Chapter 1

Practical Primates

> When we are investigating what the good life is... and how living virtuously might achieve it, we are aided by investigating our human nature. This in turn we do by seeing how we humans are a part, though a distinctive part, to the world that the sciences tell us about.
>
> —Julia Annas, "Virtue Ethics: What Kind of Naturalism?"11.

If all natural organisms can be described by normative generics, and humans are natural organisms, then humans can be described by human generics. If statements such as "apple trees produce apples" are norms capturing the object's natural end, then perhaps statements such as "human beings become knowledgeable" can capture our natural end. Perhaps such can be both normative and descriptive natural norms applicable to humans – or simply *human norms*. These natural norms would be binding on human beings as practical rational animals and not merely invented by human individuals or human cultures. These norms would be natural without being crassly biological; they would be both biological and practical.

The purpose of this chapter is to propose that there are such things as human norms. The strategy for identifying them is fairly simple: we must uncover generic propositions

about human beings that are both scientifically true *and* normatively. For example, we need the same type of Aristotelian Categoricals or generics we formulated about flora and fauna. We need generics to answer questions like: what is a human being? All else depends on the life form of our species. Also, what kinds of activities does "the human" being do? What kind of life does it live? What is its natural end, if it has one – or what are they? The answers would be both descriptive and normative. Human norms would provide prima facie normative bindingness; if I am a human being by nature, it would be initially binding upon me to *do what humans do* and *become what humans become*. These human norms, I shall suggest, give us insight into the concepts of virtue, excellence, wisdom, and flourishing. For example, it might be that some normative propositions such as "you ought to be wise" are brutely normative *natural* facts.[1]

Section 1 begins with the observation that human beings are natural organisms. Nevertheless, human beings are animals of a peculiar sort who engage in such activities as speaking, innovating, deliberating, and so on. So, I conclude, human beings are practical, rational primates. This conception of human nature is seamlessly both normative and descriptive. If humans fit the larger pattern of natural normativity defended in chapter 2, then evaluation of individual human beings is possible by comparison to the human life form.

Section 2 attempts to sympathetically articulate and respond to a few critical objections philosophers have had about the neo-Aristotelian project of grounding ethical evaluations in a normatively loaded conception of human nature. Each of these receives an initial rebuttal, though a few of them will require further comment in chapter 6.

Section 3 begins to apply the foregoing account of human nature and natural human norms to ethics. Specifically, I shall argue that as practical, rational animals, a basic human norm is that one *is to become a fully mature human being*. Practical primates have prima

1. Admittedly, it sounds rather odd to say that an 'ought' can be a brutely normative natural fact. In chapter 6, I shall dissipate the oddity by offering a thorough discussion of the concept of 'nature.'

facie normative obligation to be what they are (to respect the conditions and criteria of their life form) and a prima facie obligation to become fully mature practical primates.

1. Animals of a Peculiar Sort

The previous chapter drew substantially from Philippa Foot to argue that *any* animal exists within a nexus of natural normativity. Since humans are animals, it would seem to follow that humans are subject to natural norms. Foot is well aware that the derivation of normativity from brute nature is likely to seem absurd, especially when it comes to human beings. She says:

> The idea that any features and operations of humans could be evaluated in the same way as those of plants and animals may provoke instant opposition. For to say that this is possible is to imply that some at least of our judgements of goodness and badness in human beings are given truth or falsity by the conditions of human life. And even if it is allowed that certain evaluations of this kind are possible – those vaguely thought of perhaps as 'merely biological' – there is bound to be skepticism about the possibility that 'moral evaluation' could be like this.[2]

Despite such legitimate worries, we have followed Foot in trying to earn a hearing for this notion by arguing that the meaning of 'good' in so-called 'moral contexts' does not have a special logic of its own. Rather, 'good' and 'defective' pick out natural properties of living things. The goodness of a cactus is relative to its cactus nature; likewise, we should expect that the goodness of human beings is relative to their human nature.

Are human beings natural organisms? On its face, calling human beings organisms or animals or primates appears to be an innocent truism. *Of course* humans share properties in common with every other organism: they enjoy a particular evolutionary history; they move about the earth engaging in activities such as reproducing, sleeping, feeding, dying, and so on. But some have objected to the suggestion that human beings are *mere*

2. Philippa Foot, *Natural Goodness* (Oxford University Press, 2001) 38.

animals. We are different from other animals, and the significance of this difference is a matter of some controversy. Certainly, humans exhibit a range of actions such as language and complex social systems that other animals do not. As Hursthouse summarizes:

> When we moved from the evaluations of other social animals to ethical evaluations of ourselves, there was an obvious addition to the list of aspects which are evaluated. The other animals act [as opposed to chemicals which are only acted upon.]. So do we occasionally, but mostly we act from reason, as they do not, and it is primarily in virtue of our actions from reason that we are ethically good or bad human beings. So that is one difference that our being rational makes.[3]

In light of the difference of being rational, the task in discovering true generics about human beings is capturing what is common and what is unique about humans.

My view is that human beings are animals of a peculiar sort where the peculiarities do not eliminate the commonalities. The traditional formula that humans are "rational animals" is close to correct. As such, both the *animal* part of that formula is essential and the *rational* part. To see why, let's first consider in a bit more detail what it means to be an animal, and why it matters. Then we shall look at what it means to be the peculiar sort of practically reasoning animal that we are.

To be an animal is to belong to the "tree of life" – and to have a location in the broader story of life on earth.[4] That story begins 3.5 billion years ago with the first living organisms, and our own part begins about 200,000 years ago with the emergence of anatomically modern humans. In contemporary classificatory scheme, we can locate hu-

3. Rosalind Hursthouse, *On Virtue Ethics* (Oxford University Press, 1998) 217.

4. As Michael Mautner explains, all living things (on earth at least) share common ancestors and even share genetic material: "…phylogenetic trees indicate that all terrestrial life can be traced to a common ancestor. Organisms as different from us as yeasts share half; mice, over 90%, chimpanzees, over 95%, and different human individuals share over 99% of our genome. These scientific insights give a deeper meaning to the unity of all Life. Our complex molecular patterns are common to all organic gene/protein life and distinguish us from any other phenomena of nature." Michael Mautner, "Life-Centered Ethics, and the Human Future in Space," *Bioethics* 23, no. 8 (2009): 433–40 434-5.

mans within the phylum chordata, the class mammalia, the order of primates, the suborder haplorhini, the familiy hominidae, the genus homo, and the species homo sapiens.

Does this matter ethically? I think it can be demonstrated that the common history of living organisms (including humans) is not ethically irrelevant. At the very least, the bundle of properties intrinsic to our animality serves as a condition of our ethical life. At the most, our animality is (sometimes) a *criterion* of our ethical life.

One example that will suffice to illustrate the point is mortality. As a matter of plain scientific fact, we are mortal – like every other living organism or species. All life on earth undergoes a process from a humble beginnings in a single cell through infancy, maturation, and adulthood, at which point it may reproduce itself before dying. All of these phases we notice in human animals as well. The human life cycle is characterized by various phases, including growth, language acquisition, puberty, physical maturity and characteristic activities, aging, and death.

Now, all that is good in life depends on the prior state of being alive at all. Although death is "normal" at the end of the life cycle, it is a very basic normative fact that being alive is a good. What is so morally heinous about murder is that it unjustly and prematurely destroys the good of life. Where theft robs one of this or that particular good, murder robs one of life which is the condition of all other goods. In this way, mortality is a condition of ethical life; prima facie, one ought not behave in such a way as to make others die (or to put others at risk of dying) before their life cycle is complete.

