violence. Thus the problematic narrative within Pinker's account is revealed – a (negatively) moralised nature becomes a resource in advocating for a particular political and systemic viewpoint. Anthropologist R. Brian Ferguson (2013) also takes issue with Pinker's claims for violence within human nature, seeing his argument as equally extravagant and overstated. He takes a different tack to Gray, one that argues that human nature was not in fact as violent as Pinker suggests in the first place. Obviously this contrasts with Gray's tacit agreement on the violence of humanity, required in order to argue that we have not been cured of this violence by modernity. (cf. Malik, 2002b) Ferguson's interpretation of the anthropological and archaeological evidence is that it does not support the idea that humans are intrinsically aggressive (and that war has not formed a sufficiently strong selective factor in our evolution). If so, then this would lend weight to the notion that Pinker's appeal to a propensity for violence as justification for the liberal nation state reflects his political position more than his scientifically led theorisations. The problem here is that it looks very much as though Pinker is overstating the violence of prehistorical humanity in order to increase the impression of reduced violence in modern humanity. Taken together, this raises the prospect that Pinker is not only perpetuating a myth but appears to be, consciously or not, selectively adjusting the facts to bolster his case.

Keeping in mind these points, the normative conclusions of a human nature theory will only pass muster if the human nature theory itself is accurate. The implication of the framework I have elaborated here is that this will in part depend upon where that theory locates the main impetus or locus of human nature; but this is not all. It will obviously also depend on such factors as how well a theory conforms to – or at least does not conflict with – the evidence available. Thus, no matter the substantive content of a human nature theory or the particular normative conclusions its articulators recommend, it can still be judged according to its characteristic approach to

its object – where it locates human nature within the topology of human existence, and how well it reflects the evidence.¹³⁶

Human Political Ethology

Having considered the available range of theories of human nature, it is worth returning to the idea of human nature considered in its own right. As I see it, we cannot escape talking about the issue. Even discounting the prospect that many critics will likely carry with them an idea of what human beings are, such kinds of ideas are integral to our social, political and ethical projects. We often build our conceptions about how society works based on what we know about the people in society – how people “just are”. Similarly our accounts of social phenomena must make reference to how human agents respond to their political realities unless we are to suppose they mechanically carry out whatever society had programmed them to do. (See Toddington & Beyleveld, 2006: 2-10) I would argue an awareness of human nature is necessary in such circumstances, and thus I am obliged to state my own position.

From what we have covered thus far the main issue here seems clear: such an undertaking cannot simply result in an answer. If we presume the (likely) eventuality that human nature is in part the outcome of social forces, that interrelations with social and environmental forces play a fundamental role in governing what we are, then even in this minimal instance we will need to update our conception of human nature as it changes over time in step with those social forces. Then there is the necessary process of critique and improvement – as we have seen each schema is subject to its own range of criticisms, as well as the challenges outlined in chapter four. This does not make the end unattainable, however we should be wary of final answers. (None of this, I should add, necessarily means that human nature is unreal or fictitious.) Here I want to propose a program that might go some way to overcoming this obstacle. I use the word program since we can develop some of the perspectives we have examined to develop a research project with which to address human nature rather than some definitive statement as to

¹³⁶ And, if such a theory says something about human nature which seems otherwise accurate or intuitively makes sense, then we may have to find other explanations for this (or else, of course, abandon our intuition). This is partly what Flanagan, Sarkissian and Wong (2008) suggest we must do with regards to Kant’s Golden Rule, as they judge his reliance on reason and duty as supernatural.

its character and content. The result would be something akin to an iterative study of human nature, similar to that espoused by Peter Loptson (2006) in his own study. In the same vein as evolutionary theory or critical theory, this human nature theory ought to be considered as an ongoing project relating to a particular field and based on particular precepts.

