

Apprehending Human Form
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My immediate aim in this lecture is to contribute something to the apt characterization of our representation and knowledge of the specifically human life form, as I will put it - and, to some extent, of things 'human' more generally. In particular I want to argue against an exaggerated empiricism about such cognition. Meditation on these themes might be pursued as having a kind of interest of its own, an epistemological and in the end metaphysical interest, but my own purpose in the matter is practical-philosophical. I want to employ my theses to make room for a certain range of doctrines in ethical theory and the theory of practical rationality - doctrines, namely, of natural normativity or natural goodness, as we may call them. I am not proposing to attempt a positive argument for any such 'neo-Aristotelian' position, but merely to defend such views against certain familiar lines of objection; and even here my aims will be limited, as will be seen.

In order to bring my empiricist target into focus it will be necessary to consider the representation of things as alive quite generally, and at its most rustic and fundamental level, before moving to our proper study, viz. the representation of matters specifically human and practical.

Some elementary forms of representation of life¹

Suppose that you are an expert on some particular type of terrestrial organism. Let's say, to fix ideas, that you are an expert on the jellyfishes and their relatives in the phylum Cnidaria. A writer of science fiction, populating the seas of Jupiter in her imagination, would be hard pressed to come up with a range of life forms as strange as this collection of transparent drifting gelatinous creatures. Their peculiar labor and life plan is to render themselves as little distinct as possible from the surrounding aqueous medium, as if to realize some oceanographer's idea of a ghost.

Let our thoughts now place you on some distant reef. Armed with your extensive knowledge of the phylum, you set out, inevitably, to study the local gelatinous fauna. And now you come upon a very peculiar 'jelly', as they call them, one with novel parts and features. For a jelly so tiny it has an unusually large number of secondary mouths, as they call them; its tentacles are disproportionately short; its upper part, or 'bell', is extremely thin, spreading out over rest of its mass like an umbrella.

The specimen in question at first strikes you as a bit of a freak, perhaps. You wonder whether it might not be a defective instance of a species familiar to you, perhaps the cross jelly. You consider that maybe its development has been compromised by some complex chemical pollutant abroad in these waters. But now you come upon another individual jelly similar to it, and another; the reef is full of them, and so, you find, is another many miles to the south, beyond the reach of any similar source of potentially compromising chemistry.

At some point in the gathering of this storm of experience, condensation will occur. You will find yourself with a new object of explicit and independent thought: you will, that is, be in a position to recognize a novel species of jellyfish, a hitherto unknown form of gelatinous life, a new way for physical particles to be trapped in a vortex of life-processes. You will thus, for one thing, be in a position to introduce a new general name, a name for a living kind or form. Let's suppose you introduce the name 'umbrella jelly' for them.

Armed with this new name and concept you will be ready to frame new judgments. The

simplest range of new judgments would of course be those bringing given individual organisms under this life form, as bearers. We might call such claims life form attributions, or judgments of type A. Their general form will be something like this: X is a bearer of life form S, or X is a member of species S, or, in suitable contexts, simply X is an S or Lo, an S.

But your increasingly abundant experience as you study these reefs will put you in a position to frame certain distinctive general judgments as well. These judgments will not be about individual jellies taken singly or en masse, but, we might say, directly about the newly conceived life form itself - about umbrella jelly or 'the' umbrella jelly. The verbal expression of these general judgments will deploy your new general name in a sort of subject position; but the predicates attached to it will be otherwise attachable to representations of individuals. In these general propositions, you might, for example, describe the peculiar so-called life-cycle associated with life-in-this-novel-form. This cycle moves from an egg stage to a polyp stage to what is called the medusa stage, as it does in every form of jelly-life. But the familiar basic pattern has numerous peculiarities in the case of the umbrella jelly. You will take note of these in the monograph that you are, let's suppose, beginning to compose.

We may call the judgments you are assembling in your monograph natural historical judgments, or judgments of type B. Their general form will be something like this: the S is/has/does F, or S's are/do/have F, or S's characteristically are/have/do F, or it belongs to an S to be/do/have F, or this is (part of) how S's live: they are/do/have F. What particular verbal materials are used to join 'S' and 'F' in speech is of no importance; what matters is that the resulting nexus of signs, perhaps taken together with features of the context, expresses a distinctive form of general judgment.