My point is not that the status of mortality is uncontroversial. Whether mortality is condition or criterion of ethical life is a live controversy in bioethics: should we attempt (if possible) to overcome mortality?[5] Would doing so be a morally innocent intervention like body-building or a morally loaded intervention like genetically modifying embryos?

5. Nick Bostrom, "Transhumanist Values," *Journal of Philosophical Research* 30 (2005): 3–14; Nick Bostrom, "In Defense of Posthuman Dignity," *Bioethics* 19, no. 3 (2005): 202–14.

My point is that being mortal creatures whose very life is a fragile homeostasis is *at least* a condition that must be taken into account when living life or constructing an ethical theory.

What other conditions of animality are possible criteria of ethics? The whole range of facts that characterize a human being and a human pattern of life. When I say "pattern of life" I do not just mean the crudely biological features of life; I mean the whole range of biological and neurophysiological facts by which a human being undergoes the process of living from birth to death.

We cannot, except via abstraction, describe the human species adequately without describing biology, ethology, psychology, and sociology. For example, it might seem a purely descriptive biological trivium that humans have 23 chromosomes in each somatic cell. But genetic defects in a person have enormous effects on that person's quality of life and on the community in which he or she lives. Apparently innocent "descriptions" of human animals are inseparable from ethological and anthropological descriptions, which which are both descriptive *and* normative.

Furthermore, a scientific account of humanity cannot leave out that humans have large brains relative to other primates, with a neocortex and prefrontal cortex that correlate with abstract thinking, problem solving, society, and culture. A scientific account cannot leave out that humans don't just suffer physiological responses like fear and excitement or arousal, they willfully seek out such emotions for themselves through art and entertainment and willfully cause them in others. Presumably, even an alien anthropologist who knew nothing of human language or "what it is like to be a human" would be able to notice, upon examination, that a human's laugh or cry is different from a hyena's laugh or a crocodile's tears. Part of the alien anthropologist's examination would be to examine the body, brain, and hands of human beings. One of the first things we can imagine they would notice is that humans live in cultures and societies. They are not merely "social animals" like apes; they are language-users, communicating in signs and symbols. Their language is an

extremely complex, open-ended system which is both recursive (able to nest propositions within propositions) and productive (able to create sentences by potentially limitless combinations of words). In virtue of language and their opposable thumbs, they are creative; they don't just live on the ground or under ground, but build houses and shelters, sometimes in new places, such as caves, trees, hills, mountains, etc. Also, they are self-reflective. They establish social relations upon biological grounds (some children growing up with natural parents) and upon normative grounds (some orphans growing up in orphanages created by philanthropists). Even before introducing the "human" point of view, we can describe "the human" form of life in some detail. My hope is that these generics are plausibly knowable from an "objective" or third-person point of view of scientific exploration, data gathering, inductive generalization. They seem to have at least *potential* ethical significance; even so, the most ethically significant fact about us is the peculiar differentia of our species: practical rationality.

It is now time to offer a first characterization of the 'practical reasoning' of an organism.[6] Practical reason occupies a place of importance in the theories of many virtue ethicists. For example, Foot, McDowell, and MacIntyre have each treated the theme.[7] Chapter 5 focuses on the neo-Aristotelian accounts of practical reasoning in some detail. For now, I shall only offer an initial exploration. Jay Wallace gives an adequate general definition of practical reason: "Practical reason is the general human capacity for resolving, through reflection, the question of what one is to do."[8]

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6. I shall return to this theme in chapter 5. Throughout, I use the term 'practical rationality' as a synonym for 'practical reason.' Warren Quinn uses 'practical reason' to mean the faculty and 'practical rationality' to mean the excellence use of the faculty. Cf. Warren Quinn, "Rationality and the Human Good," *Social Philosophy and Policy* 9, no. 02 (1992): 81–95.

7. Cf. Foot, *Natural Goodness*, chapter 4; McDowell, "Virtue and Reason"; Alasdair MacIntyre, *Whose Justice? Which Rationality?* (University of Notre Dame, 1988).

8. R. Jay Wallace, "Practical Reason," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, 2014.

When we take a wide view and observe human behavior in context of other animal behavior, observing ourselves both "from inside" and "from outside" the human perspective, we notice a range of properties not shared by other mammals: grammar and language, fire-making, cooking, sexual union for pleasure, abstract reasoning, science, philosophy, religion, mythology, and agriculture. Is there any way to collect these idiosyncrasies into one or a few generic categories? All of them depend, in one way or another, on activities we call "rational."

Predicating rationality is not merely based on the fact that "some people can do sums," as Bertrand Russell joked.[9] Rather, we predicate rationality on the basis of observing a range of activities such as: to observe, reflect, and perceive; to remember, predict, and categorize; to decide, determine, and pursue; to abstract, explain, and infer; to criticize, blame, and praise; to admonish, prohibit, and command; and so on. Abstracting to what all these disparate activities have in common gives us a sense of what the generic activity of practical reasoning is.

Practical reasoning is the process of self-determining, of taking our actions "into our own hands" so to speak. Some of the above rational activities are intrinsically aimed at action, while others are not. But even the theoretical activities (like reflection) can be and are put to use in practice. Hence, on my view, practical reason is constituted by at least four capacities that in turn constitute human nature: the capacity to speak, to live in society, to engage in rational practices, and to create or innovate. Let's consider each of these four properties in turn.

First, we should consider the unique phenomenon of human language. Aristotle observed that, "Man alone of the animals possesses speech."[10] Other animals have forms of

9. Bertrand Russell, *The Basic Writings of Bertrand Russell, 1903-1959* (Psychology Press, 1992), 73.

10. *Politics*, 1.1253a. Aristotle and the translator use the term 'man' in the gender inclusive sense.

communication and even a sort of speech. But nothing in modern science has superseded or contradicted the observation (obvious to anyone) that human speech is qualitatively different from other animal speech. Modern science *has* helped us to understand exactly what is different. Upon reflection, researchers have observed that animals communicate with non-grammatical closed systems with a small, finite set of symbols. Communication systems used by other animals such as bees or apes are closed systems that consist of a finite, usually very limited, number of possible ideas that can be expressed. In contrast, human language is open-ended and productive, meaning that it allows humans to produce a vast range of utterances from a finite set of elements, and to create new words and sentences. Our language is unique: it is grammatical, open-ended, recursive, and productive. We are animals who use signs and symbols to communicate self-reflective and abstract thought.[11]

Speech is inseparable from self-reflectivity and sociality. Through our animal senses comes a sensitivity to our surroundings, the ability to see the world, ourselves, the sun and stars, to hear our fellow creatures, and to take the whole cosmos into consciousness. Before learning to speak, infants lack the cognitive capacity to understand what pours in through their senses. Infants also do not initially grasp the difference between non-human and human speech, but learn words by imitation just as well as they learn tweets, barks, and growls. Once words are recognized and learned, an irreversible change occurs. Through speech comes a whole second cosmos of culture. Through speech comes intentionality in all its forms. Through speech comes practical communication (i.e., "pass the salt"), and whole languages and cultures (about 5,000 distinct languages). Through speech comes self-consciousness ("who am I?"), abstraction ("all grass is green"), science, philosophy, religion, mythology, technology and more. Perhaps even art and music arise from the rational capacity to direct our actions to create not only what instinct demands but whatever the

11. Terrence W Deacon, *The Symbolic Species: The Co-Evolution of Language and the Brain* (WW Norton & Company, 1998).

imagination can invent.[12]

The second constitutive feature of practical reason is sociality. When Aristotle asserted that "Man is by nature a political animal," he did not mean the facile point that human beings prefer to reside in groups. He meant that human beings are born into families and families "naturally" join into groups to form societies. Contra Locke and Hobbes, living in a society is the "state of nature." I would suggest that we can interpret Aristotle's assertion as a generic. 'The human being' is formally constituted by being an animal that exists not only in a family setting but in a political setting. Just as 'the human being' is a creature produced by the sexual union of two other human gametes, so 'the human being' is able to speak, and to be enculturated in a particular natural language in a time in human history and a place on the globe.