What we need, then, is an explicit affirmation of human nature that seems adequate to summing up what we are trying to describe, that can be made amenable to the political dimension (if not already absorbed into it) and that does not attempt to subsume nature into politics or politics into nature. The best way to do this would be to explicitly locate where human nature most likely lies, and to try and find some way of tying this into what else we know about the relevant forces in the natural and political spheres, balancing fidelity against the realities of the uncertainty principle. The motivationalist schema strikes me as the most promising place to start discussing human nature in this way, especially if we synthesise the various approaches employed by those falling within this area – ethologists, philosophers, psychologists and so on. For one, they show a marked awareness of the multiplicity of human motivations, and do not simply look to rationalise conflicting or divergent impulses into a harmonious blueprint.¹³⁷

Establishing an Ethological Subject

In doing so, I side with the ethologists over the gene-first Darwinians. On this my position accords with a sentiment expressed by Midgley:

Because of his methods of observation and his refusal to posit single explanations, the ethologist is better off than many previous people who have made use of the term "human nature." The term is suspect because it does suggest cure-all explanations, sweeping theories that man is basically sexual, basically selfish or acquisitive, basically evil, or basically good. These theories try to account for human conduct much as a simpleminded person might attempt to deal with rising damp, looking for a single place where the water is coming in, a single source of motivation. This hydraulic approach always leads to incredible distortions once the theorist is off his home ground, as can be seen from Marxist theories of art or Freudian explanations of politics. The ethologist, on the other hand, does not want to say that human nature is basically anything; he wants to see what it consists

137 Neither the outcome of some biological or cultural (or metaphysical) determination, human nature can be considered as a 'real pattern' in Ladyman & Ross' sense (Ladyman & Ross, 2007: 258ff, 289; see discussion in chapter one).

of. (Mary Midgley, 1995: 55; cf. Bateson and Laland, 2013)

It is on this attitude of asking what human nature consists of that I propose to base this human nature theory. We should attempt to uncover the dispositions and faculties that underwrite human activity and experience, and treat these as real and constitutive of human nature. The gene-centric viewpoint treats such motivations as ephemera: the results of a deeper algorithm which takes explanatory precedence. This attitude or pattern of enquiry will be the same for any algorithmic approach.

The ethologists take dispositions and capacities (and motives) seriously, in the sense that these form the central grounds for theorising human nature. Motivations are the fulcrum for understanding humanity, not things to be explained via appeals to some kind of prior logic that reveals the purportedly “real” foundation of human experience. To be sure things like evolutionary utility and social significance are taken into account, but these are in order to elucidate the central theoretical concerns, not to explain them in their entirety in terms of some other conceptual framework. This integrates well into the conception of human nature theory as an ongoing area of research. After all, as I argued above, the motivationalist perspective on human nature effectively emerges from the kinds of research its respective scholars pursue. Add to this the emphasis on actual human beings and we have a fair idea of where to search for human nature.

An additional virtue of this approach is its incorporation of various empirical perspectives that promise to satisfy the criteria of naturalness set out in the introduction, in that they concern themselves with animals and pre-cultural humans, through the use of ethology and developmental psychology. These areas will have a degree of validity in claiming to be able to capture “nature” given that their subjects are largely free from socio-cultural determination (as discussed in the introduction). (See pages 16-19 above.) As we saw in chapter two, psychologists dealing with infants and children have the opportunity to study the behaviour (and, within certain limitations, the mental states) of human beings before they are significantly affected by culture. Infant helping behaviour, for example, can be interpreted as significant precisely because it occurs before the child has come to expect rewards or even associate rewards with certain actions, or to make distinctions in the perceived merit of potential recipients of helping behaviour. For their part the ethologists can make inferences about the similarities shown by various social species, especially those closely related to us, such as the other great apes. Even

in the case of Tomasello, who believes that human activity is marked by a radical difference – in particular a more sophisticated ability to understand the motivations of others – there is still a sense in which comparisons such as these do tell us something important about the inclinations and psychological abilities of human beings. This is analogous to Kitcher’s recommendation from the same chapter: ‘in any evaluation of our evolutionary history you can emphasize the continuities or the discontinuities. I think little is gained by either emphasis. You do better simply to recognise what has endured and what has altered.’ (de Waal *et. al.*, 2006: 139) An understanding of our close evolutionary kin can tell us what kinds of dispositions and types of motivation will likely be a part of our own nature, even if it is in a modified form. As far as I am concerned, any notion of human nature which makes use of the kinds of tools and findings we see in the motivationalist schema will have a far stronger claim to having located (*human*) “nature” than those which do not.