Note, for example, that these general propositions about the life form have unusual temporal properties. Of any individual jelly here and now, you will speak in the usual temporal way. You will judge that it 'is' in some one of these phases and 'has been' in another, and you might form the expectation that it 'will later on be' in another. But of umbrella jelly as a general kind, or form, of life, you will speak in the first instance completely atemporally. In your monograph about the life form, you will say that on its first appearance the thing 'is' an egg, then later it 'is' a polyp, then later it 'is' a medusa. Or again: of this umbrella jelly hic et nunc, you will say that it 'is developing' into a medusa; of 'the' umbrella jelly you will say that it 'develops' into a medusa. Though temporal relations are somehow registered, everything is put into a special kind of present tense, grammatically speaking.² Your monograph will employ similar general atemporal judgments in its elaboration on the peculiar structure of the bell that characterizes the mature medusa phase of 'the' umbrella jelly. If the medusa of this kind is characterized by a fixed number of tentacles and mouths, you might assign a Latin name to each of 'them', and go on to characterize 'its' position and structure, again atemporally and generally, as doctors do for each of the human bones and dentists do for each of the human teeth. You view the various parts as akin to individuals in this enterprise, even though each can have indefinitely many instances.

We may call the complete class of true such general judgments the natural history of the umbrella jelly. Your little monograph will inevitably contain only the tip of this iceberg, which of course might be extended into the deepest biochemical detail. But in the ideal with which you are operating, your propositions belong to a totality, a connected whole, a system. In it each general atemporal proposition will explain others and be explained by others. Relations of dependence among the propositions would be marked by what are called teleological or functional connections. Your particular propositions, e.g. 'The medusa of the umbrella jelly has one hundred and forty four tentacles', are understood as out-takes from this possible connected system.

It is important to emphasize that the particular out-taken propositions, the natural historical judgments, are not mere reports of what is always or mostly or even often the case with jellies of this kind. You are not aiming at anything like a synopsis of what has happened. To paraphrase Elizabeth Anscombe, one hundred and forty four is probably not the average number of tentacles that mature umbrella jellies have had at any time.³ The point becomes clearer if we consider that your monograph might contain some such natural historical proposition as this: 'Upon fertilization, the mature umbrella jelly lays hundreds of eggs'. But you can hardly fail to have reflected that the population must for generations have remained more or less stable, at least with in a few orders of magnitude. It is clear, then, that only a tiny fraction of umbrella jelly eggs have ever realized the story you told about how 'the egg' develops into 'the polyp' and then 'the medusa' - a narrative which might seem a bit Pollyannaish from a certain point of view, but which is forced on you by the form of representation in which you are engaged. If even a sizable proportion of them had for some time followed, in reality, your account of what 'happens' to such a thing, in the natural history, then in a few generations the seas would have become completely clogged with gelatinous goo. Things would be structurally the same if your inquiry had found that tens of thousands or even tens of millions of eggs are produced. In your articulation of the natural history of the umbrella jelly your thoughts exhibit a certain form of generality, as one might say, but it is clearly very far from any familiar Fregean or statistical or ceteris paribus form.

Vital description and reciprocal dependence

Your enquiry is moving you closer and closer to the distant ideal of complete comprehension of the general atemporal natural history of the umbrella jelly, a complete account of how they live, or how life-in-this-form hangs together. But note that this monographic knowledge will at the same time position you to give increasingly rich temporal descriptions of what is going on with any one specimen here and now. We might call these judgments about particular organisms by the name of vital descriptions, or judgments of type C: their typical forms would simply be this S (or X) is/has/does G and its past and future versions - or more explicitly, it is a phenomenon of this S's life that it is/has/does G, together with its past and future forms.