The third feature of practical reason is the ability to engage in rational practices. All organisms initiate *action* in the most general sense that they move about and do things. And all higher mammals engage in complex (and often social) practices, such as communal hunting, grooming, and building. Humans exhibit unique behaviors. We do not merely *act* ; we act *on reasons*. We are the only creatures that set goals, on purpose, far in advance of their fulfillment. We are the only creatures who undertake long, complicated sets of actions in order to achieve those goals. Micah Lott summarizes the specific point about the human life form: "Human form is characterized by *practical reason*. This is the capacity to act in light of an awareness of the ground of our actions, to recognize and respond to practical reasons."[13] Goal-setting and recognizing practical reasons are inextricably tied. Practical reasons include our assessments of what is worthwhile. We also reflect on past actions and evaluate them to decide whether it is advisable to do the same thing again or try something

12. Gordon H. Orians, "Nature & Human Nature," *Daedalus* 137, no. 2 (2008): 39–48. Orians says that "Americans spend more money on music than on sex or prescription drugs."

13. Micah Lott, "Moral Virtue as Knowledge of Human Form," *Social Theory and Practice* 38, no. 3 (2012): 415. Original emphasis.

else. Practical reasoning includes not just deliberating about what to do but weighing the apparent reasons for and against a particular course of action. Hence, as I shall explain later, it is under the category of 'rational practice' that I shall include everything unique about humans having to do with morality.

The fourth feature is rational creation or innovation. Innovative creation is intrinsically related, I think, to speech, sociality, and rational practice. That is, one of the forms practical reasoning takes is that we *innovate* – we create and design and plan actions, new behaviors, new games, new languages, new activities, and so on. The structural features of our grammatical system allows us to create new propositions from a finite set of words, without which we could not tell stories or write philosophy papers. Furthermore, living within a social order, practical primates create living spaces, utensils, farming implements, and so on. We even create new social orders.

The human differentia of 'practical rationality' entails not only abstract reasoning but speech, sociality, rational practice, and creation. Such norms are not *only* accessible to us, but would be accessible to an "alien anthropologist" observing humanity from the "outside." The alien anthropologist, if indeed it were rational enough to develop anthropology, could observe these actions and infer the existence of the property of rationality.

2. Objections

We must avoid a misunderstanding about the concept of a 'nature.' In the epigraph above, Chris Toner stated that *human nature is normative.* I don't insist on the term 'nature,' as some object to it on aesthetic grounds; we could just as well express the point by saying that genetically modern homo sapiens sapiens are potentially practical, rational primates. The important thing is not the term 'nature' or 'human nature' but the concept of a nature. What do I mean by a nature or life form?

In the old classificatory schemes, philosophers provided a genus and a differentia to pick out the unique "nature" of any life form or natural kind. Not every kind-concept corresponds to a real nature: *the set of medium sized objects immediately to my left* is not a natural kind, nor is *the set of people born in Ireland.* The kind-concepts under review are not just any generalizations but scientific and biological kinds that arise from inquiry and on which inquiry depends. We start out knowing nothing about an organism (say, some species of beetle) and come to discover not only that they exist but a whole set of properties: their genetic traits, their evolutionary history, their natural habitats, diet, predators, lifespans, and so on. In this way, a nature is a species, or a homeostatic set of properties, or a natural kind.

When such a kind-concept corresponds to a real natural kind or "nature," that nature is potentially discernible both by contrasting it with other kinds of things and by comparing it with instances of the same kind. Hans Fink explains:

> The nature of x is both what is special about this x and what makes this x one of the x's as opposed to the y's. When x is defined per genus et differentia both the genus and the differentiating characteristic and their combination could be taken to express what is the nature of x…. Human nature is what differentiates us from the animals and the plants. By nature we are rational beings. Our human nature, however, is also that in virtue of which we belong to the animal kingdom and to the living organisms. By nature we are mammals. We may thus use the concept of nature to differentiate rather than include, but also to include rather than differentiate. And we may use the concept of nature to express that differentiation and inclusion should not be seen as incompatible.[14]

As Fink points out, the concept of a nature gathers and divides. It gathers up all the members or putative members of a kind and divides the kind from other kinds. With this definition in view, we can see what the point of the old formula was, that man was a rational animal, or a featherless biped. There are many animals, but few (if any) other rational ones. There may even be other rational creatures who are not animals (artificial intelligences, gods,

14. Hans Fink, "Three Sorts of Naturalism," *European Journal of Philosophy* 14, no. 2 (August 2006): 207.

intelligent Alpha Centurions, or what have you), but so far as we know, we are the only rational animals in the cosmos.

The best way of reflecting on ourselves as members of the organic kingdom, as organisms within the evolutionary tree of life, and as physical objects in the cosmos is to slightly modify the old formula: a human being is a practical, rational primate. This simple, generic proposition is astonishingly rich. It captures the facts of our life form and can be demonstrated to be true from within the human point of view, and from outside it; an alien anthropologist studying human beings from its own non-human point of view could discover that humans are practical, rational primates.

A second misunderstanding has to do with the predication of 'rationality.' Humans engage in demonstrative reasoning and practical reasoning. While both are recognizably modes of *reasoning*, they should not be conflated with each other.

There is indeed a linguistic parity in the way we talk about π-type reasons and Q-type reasons.[15] Both are a species of "*reasons*," though they differ in their use. For example, Philippa Foot says that reasons of type (A) are "Reasons for acting, which we may call practical reasons" and type (B) are "Reasons for believing, which we may call evidential or demonstrative reasons." She continues:

> As philosophers, and therefore theoreticians, our job is of course to give the second type of reason, arguing for or against the truth of a variety of propositions that seem to involve special problems—like those, for instance, about personal identity or the existence of an external world. But among these many 'philosophical' subjects we find that of the nature of practical reasons, and in this special case we shall have to give reasons of type B for theses about reasons of type A.[16]

Some unwittingly interpret "rationality" to mean only speculative reasoning – i.e., mathematical, logical, or otherwise abstract thinking. This kind of abstract thinking Aristotle

15. Roy Edgley, "Practical Reason," *Mind* 74, no. 294 (1965): 174–91.
16. Foot, *Natural Goodness*, 64–65.

would call *theoria* or contemplative science. I do not think the best way to understand the old formula of "rational animals" is to take "rational" to mean "abstract thought" because a nature should capture *all* non-dysfunctional members of a species and only a relatively small minority of humans engage in that kind of abstract reflection that characterizes science, theology, mathematics, metaphysics, ethics, and so on.

Practical reasoning is a better candidate for the single defining feature because all normal, functioning adult humans, regardless of cultures, intelligence quotients, or walk of life, engage in practical reasoning and deliberation. I want to make it indelibly clear that I am not supposing human nature to be rationality per se but practical rationality. It is not merely *thought* but *thoughtful action* that I would like to emphasize. (That practical reasoning is indeed a form of reasoning, and the difference, if any, between theoretical and speculative reasoning, is a theme of chapter 5.)