The Political Environment

Thus the benefits of the motivationalist schema are its focus on human beings as a nexus of motivations and activities, including their interrelations, and its potential for accessing human nature uninfluenced by politics. I take it to be the best starting position for developing an accurate account of human nature. However as discussed in chapter two it has its limitations, namely that it does not take great account of human nature’s mediation by external forces. When considering the way that humans fit into their culture, or the more complex levels of mediation consequent to our complex socio-cultural formations, these approaches tend to limit their scope. In the process of considering the political dimension they focus on a particular economic or social phenomena, or on the manifestation of a specific aspect of human nature. For instance Boehm and Flack look at a range of human cultures, as well as comparative ethology, but limit their discussion to the question of hierarchy. Likewise the ethical philosophers of chapter two obviously probe the deeper implications of an motivationalist human nature, but within the specific context of ethics and metaethics. These attempts do not capture the full range of mediating factors that impinge on human nature.

What we need is a better sense of how this human nature interacts with politics, to build a political ethology. We could even view this as an extension of the ethological

project itself, given that one of the main questions of that discipline concerns the developmental emergence and implications of a behaviour. Here I think the contextualists have an exemplary approach (what they lack, after all, is a more nuanced and detailed sense of just what is being transformed by social and political mediation). In them we have a more refined idea of the way in which aspects of human nature become moulded by a person's society. I want to augment the motivationalist understanding of our human nature with an awareness of its openness and the way in which it is politically transformed, according to a sensitivity developed by the contextual schema. So, whilst de Waal's consideration of how (neo)liberal capitalism impacts upon the human nature he describes is rather limited, in that there is little discussion of the social forces and mechanisms which condition that nature, this is precisely the focus of contextualists like Marx or Habermas.¹³⁸

In fact, a promising prototype for this augmented, synthetic (and syncretic) approach to human nature comes from the field of Marxist political science. Gary Olson's argument about the transformation of our empathic responses takes its lead from the studies of empathy carried out by people like de Waal and by neuroscientific findings concerning mirror-neurons (the biological mechanisms underlying empathy). In this he builds on William Connolly's work on the links between the brain and those areas of concern typically the domain of political science. (Olson, 2013; Connolly, 2002) He also borrows Connolly's term "neuropolitics" for this approach. The general idea is twofold: to understand how brain processes affect cultural formations, and to understand how cultural mediation channels, manipulates and modifies these same processes. It is taken for granted that the relationship is two-way, and that equal attention should be given to the innate human forces as to the socio-economic forces. Olson's particular interest is in the way that capitalism generates forces and extrinsic motivations which are at odds with natural empathic dispositions. To this effect, he goes into deeper detail about the effects on empathy wrought by our socio-cultural formations, such as global capital, the shift towards prioritising the profit motive in contemporary democratic culture, and the "psychopathic" professional culture within corporate entities. Notably he finds something problematic in the fact that individuals

138 In full fairness, there *is* a sense of certain elements of human nature being accentuated or muted in accordance with the prevailing cultural milieu, and of a variability in our ethical sensibilities, so de Waal is certainly not devoid of a sense of this conditioning. Motivationalist philosophers are even more sensitive to these variations and contingencies.

are obliged to compartmentalise their empathetic responses to get ahead at work, where the priority is on profitability rather than people, which results in secondary or functional sociopathy. People cease to function as “normal” human beings in a significant part of their life thanks to a devaluation of a critical human faculty. (Olson, 2013: 55-6)

Combined with a greater appreciation of the inner workings of these socio-cultural variables and phenomena, this moves us further towards an understanding of a politically-mediated ethological human nature. Olson himself sees this as a promising opportunity for politics. For him the primary (normative) political matter is developing what he calls ‘dangerous empathy’, by restoring empathy in instances where it has been attenuated, and applying it in new instances, beyond just those individuals already members of our group or community. In pursuit of this aim he suggests that images can be used to trigger empathetic responses, and thereby call attention to the consequences of state and corporate activity in a globalised world, opening up a radical potential for questioning the *status quo*. (See Olson, 2013: 81ff) In this sense the content of this human nature refers back to its structure or form, in that there is a transformative role for external influences to play, and through awareness of this we can exercise some degree of control over the final product.