For example, the better your natural historical knowledge of the umbrella shaped bell that the umbrella jelly grows - and the better you understand, say, its peculiar mode of contraction - the more clearly you will be able to tell when this individual jelly here and now before you in the reef is moving itself up or down the water column and when instead it is being moved by currents. And with improved atemporal monographic knowledge, you will be able to distinguish individual cases of bell-contraction that are a part of self-movement from those that are defensive reactions to perceived predators.

Or again, even though it might be that the individual medusa you are now observing is not engaged in any process of reproduction, and has not yet engaged in any such process, still your general monographic knowledge might position you to say, of these parts here and now, that they are reproductive organs. No connection with reproduction can be found in this individual case; and there never will be any if you now take a notion to dissect the specimen. It is only by appeal to the natural history of this form of life taken generally, and thus mediately by appeal to what you have observed in other individual jellies, that you are in a position to frame this judgment - these are reproductive organs - about the specimen given to you here and now.

This sort of case brings out what seems on reflection to be a general and thoroughgoing reciprocal mutual interdependence of vital description of the individual and natural historical

judgment about the form or kind.

At the outset, in your first vital descriptions of the first strange jelly you encountered, you did not make even latent reference to 'umbrella jelly kind' as such, which you hadn't properly conceived. But you did, I think, make latent demonstrative reference to 'this kind of jelly' or 'this form of jelly life' - the kind or form of jelly before you. Even at the outset you thought things like these are the tentacles and this is the bell and these are the reproductive organs. You thus implicitly thought that these bits, however deformed in the individual case, occupied the position or role of tentacles and bell and reproductive organs in 'this form of life'. Of course you thought wrongly that 'this form of life' was the cross jelly form of life. And so you thought some false things about 'this form of life' and thus also some false things about the parts of this individual - for example, that they were stunted and otherwise deformed.

Even such apparently purely physical judgments as that the organism starts here and ends here, or weighs this much, must involve a covert reference to something that goes to beyond the individual, namely its life form. It is only in the light of a conception of this form, however dim that conception might be, that you could intelligibly suppose, for example, that the tentacles are not parasites or cancerous excrescences or undetached bits of waste. Similarly, the recognition judgment - that this is the same organism as was sighted earlier - must presuppose a conception of the inner character of the life form supposed borne by what is sighted on the different occasions.

I will return to this idea of a reciprocal dependence between judgments about the individual organism and judgments about its form, and also to the correlative connection that facts about the individual can bear to facts about its form.

These three sorts of judgment about the umbrella jelly and umbrella jellies might be compared to three parallel forms of judgment about human speech - an analogy Darwin himself draws.⁴ As we distinguish various species, or natural forms of life, so also we distinguish various languages, or customary forms of discursive interaction. We classify individual organisms as bearers of particular life forms; and so also we classify people as speakers of particular languages (type A). A naturalist like you, we saw, will make numerous general and atemporal judgments about any given life form under investigation, and will attempt to join them into a system. And so also a linguist will make numerous general atemporal judgments about a given language she is studying, attempting to join them into a (quite different) sort of system (type B). She will characterize its lexicon for example, and assign particular meanings to particular words - words which admit indefinitely many individual 'tokenings', as tentacle 137 of the umbrella jelly admits indefinitely many instantiations.⁵ Finally, a naturalist like you will engage in much vital description of given organisms here and now, framing judgments about what they are up to and what parts these are and so forth. And so also our linguist will be positioned to say what words this person is now using, what sentence he is now asserting, and what, in fact, he is now telling his interlocutor (type C).⁶

But note again the element of reciprocal dependence: once our linguist gets into the system, many of her tensed remarks about individuals will presuppose generic atemporal thoughts about the language in question. For example, any description of a given speaker hic et nunc as telling another that snow is falling or that snow fell yesterday will presuppose a general assignment of meanings to words. Here too, then, there is a sort of dependence of tensed judgments about individuals on untensed general judgments. In each case, vital and linguistic, the connection between the given individual (or pair) and the property ascribed to it is mediated by the presence in it (or them) of a determinate form.