I am *not* saying that only practical reasoning is *active*. Both theoretical and practical reasoning are active in the sense that both require intentional effort and both light up the brain on an MRI scan. The difference between theoretical and practical reasoning is that where theoretical reasoning results in belief, judgment, speculation, and so on, practical reasoning *results in action*. And, I would suggest, this distinction must be built in to our definition of practical reasoning.

That said, the capacity for abstract or "theoretical reason" is certainly an important feature of human nature and stands out from the capacities of other organisms. While other members of the animal kingdom "think" in one sense of that term, as far as we know, no other animal constructs theories about, say, the cognitive capacities of the animal kingdom. My only point is to challenge the unwitting interpretation of "rationality" to mean abstract reasoning to the exclusion of any other capacity.

A third possible misunderstanding has to do with exceptions to the truth that human beings are practical rational primates. To quote another quip from Bertrand Russell: "Man

is a rational animal – so at least I have been told. Throughout a long life I have been looked diligently for evidence in favour of this statement, but so far I have not had the good fortune to come across it."[17] The humor of his misanthropic jab turns on an ambiguity in the predication of 'rationality.' Certainly, many of us are forgetful, neglectful, and driven by emotion or desire, and our thinking is riddled with fallacies. If by 'rational' we mean the reliability habit of thinking well, then the possession of rationality would be rare indeed. Children, the uneducated, the foolish, and many philosophers are not rational by this high standard. If, however, by 'rational' we simply mean the *potential* to become successfully rational, then every normal human possesses rationality.

A second misunderstanding, more dangerous than the first, is to think that someone who cannot successfully think rationally is not even human. What about anencephalic babies, the genetically defective, the comatose, the mentally ill – are they not really human? An uncharitable critic might accuse me of insinuating so. I deny the charge. In fact, one strength of my argument is that it can explain both why disabilities are sub-optimal *and* why exactly our disabled fellows are members of our species. Generics describe a life form well only when the sample includes exemplary instances of the species – not the young, immature, ill, injured, genetically defective, radiation poisoned, comatose, mentally ill, and so on. However, such are still recognizably members of the species. Humans are "bipedal" by nature even when someone (say, a war veteran) is no longer bipedal. Anencephalic babies who lack the subvenient brain structure necessary for rational consciousness are "rational" by nature even though they will never exemplify their potential for practical reasoning. Abnormal members of our species are recognizably *human* – they are not eagles or moon rocks or dandelions. We have a clean explanation for this, for generic truths are compatible with individual exceptions. Indeed, without well-grounded knowledge of the life form expressed in generic propositions, it would be impossible to describe any individual as abnormal, im-

17. Russell, *The Basic Writings of Bertrand Russell, 1903-1959*, 72.

mature, ill or injured.

A final possible misunderstanding needs a response here. Someone might observe that terms such as "exemplary" or "normal" or "mature" are normative terms and hence charge that I am "smuggling" evaluations in to a process of objective, scientific description. I welcome the observation, but deny the charge. The discernment between ordinary, unusual (but not defective), and abnormal (and defective) is certainly an evaluative discernment. My point has been that such evaluative discernment is part and parcel of objective, scientific generic predication. Researchers do not judge the characteristics of a newly discovered species of beetle by examining its young. They might, at first, mistake the initial specimen for a fully mature adult; but the correction would come from a further application of scientific methods. The capture of a larger beetle that appears to be *of the same kind* would suggest that the initial specimen was either a child or a runt. After collecting a sufficient sample of specimens (say, a dozen or preferably more) the researchers would be in the position to make justifiable fundamentally normative judgments about *which of these individual beetles is exemplary of the species.*

We can draw the same conclusion with a hypothetical situation in which humans are the newly discovered species. Suppose an alien anthropologist were to stumble across earth and study humans. Suppose that the initial specimen was a 12-year-old boy or girl. If that was the anthropologist's *only* sample, the alien race would come to all sorts of incorrect conclusions about humanity in general. If, instead, they studied mature, healthy, human beings of both sexes, in the "prime" of life, they would be closer to identifying what is generically *human*. My contention is that they would be best served not by examining foolish humans but practically wise ones.

I conclude that the ascription of practical reason to human beings is indeed true generically of the human life form, species, or nature. The rarity of successful realization of a capacity for practical reasoning does not tell against the truth of the generic, and neither

does the existence of persons who may never actualize the capacity. Such exceptions rather support the thesis, for how else could we judge that there is a *genetic defect* except by reference to the genetic norm?

2.1 No Organic Natures

There are a few other objections a reader might have at this juncture. The first objection is simply that we cannot identify "human nature" with any scientific accuracy because there is no human nature. This objection has three iterations.

The first sort of critic might deny that there is any such thing as a human life form because there are no life forms at all. This is an objection to the very concept of a nature. Perhaps, instead of real life forms and natural kinds, we should be nominalists about divisions between various branches of the tree of life.

One iteration of this criticism is an alleged tension between the flexibility of species (as represented in evolutionary biology) and a fixed notion of human nature. In a seminal paper on natural teleology, Ernst Mayr says:

> The concepts of unchanging essences and of complete discontinuities between every *eidos* (type) and all others make genuine evolutionary thinking impossible. I agree with those who claim that the essentialist philosophies of Aristotle and Plato are incompatible with evolutionary thinking.[18]

Arthur Ward is a recent critic who agrees with Mayr on this point. Ward argues that "naturalists should reject the idea of 'human nature,' and indeed should reject that any organism or its parts or operations has a nature, purpose, proper function, or the like."[19] I have already pointed out that rejecting all organic natures and purposes is not necessarily the only ratio-

18. Ernst Mayr, *Populations, Species, and Evolution: An Abridgment of Animal Species and Evolution* (Harvard University Press, 1970), 4.

19. Arthur Ward, "Against Natural Teleology and Its Application in Ethical Theory" (PhD thesis, Bowling Green State University, 2013), 1.

nal, scientific option; indeed, such a rejection seems to me to be motivated by philosophical materialism far more than it is motivated by any respect for actual biological science.

The arguments of the previous chapter, built on the assumption of a minimal scientific realism, is enough to secure a fairly solid grounding for the notion of natural kinds. Nevertheless, I cannot insist that accepting organic natures and purposes is the *only* rational, scientific option. Nor can I chase down the (justifiably important) dispute about the status of natural kinds. I can only hope that my reader will agree that both views are live scientific options.

2.2 No Natural Teleology

A second sort of critic accepts natural kinds but denies that these kinds have teleological features. For example, Bernard Williams asserts that: "The first and hardest lesson of Darwinism, that there is no such teleology at all, and that there is no orchestral score provided from anywhere according to which human beings have a special part to play, still has to find its way into ethical thought."[20]

He says elsewhere:

> The idea of a naturalistic ethics was born of a deeply teleological outlook, and its best expression, in many ways, is still to be found in Aristotle's philosophy, a philosophy according to which there is inherent in each natural kind of thing an appropriate way for things of that kind to behave.[21]

This sort of critic thinks that there are natures or natural kinds and stable species with objective properties, but does accept the notion that functional or teleological properties feature in purely biological descriptions of organisms.

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20. Bernard Williams, *Ethics and the Limits of Philosophy* (Taylor & Francis, 2011), 44.

21. Cf. Bernard Williams, "Evolution Ethics and the Representation Problem," in *Making Sense of Humanity: And Other Philosophical Papers 1982-1993* (Cambridge University Press, 1995), 109.

Williams voices a common opinion when he alleges an incompatibility between Darwinism and teleological realism. The proper response, as articulated by Hursthouse, Foot, Brown, etc., is that natural teleology is indeed compatible with Darwinism and does indeed provide "an appropriate way to behave" (or we might add, *ways*) that is "inherent in each natural kind of thing." Natural teleology is not incompatible with evolutionary theory.