However I would say that this is also an opportunity with regards to human nature. Whilst it does not, in itself, constitute a comprehensive human nature theory, it does represent a complementary second step towards one, giving us an opportunity to work around – if not entirely overcome – the issues thrown up by the Copenhagen interpretation of human nature. In effect Olson has imported an motivationalist kernel into a more sociological account of human nature. However his preferred term of “neuropolitics” does not seem to encapsulate what is really at stake. This approach’s proponents are certainly not trying to locate a neurobiological basis/explanation for all political phenomena, nor are they necessarily looking for the ways that politics and neurobiology interact. The focus, especially with Olson, is on the *psychological* affects that they associate with political affects; psychological affects that they argue are grounded in (but don’t reduce to) our neurobiological make-up. On the one hand, this looks like it is merely another example of universalisation akin to that which we saw in the previous chapter. On the other, we might reasonably suggest that the term

neuropolitics is more of a rhetorical flourish than a description of the endeavour itself. Neurobiological findings may serve to ground some of the capabilities in question in the physical material of the human agent, but what is usually under discussion – and thus what is at stake – are the higher-order psychological mechanisms, particularly inter-subjective ones, which interact with the political dimension. Regardless of terminology, there is a promising approach being developed here. Not only does Olson start from a motivationalist human nature – drawing on ethological, psychological and anthropological research – but he also incorporates a whole network of social (including global) affects into understanding how human nature is mediated by culture. Significantly he perceives human nature as having been pathologised within an entire culture if the socialisation process (i.e. growing up within that culture) is itself subordinated to a pathological hegemony. (Olson, 2013: 36-9; 57-8) The etiolation of empathy is taken to be problematic in that people supposedly become poorer at relating to those around them as well as to instances of political or ethical outrage.¹³⁹ The ramifications are obviously that that culture's understanding of human nature will in turn become warped, with the perception that the pathology is somehow natural and a reflection of human nature at work.¹⁴⁰ By considering the effects of global and local political influences, this perspective shows us a way of considering how a motivationalist human nature is transformed over time by the environment; a form of “historical-naturalism” if you will.

There is still a limitation in Olson's formulation, of course, in that he, like de Waal and others, primarily considers empathy, but (less like de Waal) other innate factors – such as the psychological structure of in-group bias discussed in chapter two – are not factored into the total analysis. Their contribution, in *Empathy Imperiled*, is noted but not pursued in great detail. (Olson, 2013: 55-7) What it does succeed in is expanding the political sphere of reference with a more comprehensive understanding of the systemic and cultural forces acting on innate human properties. This does not mean that there are no extant attempts at articulating this kind of human nature theory. In fact

139 In some sense, of course, he could here be interpreted as claiming that what is natural is good, in that the claim is we are naturally empathetic and this empathy is being curtailed, constricted, and deformed by cultural practices inimical to it. For now we are interested in the *structure* of his human nature theory, and so we might refer consideration of the content to Olson's own work.

140 Thanks to the Ringworld effect, (see introduction) and the problem of parochialism (see chapter four).

there are a number of sources (in addition to Olson) from which we can take inspiration or use as prototypical examples.

To start with, Aristotle's general structure might provide a sort of model for conceptualising this arrangement. His *Ethics* resembles the motivationalist schema, in that there he discusses human dispositions and capacities – noticeably and most significantly the capacity for reason – and their effects on our pursuit of the good life. (His conclusions relying in large part on the presumption that being rational a large part of our purpose, and from thence our pursuit of the good life, involves exercising this capacity.) In the *Politics* he moves much further into the territory of the contextualists, his own bibliography describing the kind of dialogue between schemas I am trying to evoke here. *Politics* describes how our political formations will impact our ability to act rationally, in the way they encourage or discourage our acquisition of the virtues (the habit of exercising our capacities well and pursuing our various desires in moderation). Thus there are good states and bad, judged according to the effects they have on human nature.

Owen Flanagan likewise casts an eye over the ways in which society and human nature interact, and I even go so far as to cite him as an example of the ethical naturalist perspective in the motivationalist schema. He also takes an interest in the ways the conscious practice of meditation triggers patterns in the brain that are related to peace of mind, offering a potentially deflationary account of its efficacy and illustrating the interrelatedness of intrinsic and extrinsic forces. It is his stance on ethics, however, that is particularly interesting. Here the emphasis is on a variety of affects which trigger or modify innate human properties; such that virtues differ radically from culture to culture, but are rooted in common psychological mechanisms. (Flanagan, 1991; 2009a; 2011) He and his colleagues at Duke university state the matter plainly:

To understand the full story, we will need what we only have pieces of—namely, insights from evolutionary biology, animal ethology, developmental psychology, learning theory, psychiatry, cognitive neuroscience, and cultural anthropology. All these disciplines and research programs are essential to (and thus have a say in) the genealogy [of morals]. (Flanagan, Sarkissian & Wong, 2008: 10)

Of course the specification of morality here reminds us that attempts at tracing the linkages of human nature and politics can often be limited in scope, but the fusion described could easily be extrapolated to a more general application.