We might say, then, if we care to push the linguistic analogy off a cliff, that a life form is like a language that physical matter can speak. It is in the light of judgments about the life form that I assign meaning and significance and point and position to the parts and operations of individual organisms that present themselves to me. As French or English are to the people and brains of which they take possession, so are things like umbrella jelly and cross jelly to the physical particles of which they take possession. And just as there is no speech - no discourse, no telling and believing people, no knowledge by testimony - without a language that is spoken, which is to say, without a framework for interpreting what is going on between the speakers, so there is no life without a life form, which is to say, without a framework for interpreting the goings-on in the individual organism.

Judgments of natural goodness and standard

But let us move to two further forms of judgment we frame about living things. Note that you will as time goes on be in a position to make judgments of defect and deformity in individual umbrella jellies. Having given names to all one hundred and forty four tentacles of the umbrella jelly in your monograph, you will be able, e.g., to say when an individual jelly is missing a tentacle, or when a tentacle is present but broken. You will be able to say when one of the many mouths is malfunctioning, when contractions of the umbrella-like bell are well or badly effected, and so forth. We might call these judgments judgments of natural goodness and badness, judgments of type D. Their canonical form would be something like this: this S is defective/sound, as an S, in that it is/has/does H. If some forms of defect or deformity are frequently seen, you might invent special concepts to capture them, as we speak of lameness and blindness in human beings and etiolation in green plants.

Note that what sorts of things are aptly judged good or bad, defective or sound, in the parts and operations of a given umbrella jelly will differ, in detail at least, from what counts as good or bad in jellies of other kinds - still more from what counts as good or bad in the workings of oak trees, bacteria or squid. When you thought, of the first specimen you sighted, that it was a cross jelly, you thought it was woefully deformed. And if it had been a cross jelly, it would have been woefully deformed. But now, with further observation, you can see that that original specimen was quite sound, except perhaps for a few broken tentacles. It is just that it belonged to a different kind, and was thus subject to a different standard.

In speaking of 'different standards for different species or kinds or forms', I have implicitly suggested that you will by degrees also come to form general judgments with evaluative content, a fifth form of judgment, type E. You will be positioned to say when in general an umbrella jelly is formed well or badly or operating well or badly, in respect of some part or capacity. We might call such general judgments judgments of natural standard. Their general form would be something like this: an S is defective/sound in a certain respect if it is/has/does G. The system of general judgments of natural standard about umbrella jellies will closely track the system of atemporal natural historical judgments about the same kind or form. Indeed, judgments of natural standard might be said simply to transpose our natural historical judgments into an evaluative key: the monograph you have been composing might be viewed as indirectly articulating the ideal, standard or perfect operation of a bearer of this kind of life. A natural history, as we saw, does not describe what happens on average or mostly; its relation to facts about individuals is evidently much more complex.

Your observations, which are at bottom always observations of individual organisms, will

thus lead in the end to a possible critique or evaluation of individual organisms and their parts and operations. And they will lead to the articulation of general standards of critique applying to organisms of the kind in question. This sort of critique of the individual is everywhere mediated by the attribution to it of a specific form; to bring an individual under a life form is, we might say, at the same time to bring it under a certain sort of standard. It goes without saying that this sort of critique or evaluation of an individual is not the only sort possible: a dog might be profoundly deformed as a dog, but prize-winning at a general congress of St. Bernards; a tree might be woefully deformed as a Japanese black pine, but prize-winning at a bonzai exhibition.

Note that here again your position is much like that of our imagined linguist. With time she too will take on a critical role. She will be able to declare whether particular statements made by her informants are true or false, if it happens that she knows about the matter under discussion (type D). And if she arrives at the point of a so-called truth theory for her object language, she will be able to say when in general a sentence of the language is true or false (type E).

The role of observation in the framing of judgments falling under these diverse types

I have been describing the progress of your mind as it arrives at particular judgments of five types, A through E. The judgments take as their theme either individual organisms - X or this S - or else the general 'life form' or 'kind' or 'species', S, that these individual organisms exhibit, bear, or fall under. As I have written them, these are mere schemata of judgment, colorless abstract forms. In the course of your study of those jellies on those reefs, you made numberless particular judgments falling into these forms, filling in the blanks in a variety of ways. We might compare these abstract shapes with the shapes printed in a fresh children's coloring book. Faced with a tide of umbrella jellies, you colored them in, so to speak.