Strictly speaking, evolutionary theory is a set of theses explaining the current multiplicity and shape of terrestrial life. It says absolutely nothing about teleological causes or properties.[22] There is room, in other words, within evolutionary theory for discussions about the evidence for or against non-mechanical teleological causation. Thomas Nagel is one who recently presented such a naturalistic theory of Darwinian natural selection combined with teleological causation.[23] I do not wish here to defend Nagel's view so much as to point out that teleological realism is compatible with evolutionary theory. Merely *asserting* that teleological realism in biology is incompatible with Darwinism does not make it so. Naturalistic teleological realism is certainly incompatible with a teleological nihilism distinctive of (certain brands) of metaphysical reductionism. If our knowledge of natural teleology is well-grounded enough then so much the worse for metaphysical reductionism.

One other response to Williams is possible. Williams despairs of finding human

22. The biological claims include the following: The earth, which is very old, has given rise to simple life forms which have become over slow and gradual changes given rise to myriad life forms, some of which are very complex. The driving mechanism of this process is natural selecting acting on the genetic mutations of a given population. All of life originated from one original place and species. A philosophical claim, often appended to the biological ones, is that the process of natural selection is *unguided by any causes but material-efficient mechanical ones.* But this claim is a philosophical belief, not a biological one. Polemicists will sometimes cite the popularity of the philosophical belief among biologists as proof that it is a "biological" claim. But we do not determine truth by vote. If belief in God was popular among biologists of a certain era, it does not follow that theological claims are strictly biological claims.

23. Thomas Nagel, *Mind and Cosmos* (Oxford University Press, 2012). Briefly, he suggests that while physical laws work impersonally on entities at a given time, teleological laws might work impersonally on the same entities over time.

nature, including a human telos, because he thinks that modern biological science somehow demands such despair. Rosalind Hursthouse correctly points out that Williams' worry is not actually rooted in the progress of modern science. Williams himself admits that "many of course have come to that conclusion before… that human beings are to some degree a mess… for whom no form of life is likely to prove entirely satisfactory, either individually or socially."[24] If many have come to that (philosophical) conclusion before, without the benefit of modern science, why would we think modern science is definitive for this philosophical conclusion? If modern science provides additional warrant for rational despair that was unavailable to our ancestors, what exactly is that evidence? It is not enough to gesture. According to Hursthouse, Williams' worry is not an argument at all but an expression of moral nihilism. He despairs of finding one purely satisfactory way of life, and so concludes that human beings are a mess. His may be a rational despair. But citing biological facts cannot prove it so. Whether we should despair or not must be settled by philosophical argument. To amass scientific evidence for p and then to assert the philosophical conclusion that q is a non sequitur.

2.3 Only Biological Nature

A third iteration of the "no human nature" objection is that if there is such thing as "human nature," it is nothing more or less than our biological and physiological makeup. Tim Lewens argues that "the only biologically respectable notion of human nature that remains is an extremely permissive one that names the reliable dispositions of the human species as a whole. This conception offers no ethical guidance…"[25] On Lewens' view, the only talk about our "nature" that would be scientific would be an indeterminate series of complicated stories about physical status and history: our genetics, evolutionary history, neurophysiol-

24. Hursthouse, *On Virtue Ethics*, 261, quoting from Williams.

25. Tim Lewens, "Human Nature: The Very Idea," *Philosophy & Technology* 25, no. 4 (2012): 459–74.

ogy, geography, and sociobiology. As Arthur Ward says, "one can affirm that humans have many innate instincts explained by evolutionary processes, yet deny that humans have a "nature" strictly speaking."[26] The problem, as we have seen, is that an empirical "scientific" conception of human nature has nothing to do with *ethics*. All of the complicated stories we could tell – if they are genuinely scientific – would be purely *descriptive*.[27] Bernard Williams expresses a similar objection by saying that nature has bestowed upon us an "ill-sorted bricolage of powers and instincts." He continues:

> [the problem] lies not in the particular ways in which human beings may have evolved, but simply in the fact that they have evolved, and by natural selection… On that [evolutionary] view it must be the deepest desire – need? – purpose? – satisfaction? – of human beings to live in the way that is in this objective sense appropriate to them (the fact that modern words break up into these alternatives expresses the modern break-up of Aristotle's view).

Williams objects that norms bestowed by the process of evolution would be those that lead us to survive and reproduce. Along similar lines, Fitzpatrick articulates a worry that evolution has bestowed upon us a very specific, ordered power but it is not the power to flourish but the power to reproduce. He says:

> If, however, natural functions and ends in living things are structured by special relations established through the process of evolution through natural selection, i.e., non-incidental relations between traits and a special subset of their effects that figured into the selection process, then natural teleology will not ultimately or generally be about the welfare or flourishing of organisms.[28]

On Fitzpatrick's worry, the fact that there might exist natural human norms to reproduce is irrelevant to whether or not willfully conforming to such norms would contribute to our

26. Ward, "Against Natural Teleology and Its Application in Ethical Theory," 1.

27. This worry is developed in detail by Hursthouse (*On Virtue Ethics* Chapter 10) and Stephen Brown (*Moral Virtue and Nature* chapter 5) and ibid., . All three think that ethics is not ultimately scientific.

28. William FitzPatrick, "Morality and Evolutionary Biology," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Spring 2016, 2016. Cf. William Joseph FitzPatrick, *Teleology and the Norms of Nature* (Taylor & Francis, 2000).

welfare.

A third proponent of this worry is Stephen R. Brown. Brown's defense of virtue ethics is ambivalent. He seems to *wish* he could make the account genuinely normative but concedes that it is, in the end, merely descriptive discipline.[29] Even virtue ethics, after being appropriately "naturalized," does not *commend* the virtues so much as *detail* the traits which happen to be adaptive for creatures like us to survive and propagate our genotype.[30] Brown thinks that human beings do have a characteristic form of life involving highly rarefied neurological and cognitive processes we do not observe in other animals; but, nevertheless, he thinks that biology reveals that species are the only natural kinds, and species aim to survive and reproduce.

2.4 Responses

The objection that human nature is *merely* a biological (and hence descriptive) concept is a relevant one. Despite the varying details, what Lewens, Fitzpatrick, and Brown agree upon is that if such a thing as human nature or the human life form exists, and if such a thing as a natural teleological norm for humanity exists, then it is the norm to reproduce and propagate one's genotype. Three comments are required to untangle this objection.

First, even granting that reproduction is the only natural end of non-human organisms, Lewens et. al., assume that human beings are *merely* animals. This can be queried. Above, I asked the innocuous question: Are human beings natural organisms? There are really three slightly different answers: non-naturalist answer is that humans are natural plus something more than natural;[31] the reductive naturalist answer is that human beings are

29. R. Stephen Brown, *Moral Virtue and Nature: A Defense of Ethical Naturalism* (Continuum, 2008).

30. Stephen Brown, "Really Naturalizing Virtue," *Ethica* 4 (2005): 7–22.

31. For example, a non-naturalist or religious philosopher could concede that humans are *partly* natural but would argue that human beings are exceptional in some way – in virtue of being endowed by God with the *Imago Dei*, or enjoying unique cognitive faculties such as practical reasoning. I am laying aside this possibility.

natural organisms like chimpanzees and nothing more; the non-reductive naturalist would answer is that human beings are natural organisms, leaving the rest to one side.

My view is that humans are *at least* natural organisms. Hence, my view can accommodate non-naturalism and non-reductive naturalism. The only position *incompatible* with mine is the crassly reductive one that asserts that human beings are no different from other primates – even in being practically rational. I can agree that human beings as a species are endowed by their history with a natural norm that leads them, absent countervailing factors, to reproduce. I simply deny that *that is all*. The only way these authors can sneak in the view that *that is all* is by begging the question in favor of a reductive view of humanity.