The psychologist Darcia Narvaez also offers us a way of conceptualising this extended “political ethology”, one more connected to concrete social activity. Her particular interest lies in child development, and the way that moral and social character develops in response to certain stimuli. In respect to this development, there are certain pathways and probabilities related to the interaction between early psychological needs and socialising interactions (most significantly with parents or similar caregivers). Thus our attention is directed towards the canalisation of human nature, via structures of socialisation, with reference to the expected result. (Narvaez & Gleason *et. al.*, 2013; Narvaez, 2013; Rest *et. al.*, 1999; cf. Olson: 55) In simplistic terms, humans are born with certain requirements (such as a sense of security), and psychopathologies (like insecurities or neuroses) occur when socialisation (such as contact between child and caregiver) fails to adequately meet these requirements. Thus, on this view, it is possible for there to be “good” and “bad” cultural practices, with human nature acting as the benchmark for this judgement, without there being a particular prescription for the “best” practices. For Narvaez and her colleagues this has implications not only for the child rearing practices of a culture, but also with regards to society’s regulation of those practices, in other words: policy.¹⁴¹ (Narvaez & Panksepp *et. al.*, 2013)

In this sense Narvaez’s stance reinforces the idea that the completion of our human nature theory rests on extending the interindividual dimension of the ethological paradigm, within the motivationalist schema, with an emphasis on the cultural mores and structures that govern these interpersonal relations. This ties into the perspective on human nature as potential, offered by the Marxist Virno, save that Narvaez enters into more specific discussions about the differing potentials and the processes by which each might be realised. (Virno, 2009; 2015a; page 127 above) Virno’s notion of human nature, then, might serve to codify what we are dealing with in regards to human nature-in-context (once again supplanting a contextualist kernel – in this case a semiotically-informed notion of potentiality – with an motivationalist nature). Obviously the range of possibilities in my account is more constrained than in that of Virno, since I am proposing that it contains a larger number of pre-existing dispositions and capacities (to wit, those identified by the motivationalist schema). This also means that the political ramifications Virno sees in our supposed raw plasticity hold less significance than he

141 Incidentally, she is not convinced that the “west” has necessarily got things right in this regard.

ascribes to them. Instead I want to borrow the broad structure of his account to serve as a paradigmatic framework for how the question of human nature ought to be addressed. Human nature is not isolatable in any single instance, since it is never, in its totality, actualised; what we are discussing are particular instantiations of human nature, as the confluence of our natural and political heritages.

These are promising means of refining our ethological picture of human nature, though each may have limitations when taken on its own. Synthesised, however, they could provide a much clearer picture of what human nature is and how best to understand it. However, the complexity of the relations between nature and politics in forming human nature make it difficult to find any single comprehensive description of what it means to be human, and thus what we have here are components, constituent strands of an ongoing human nature theory.

Some Internal Dynamics of Human Nature

So far all we have is an outline for the structure of this human nature theory. I have made few specific claims about what it might say about us. For it to be explanatorily useful it will need some substantive content: I will need to say something about what we can learn about human nature from those theories I have deemed structurally/topographically most suitable. A good place to start might be the issue of human nature's innate goodness which has been touched upon at various points over the course of this thesis. Specifically, can we say anything about the movement between the Hobbesian perception of a tainted or dangerous human nature, and the Rousseauian idealism of an intrinsically virtuous human nature? Are we essentially good, or is our nature 'red in tooth and claw'? The archetypes I have suggested here have a new appreciation for the complexities of human motivation.