The reductive naturalist would insist that "human beings are natural," meaning that humans are merely machines made of meat, "heaps of glorified clockwork."[32] Smuggled into this assertion is an assumed picture of nature – a picture of bald nature – as a heap of glorified clockwork where all its myriad variegated objects are just parts of the heap. I have tried to argue above that even bacteria and plants give the lie to this picture. Furthermore, the irony is that if human beings were *merely* animals, and subject to *merely animal* natural norms such as instinctual survival and reproduction, we could not *know* ourselves as such. Yet the objection Lewens et. al. are posing depends on knowing ourselves as both animals and as self-aware practical reasoners.

My view, by contrast, is based on the empirical observations that humans are the only primate to engage in recursive, grammatical speaking; to associate in such complex societies; to plan their actions; and to innovate and create. Those observations are enough to render it plain, I think, that our natural telos will not likely be restricted to only to that which we share with the rest of the living world but will include our peculiar capacities for rational reflection – including rational reflection about whether or not to reproduce.

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32. Steven Pinker, *The Blank Slate: The Modern Denial of Human Nature* (Penguin, 2003).

Secondly, Lewens et. al. assume that the only natural end of organismic life is reproduction. But this can be queried as well. Certainly, living things sustain their own health and life and animals propagate their genes; living things *sustain* their life form and *transmit* their life form. But which is for the sake of which? Do organisms live in order to reproduce or reproduce in order to live? I do not see how one can assume this to be true without further argumentation. Empirically, we observe *both* that each species propagates its genotype *and* that each species lives its own particular form of life aiming at the development of its own good. My view is that reproduction is *one* of the natural ends of organic life, but that each species has other natural goods, such as health, survival, and the living of a characteristic life. Reproduction is a minimal good without which the other goods (which may or may not have anything to do with reproduction) could never come to be. Above, I defended two kinds of natural normativity: the mere existence of creatures bearing life forms as well as their teleological development into fully matured instantiations thereof. An embryonic mammal *is to become* a fully grown mammal. Hence, a human is a practical primate and a practical primate *is to become* a fully mature practical primate. In other words, one of the "norms" of practical rationality, we can venture, is that we *ought to be successfully practically rational*. Practical rational activity and success is part of what it means to be a health human being living our characteristic sort of life.

Thirdly, I would try to accommodate the insights of Lewens et. al. by conceding that reproduction is *one* of our natural ends. However, we need not jump to the conclusion that it is the *only* natural end or the only fundamental natural end. "Human beings reproduce" is an instance of a broader natural generic truth we can articulate by saying: "organisms survive and reproduce." Human reproduction as a generic pattern is compatible with exceptions: The celibate, the pre-pubescent, the single, the infertile couple, the homosexual couple, and others do not themselves reproduce. Nevertheless it may be true that humans reproduce (like every other organism). That *any particular individual* does not reproduce is not an

automatic sign of defect. It seems to me that if, *as a species*, we ceased to reproduce, something would have gone wrong.[33]

Making the distinction between the individual member of the species and the species itself raises other potential problems: Is the human norm to become virtuous merely species-specific and not specific to the individual? (I shall address this problem more fully in chapter 4.) For now, I must be content to assert that some virtues that are required for the flourishing of both species and individuals. Practical wisdom is required for *every* practical primate since that is what every member of the species is.

2.5 Knowing from Inside or Not Knowing At All

There is one further objection that I will return to in chapter 5, but that deserves a mention here. The objection that human nature is *merely* animal and hence the human telos is *merely* survival and propagation of the genotype was supposed to tell against the organic teleology I have been defending. My response is that, in practical rational creatures like us, our biological norms are joined with other norms.

In one sense, these critics agree with me. They think it is "obvious" that reproduction is not our *only* norm and so the merely "natural" or "biological" norm must be supplemented with the practical point of view – the point of view from within human subjectivity. Their worry is that once we introduce the practical point of view we are leaving biological naturalism behind. This is sometimes called "the Irrelevance Objection." I offer a fuller response to the Irrelevance Objection in chapter 6.

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33. The "Voluntary Human Extinction Movement" is an example of a group who find the reasons for reproduction *as a species* to be on balance outweighed by the reasons for ceasing to reproduce. Two comments: first, on first impression, VHEMT strikes most people as satire. It is a laughable movement. It is not necessarily mistaken, but it is certainly laughable. Secondly, VHEMT acknowledges the prima facie force of the need to reproduce. They argue that the need is outweighed. So in that they think species-wide reproduction is a default natural norm, we agree.

A final objection might come from someone who simply urged that human nature is mysterious. For all we can tell without the benefit of divine revelation, humanity is an anomaly. Our origin is shrouded in mystery, our destiny undecided.

I concede the point. My thesis is not that we already know everything about humanity that we ever will know or need to know. My thesis is that observing our nature as practical primates is a minimal starting point of knowledge upon which to build. Knowing that snakes are legless reptiles is not an end to scientific inquiry about them, but a beginning. Indeed, one cannot begin to learn more about 'snakes' unless one apprehends that 'snakes' exist and roughly what they are. So capturing the genus and differentia of a kind of organism is in fact necessary for creating a conceptual placeholder *on which to attach new knowledge*. Knowing what human beings are, however roughly, gives us a concept-category within which to fill in the depth and breadth of facts and information.

The main thesis of this chapter has been that the following generic is true: "human beings are practical, rational primates." This generic, I have argued, is defensible both philosophically and scientifically. It is discoverable both by humans examining our species from "within" the human point of view and by alien anthropologists examining our species from "outside" the human point of view (so long as they too were intelligent and rational). This generic picks out a property or set of properties we might describe as *human nature*. If this is anywhere near to correct, then human nature is not a complete mystery. We know *enough* about it to build a neo-Aristotelian theory of ethics grounded in evaluations of human beings by reference to the human life form.

3. Natural Norms, Human Norms

If the argument has been successful thus far, then, the best evidence suggests that human beings are practical, rational primates. This generic captures a set of truths about the human

life form and natural telos in the same manner as other respectable scientific statements, such as 'the platypus is an egg-laying mammal' and 'the baby chick becomes a rooster.' What is the ethical significance of this proposition? The remainder of the chapter fills out some details of the picture.

As natural organisms, humans pursue certain basic goods: food, water, rest, shelter, comfort, survival, reproduction. There is every reason to affirm the truth of generics such as "human beings eat food" or "human beings sleep daily." We should hypothesize that deviation from these prima facie norms would be prima facie defective. And that turns out to be the case. Anorexia, starvation, insomnia, and so on are disorders. Importantly, such disorders would plausibly be recognizable by an alien anthropologist. Just as a scientist may evaluate a particular wolf by reference to its life form, an alien anthropologist could evaluate a particular human's life and actions by reference to its life form. So much applies to both humans and other organisms.

Things get really interesting – and much more tricky – when we consider humans as reasoners. I have used the term 'practical primate' to encompass all the ways in which human beings distinguish themselves by being scientists, moral agents, planners, creative writers, deliberators, speakers, political agents, and so on. As mammals, human beings pursue mammalian goods. As practical rational agents, human beings also pursue practical rational goods: wisdom, friendship, world travel, education, entertainment. These seem categorically different. Are they so different as to ruin the pattern of naturalistic evaluation? Michael Thompson thinks not:

> … will and practical reason are on the face of it just two more faculties or powers a living being may bear, on a level with the powers of sight and hearing and memory. The second crucial thought is that an individual instance of any of the latter powers – sight, hearing, memory – is intuitively to be judged as defective or sound, good or bad, well-working or ill-working, by reference to its bearer's life-form or kind or species.[34]

34. Michael Thompson, *Life and Action* (Harvard University Press, 2008), 29.

Naturalistic evaluation of human beings on the basis of practical rational activities follows the same pattern as before. Every animal's nature or life form has genus and differentia. For human beings, our differentia is that we can engage in practical reasoning. Hence, our animality and our rationality both count. Being a primate entails that we are alive and share properties in common with all organic nature. Being a practical reasoning primate includes a set of capacities, including abstract thought but also more: speech, sociality, rational practice, and creativity. I also argued that the generic truth about humanity holds good in the face of important objections to the effect that we have no nature, or that our only nature is biological.

Some might object that the thesis, as it stands, is vague: do natural norms bind all individuals or only some? Does practical rationality free us from natural norms in certain cases? Thus far, I have argued that there is good reason to affirm a kind of prima facie natural normativity binding on anyone who belongs to our human species. I concede that I have not yet fully articulated what effect rationality has on our animal nature and rebutted the objection that it renders irrelevant all the prima facie natural norms arising from our animal or biological nature. Rendering this more clear is a task for the next two chapters on virtue and practical reasoning.

Here, I shall only point out that even the objection cites our ability to practically reason about our life form and its attendant natural norms, which reinforces the thought that humans are obligated to practically reason *well*. The new natural criteria by which to judge the human organism include reference to the practical rationality of its life form. For example, consider generics such as these: "The human being acts upon reflection"; "the human being speaks a language"; "the human being lives in society," and so on. These natural human norms are well on the way to being genuinely ethical. Deviations from them represent genuinely *human* defects. Folk morality recognizes something wrong with the jolly fool who willfully acts before deliberating, or the blowhard who willfully speaks

without restraint, or a paranoid hermit who willfully avoids all human society. Naturalistic evaluation explains *what exactly* is wrong. Such persons are not living up to their own human life form.

Three clarifications are in order: First, I am by no means suggesting that physical disability or psychological illness constitute "moral defect." Even serious mental illnesses can be borne by the virtuous and mature adult. Rather, the defects that do inhibit living a fully human life are defects of practical reasoning. Someone hearing-disabled or born without arms might be inhibited from widely-enjoyed pleasures of hearing music, say, or playing certain sports, not inhibited from achieving their deeper natural ends. The same can be said for mental illnesses such as depression and anxiety. A person with chronic depression, say, faces pressing challenges in every day life that are liable to inhibit certain pleasures. Nevertheless, in striving to cope with the local illness, it is possible that the extra effort of facing daily challenges can result in a more rapid acquisition of certain virtues, such as patience and courage.

A third clarification is this: Even if I am successful in articulating certain generic truths about humanity, not all the details have been supplied. I aim to capture the foundations of morality, not every last detail. Hence, my account will be a step toward providing rational basis for evaluation of the vast majority of individual human beings, but it is possible (and indeed quite likely) that I have not touched on certain extreme outliers. For example, persons of extreme practical wisdom are able to determine, correctly, when acting contrary to received social norms, or speaking without restraint, or living in solitude are the thing to do. Larissa MacFarquhar details cases wherein donors offer kidneys to strangers and foster parents adopt dozens of children.[35]

Likewise, persons of extreme practical folly are able to convince themselves that

35. Larissa MacFarquhar, *Strangers Drowning: Grappling with Impossible Idealism, Drastic Choices, and the Overpowering Urge to Help* (Penguin Press HC, 2015)

the "rules do not apply" to them. In some cases, extreme folly can be terrifying, as when it is joined with a mad quest for political power and personal gain, as Hitler or bin Ladin who had *some* conventional virtues and plenty of intellectual competence to put toward their heinous ends. In other cases, extreme folly can be pathetic, as when it is joined with self-defeating helplessness and spite. Dostoevsky's Underground Man demonstrates such extreme folly:

> I am a sick man…. I am a spiteful man. I am an unattractive man. I believe my liver is diseased. However, I know nothing at all about my disease, and do not know for certain what ails me. I don't consult a doctor for it, and never have, though I have a respect for medicine and doctors. Besides, I am extremely superstitious, sufficiently so to respect medicine, anyway (I am well-educated enough not to be superstitious, but I am superstitious). No, I refuse to consult a doctor from spite. That you probably will not understand. Well, I understand it, though. Of course, I can't explain who it is precisely that I am mortifying in this case by my spite: I am perfectly well aware that I cannot "pay out" the doctors by not consulting them; I know better than anyone that by all this I am only injuring myself and no one else. But still, if I don't consult a doctor it is from spite. My liver is bad, well–let it get worse!

While admitting that he is sick, he lets it get worse. While admitting that doctors know what to do, he doesn't consult them. While admitting he should not be superstitious, he is. While admitting that he is hurting himself, he continues out of spite. Dostoevsky's character is fictional but anyone who has come across such a dizzying person in real life is aware that the normal methods of encouragement and persuasion are ineffective. Thus far, my thesis has not offered an explanation of such extreme outliers. Nevertheless, by articulating what is true of humanity *generically* provides a foundation from which it is likely to assess the outliers. What makes the Underground Man so pathetic as a type (and so powerful as a literary character) is that he seems *inhumanly* wretched. My account offers a plausible explanation: he falls short even of enjoying a basic, human level of practical wisdom.

We are now in the position to articulate a second ethical upshot of the generic that

human beings are practical, rational primates. If acorns are (potential) oak trees, then it seems to follow that an acorn *is to become* an oak tree. I won't insist on using the word 'ought' (the acorn *ought to* become an oak) because 'ought' talk strongly suggests agency, which is absurd in the case of lower organisms. But I do insist on the *natural normativity* of that statement. The individual acorn that fails to become an oak *never* fully realized its nature. Likewise, if human beings are practical rational primates then it follows that human beings *are to become practical rational primates*. This normative generic proposition is rooted in the thought that humans *are* practical rational primates. But it goes further to suggest a teleological end: we are to become (in full actuality) what we already are (by virtue of membership in our species).

If becoming fully mature or fully actualized practical rational primates requires the actualization not only of our animal nature (through growth, maturity, reproduction) but our rational potential (through intellectual growth and knowledge, and practical wisdom that sublimates all of one's emotions and bodily desires and physical settings into a good life). In other words: Humans *are to become* practical, rational animals.

I do not intend to suggest that there is something inherently morally praiseworthy about the acquisition of factual knowledge, understood in terms of institutional education or advanced degrees. There is nothing inherently morally defective about a person or culture who lives in, for example, in ignorance of advanced knowledge about biology, chemistry, astronomy, and mathematics. Rather, every person from every walk of life at every stage of life stands in need of *practical wisdom.* One of the recursive aims of practical reasoning is to determine just how far and in what areas one needs to advance one's knowledge: a lawyer who does not spend years studying case history would be just as unwise as a farmer who does do so. Both would benefit from reflection on more universal human tasks such as making and maintaining friendships, dispatching familial and social commitments, and so on.

If our nature is to be practical, rational primates, then we have some general notion of our natural "function." I shall not go in for the Aristotelian view that the natural work (Greek: *ergon*) of human beings is contemplative science, an activity by reference to which success and failure may be judged. Rather, I shall be more ecumenical: the telos of every life form is, at the very least, to do all the activities that constitute its mature flourishing. So we should predict quite generally that the human telos is to become *fully mature* practical, rational primates. The conceptions of human nature (as practical reasoning animals) must be defined in relation to virtue (the excellences of rational practice and practical reason) and to human nature as it could be, our natural telos (to be excellent and mature practical, rational primates).