In one of his defining works, Peter Kropotkin (1998: 230ff) argued that the depiction of human beings has historically emphasised either one of two primary aspects. One is the self-assertive individual, who looks out for themselves above all. The other is the aspect that he wished to highlight: the characteristic of 'mutual aid', the will and desire to form cohesive communities. In Kropotkin's view both aspects are necessary. When a society's valorisation of the individual leads to fracture and division – ultimately culminating in domination – it needs to be reminded of the sociable nature

of humanity. Conversely when a society emphasises mutual aid to too great a degree and for too long, it slides into stagnation and oppression, and needs to be reminded of the worth of individuals. Kropotkin's view was that his own society – particularly in the pronouncements of his fellow naturalists and scientists like Huxley and Spencer – had placed too much emphasis on individualism and competition. Self-betterment now came at the expense of one's fellow citizens. In *Mutual Aid* he attempted to put the case for our more social "instincts" and dispositions; to argue that not just humans but all social species were much more cooperative and other-regarding than was commonly thought. A century later Killen and Cords made a similar claim in the journal *Nature*: much contemporary psychology and social discourse presumes human beings to be rather less sociable than their research shows.¹⁴² There they argued that instead of being fundamentally self-interested, much of our social and moral character is influenced by natural inclinations and preferences. (Killen & Cords, 2002)

A simplistic summary would be to say that we are neither. After all, the very reason we can be viewed as either good or evil is because, to parallel Kropotkin's point, human nature can be read hermeneutically, like religious texts, with different interpretations accentuating the features that most accord with their view of the world. Neither angels nor demons, human beings are naturally gregarious and inclined to help one another, but they are also prone to furthering their own interests even when the cost to themselves is minimal. In chapter two, along with Killen and her colleagues' work on infant moral perception – including the ability to infer the beliefs and opinions of others – we saw how de Waal argued that human beings are more cooperative than usually supposed. On his account, our animal empathy and disposition to help one another form the basis of our morality, and we should be more attentive to this side of human nature. Tomasello disagrees only in the extent to which he thinks humans have distinctive faculties that make their ethical sense both unique and more sophisticated than that of other animals. Both, however, are prepared to say that this gregarious nature has its limits, since in times of scarce resources individuals will prioritise themselves and those closest to them.

These limitations of empathy draw our attention to other components of human nature. Agents might also temper their helping behaviour in accordance with their

¹⁴² *Mutual Aid* having been first published in 1902.

perception of another individual's group membership – a phenomenon we also considered in chapter two. (Cuddy *et. al.*, 2007; Waytz & Young, 2012; cf. Ferguson *et. al.*, 2009) Significantly not only do we recognise group membership, we also respond to it differently depending on our current emotional state, reacting more aggressively to out-group members when we simultaneously experience fear. So not only is the tendency to make in-group/out-group distinctions innate, so too is there a reliable pattern to the way we interpret the importance of these distinctions. (See pages 86-90 above.) Whilst the precise social delineations of these groups are a matter of culture they operate through mechanisms that are just as psychological and innate as the empathetic impulse. This would also have obvious repercussions for discussions of ideology and identity: we should hardly be surprised if group membership becomes politically contentious if the expression and experience of interpersonal affect is predicated on an innate cognitive framework.

Likewise I have argued that alongside other-regarding dispositions humans also have an innate tendency to be self-regarding. This would even go some way to explaining why socio-political power has been such a constant in human history. Humans strive to climb the social hierarchy as a means to assert themselves and advance their own interests; and maintaining one's position within the hierarchy leads to an obsession with power for its own sake in a manner that might be familiar to Foucault scholars. As we saw Boehm and Flack suggest in chapter two, (pages 91-3 above) we may also find hierarchy itself emerging from a confluence of internal and contextual forces, as an interplay between the desire for social stability, the desire for social status (self-interest) and a sense of justice, as well as the way these factors play out in the specific dynamics of a given social group. (Boehm, 1999; 2012; Boehm & Flack, 2010) The question then becomes: how have some cultures devised means to balance these influences, to check or attenuate the manifestation of hierarchy? How have they not only sublimated but positively deployed human nature in order to create more egalitarian societies?

Clearly we can not consider human nature to be unequivocally good. It certainly has a pro-social directionality to it – the ethologists and psychologists of chapter two

have proven as much¹⁴³ – but this is not a guarantee of unstained virtue. It contains a multiplicity of forces, some of which contest this pro-social inclination. For our purposes, we can say that the internal diversity of human nature means we are likely both self- and other-regarding (and there is no reason to suppose this former must necessarily be a negative thing, constantly lapsing into selfishness). I do not take this multiplicity of forces (self- versus other-regarding, in-group biases, hierarchy versus anti-hierarchy, and so on) to mean that human nature can be regarded as indeterminate or as pure potentiality. Rather human nature contains within it dynamics which lead us in differing directions, and the final form that a particular nature takes reflects how these dynamics play out in relation to one another and the social context (leaving it somewhat open to extrinsic contingencies).

Such a position should help us avoid naturalising any specific social structure – no society is a “natural” outcome of human nature. Human nature is instantiated in, but not reducible to, particular individuals (hence the importance of both a “human ethology” and its social contextualisation) so it is unlikely that any variety of mediated human nature – and thus the society that canalises it into its particular manifestation – represents the truest or best expression of human nature. Simultaneously this position underscores the idea that human nature is not only a rhetorical trope but also a raw material, utilised, intentionally or not, to reproduce a particular social order – or potentially, as Olson and Narvaez, in their respective ways, suggest, to resist and reform the social order. This may or may not disrupt a more traditional, Aristotelian conception of “flourishing”, or of realising the potential of human nature, but it does show that there are multiple ways to do this, not just one.

Human Nature Theory

Yet this internal diversity and potentiality compounds (or perhaps explains) the archetypes’ difficulty in conclusively summarising human nature, and underscores their

143 Of course on the other hand this might just be the result of a new swing towards a Rousseauian perspective, accompanied by a few caveats in order to accommodate those aspects of human activity which do not seem to fit a picture of inherent human benevolence. For their part the ethical philosophers are clearly staking out some kind of inherently positive aspect of human nature by locating the source of ethics in human dispositions and outlooks, rather than as external controls keeping them in check. But do these represent a more nuanced view of human nature, or just a return to a (new) Rousseauian position after the more Hobbesian human nature of the last 30 years? Is Killen and Cords’ invocation of ‘Prince Kropotkin’s Ghost’ simply the counterpoint to the perspective they are critiquing?

status as parts of an ongoing theory. I would argue that this follows directly from the Copenhagen interpretation of human nature. It is an irreducibly complex task to address human nature in its entirety – that is, both in terms of each of its components *and* in terms of its mediation and transformation by the context in which it is experienced. We can address or schematise the internal ecology of our nature (i.e. empathy, bias, the desire to dominate, the sense of justice, the ability to infer the internal states of others) or we can select some part of that ecology and consider its transformation. Both have import for the idea that we can understand our own nature, and what it means to be human, but it is a daunting task to attempt both simultaneously. This, I contend, is why “human nature” is located in such a diversity of places.

Much of this nuance is obscured, however, by the difficulty in talking properly about human nature in the first place. Not just by ideologically entrenched critics but also by the lack of consensus on what, exactly, we are talking about. What really constitutes human nature, and what is “just” peripheral or supervenient. If we can establish that, then we can establish a working human nature theory, and this is what I have attempted to present here. I have shown that, by formulating a taxonomy of the most salient human nature theories, we can ascertain the most suitable focus to start with and then properly situate it within the rest of human experience. Proceeding in this vein would require research into comparative anthropology and ethology, to refine our understanding of our innate proclivities and capacities, and an attendant discussion of its interrelations with its mediating context, necessarily invoking the question of normativity, or what we ought to do about/with human nature. Crucially, although it is possible to disagree with where I have located the ideal human nature theory the conceptual landscape remains apart from this: it is a general purpose map within which others might place a pin where they believe human nature resides *and make their case for doing so*. The map retains its function: a common point of reference by which we can gauge the relative distances between theories and the “topography” between them – their structural similarities and differences, their continuities and discontinuities – facilitating discussion.

Just as evolutionary theory is a paradigmatic approach towards certain phenomena in the biological world, and critical theory is likewise a set of tools and theoretical precepts used to tackle questions about the socio-cultural world, human

nature theory must be considered as an ongoing endeavour, based on open discussions about the most appropriate place to locate human nature, and how to trace or account for the mediations resulting in its particular manifestations. The full picture of human nature will only emerge from the integration of various strands of research. Thus its theorisation must be an explicit, collaborative endeavour, and a continuous one at that, if we are to stand a chance of knowing what we are.

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