The third ethical upshot has to do with excellence. Suppose that the excellence of species x is a quality that both constitutes being an x and enables an individual to realize x-hood. Having a bill or being able to swim is both constitutive of being a penguin and also enables the young penguin to develop into maturity and realize its nature. Now apply that same pattern of evaluation to a human being. What are the excellences that are both intrinsic goods-of-a-kind for creatures like us and also instrumental to realizing our natural telos? The answer is: the virtues.

Virtues enable one to be a practical, rational primate, but they are more than instrumentally valuable. Virtues on my account will turn out to be *constitutive* of humanity in the sense that having them is both a path to realizing one's life form and also part of the definition of expressing that life form. It may seem to odd to categorize essential properties of humanity as morally praiseworthy traits. But the point is essential to my case. Virtues are not just "morally praiseworthy" qualities; they are *the human* qualities. Virtues are examples of *humanness* in its exemplary form.

I grant the notion that virtues are "the human" qualities is a reversal on the all-too-common notion that "human" qualities are neutral with respect to moral praise or blame.

The common notion is a mistake, so the reversal is justified. As I tried to argue above, all life forms discovered by scientific investigation and articulated in generic propositions are inherently normative. Hence, the concept of human nature cannot and should not be value-neutral. Rather, as Micah Lott points out, the concept of human nature:

> …must embody a normatively significant understanding of human life and action. For any conception of human form is a natural-historical account of 'how the human lives.' As with 'the tiger' or 'the mayfly,' a natural-history of 'the human' provides an interpretation of the characteristic and non-defective life-cycle of the species.[36]

Virtues on my account will turn out to be qualities that enable one to become – and partly constitute one's being – a mature organism. As I shall detail more in chapter 4, virtues are not just *any* natural good, for our physiological life consists of a process of maturation, nutrition, rest, exercise, homeostatic maturity, reproduction, characteristic activities, aging, and death. Many human goods enable this process, from oxygen, food, sleep, and so on. However, the virtues are a subset of natural goods pertaining to one's actualization of excellent practical reasoning and excellent rational practices. The virtues enable one to perform characteristically rational activities such as speaking, socializing, thoughtful acting, and creating. As I argued above, the peculiarity of our life form is that we are inherently self-aware language-users who grow up and live in a language-community with a history and tradition, and who are curious to know what is true about ourselves and our world. We are also extravagantly innovative, creating a myriad of tools, forms of art, and other products for our use and enjoyment. We are inherently conscious and self-conscious beings who speak, interpret, and create in the context of a linguistic community such as a family, society, and culture. We are inherently goal-oriented and self-determining beings who are to some degree able to acquire new traits or lose them, able to achieve our natural ends or fail to achieve them, able to become aware of the "givenness" of our biology and work with or

36. Lott, "Moral Virtue as Knowledge of Human Form," 770–1.

against it, and are able to treat an entire biological life not only as an event but as a project. Although we are pushed about by our biological instincts and by social pressures, we do not *simply* stumble around through life; at times we also act on *reasons*. That is, we deliberate about future actions, and reflect on past actions, and become puzzled about what is called for in the present. The success of our actions is not guaranteed, and the reasonableness of our justifications is not guaranteed. Rather, we muddle through on the best evidence we have.

The criteria of a definition of virtue, then, is that the excellences intrinsic to our life form are those traits that practical rational primates per se *need* to be what they are and to live life in such a way as to become what they can potentially become. Prima facie, a basic set of virtuous traits such as courage, moderation, and practical wisdom are incumbent upon every member of the species. There is room, even so, for further reflection and specification of virtues needed – more here, less there – by individuals belonging to varying social roles and in various stages of life. I shall attempt to provide a bit more specification in the following chapters.

Just as important as specifying the basic set of virtues that constitute natural goodness is identifying the basic set of vices that constitute natural defects. *Natural badness* would be include all those traits that practical rational primates as such *need to avoid*. Vices would be those acquirable traits over which one has some measure of control, rather than just any natural evil such as hunger, exposure to predators or extreme temperatures, disease, accidental injury, and premature death. Non-moral natural evils such as these do indeed tend to frustrate one's development toward the natural end of being a fully mature practical reasoner and hence each one partly constitutes species-specific misery. We should expect that moral vices (such as cruelty) at least partially contribute to other natural evils (such as premature death). But we ought not confuse the two. Even a virtue such as commendable generosity with ones resources might lead to hunger, and commendable courage might lead

one to premature death. However, the acquisition of a vice is the voluntary infliction of a natural, moral evil upon oneself and, potential, on others as well.

One final objection deserves mentioning. The cool-headed despair of a J.P Sartre would deny that human nature exists, ready-made, prior to one's willful self-creation and self-expression. He would deny, therefore, my picture of natural goodness as the actualization of one's life form and the excellent performance of one's function. Instead, he would insist that we are radically free to choose what we are and what we will become. The shape of this Sartrian thesis certainly sounds quite different from mine – but is it so different? Sartre agrees with me that what one *is* determines what one *ought to be*. For he says: "my freedom is perpetually in question in my being; it is not a quality added on or a property of my nature. It is very exactly the stuff of my being."[37] He agrees with me that one cannot choose to *not* choose. One is *necessarily* free. While one must decide *what else* is true of one's nature, one cannot choose to be an unfree thing. While Sartre's existentialist picture of a human being is that it is simply freedom, a pure will, a choosing thing, my more scientific picture is that a human being is a practical, rational primate. Our nature is constituted by both the genetic, biological, and physiological as well as the psychological and practically rational. Hence, on my view, the set of actions one must *necessarily* do is larger than simply the action of choosing. For example, one must become practically wise because one is practically rational. Just as Sartre would accuse someone who tried *not* to choose anything of bucking their nature, I would accuse someone who tried *not* to be a practical reasoning animal of bucking their nature. We agree that rebelling against one's own nature and life form is futile and foolish; we disagree about how best to characterize that nature and life form.

37. Hazel Barnes, *Being and Nothingness* (New York: Philosophical Library, 1956), 566.

4. Conclusion

This chapter has argued that human beings are practical, rational animals. I addressed and responded to several objections, and tried to bridge the connection between the descriptive/normative generic that sets the standard for our life form, and also show how specific ethical obligations fall out of that normative foundation: there is a prima facie obligation to eat or sleep and keep oneself alive, or to become fully practically rational over time. And I began to sketch how the specific qualities of excellence for practical rational primates are moral and intellectual virtues, including moderation and immoderation, justice and injustice, practical wisdom and foolishness, and so on.

The hypothesis is that virtues are a specific type of quality belonging to creatures like us. Virtues are the human specific goods-of-a-kind. The virtues constitute a set of normative constraints on what one is and what one ought to become arising from one's nature as a practical primate. The acquisition, then, of virtues both causes and constitutes the actualization of our life form as practical rational primates. Truly exemplifying our life form constitutes our species-specific flourishing. Virtues are commonly supposed to be "excellences" of human beings. Relative to what is such a quality excellent? The answer can only be that virtues are excellences relative to our nature or life form. They are the traits or qualities that enable us to actualize our life form, to fully express in a life what we are by nature. If what we are by nature is practical, rational primates, then virtues (we can further predict) will be traits pertaining to practical reason and animality. The sketch of a fully virtuous and wise human being would not, on this account, describe an unattainable moral ideal; like a painting of a fully grown oak tree, it would describe the natural state of a human being that has arrived at its natural end. It would be a sketch of what we truly are.