The point I want to emphasize is that you did this filling-in or coloring-in - which was both factual and evaluative, temporal and atemporal, general and particular - entirely on the basis of observation, observation performed on a couple of distant reefs. You deployed your senses in connection with certain external objects and as a result were able to fill these abstract judgment frames with manifold contents. One class of such judgments, the natural historical judgments, you included in your monograph.

This coloring-in or blank-filling would of course have gone quite differently if you had been a fern expert faced with some unusual ferns, or a primatologist faced with unclassifiable individual primates, or a bacteriologist faced with a peculiar colony of microbes. The differential impact of outward things, living things, upon your senses and instruments would account for the different concrete judgments framed in each case.

Let us apply these thoughts to our real topic, which is the specifically human form, a product of evolutionary history quite as strange in its way as the umbrella jelly. And it seems plain that this empiricist or observationalist picture of things holds for much of what is known about things specifically human. We certainly deploy our five forms of judgment in this connection: 'human' can be put in place of 'S'; your name can replace 'X'. And we happily fill in the other blanks in these judgment-forms on the same sort of ground we met with in the case of the umbrella jelly: we do it, that is, on the basis of observation, or intelligent experience with individual members of the kind. It is clear that the ordinary operations of a doctor or a dentist, for example, will involve implicit or explicit deployment of all five forms of judgment. And it is equally clear that the distinctive

knowledge of a doctor or a dentist is purely empirical, or founded on observation, formally no different from your knowledge of the umbrella jellies.

The empiricist propositions

If we take the cases so far canvassed as typical, the overwhelming role of observation in supplying our abstract forms with determinate content might lead us to accept the following propositions. I will call them the empiricist propositions:

The concept species or life form is itself an empirical concept.

Concepts of particular life forms (moon jelly, umbrella jelly, white oak, horseshoe crab, human) are invariably empirical, or observation-dependent, concepts.

Singular representations of individual organisms are invariably empirical representations.

Substantive knowledge of any given individual organism (propositions of types A, C and D) can only arise from observation.

Substantive knowledge of the character of a given species or life form (propositions of types B and E) can only arise from observation.

The empiricist propositions might be opposed in a number of ways, but my purpose is to oppose them with something like the following anti-empiricist propositions:

The concept life form is a pure or a priori, perhaps a logical, concept.

The concept human, as we human beings have it, is an a priori concept attaching to a particular life form.

A mature human being is typically in possession of a non-empirical singular representation of one individual organism.

Individual human beings are sometimes in possession of non-observational knowledge of contingent facts about one individual organism.

Human beings are characteristically in possession of some general substantive knowledge of the human life form which is not founded empirically on observation of members of their kind, and thus not 'biological'.

The empiricist propositions are rarely affirmed explicitly, but I think they are - or many of them are - implicit in much of our thinking about life and human life. A comparative survey of opposing pairs of propositions from the two lists will show that each disputed point raises potentially absorbing metaphysical and epistemological issues, just by itself. But, as I have said, I am moved to consider the merits of the empiricist propositions by the place that some of them occupy in ethical

theory.

Normative naturalism

More particularly I want to consider the place the empiricist propositions implicitly occupy in much of the received criticism of ethical doctrines which appeal to notions of natural normativity or natural goodness.

By such a doctrine I mean, in the first instance, a theory of the type sketched in the concluding paragraphs of Elizabeth Anscombe's 'Modern Moral Philosophy' and lately developed in the last part of Rosalind Hursthouse's book On Virtue Ethics, and still more recently in Philippa Foot's book Natural Goodness.⁷ These works are of course united in a number of ways, for example in the use they make of the concept of virtue. I will focus, though, on the special significance they attach, within ethical theory, to the idea of the human - that is, to the concepts of a human being and of the specifically human life form and of so-called human nature.

The idea of the human that these writers propose to make central to ethical theory is not the abstract idea of a rational being or a person; it is not what Kant meant in speaking of 'humanity'. Like human beings, the Martians and other so-called humanoids of science fiction would be 'persons' and 'rational beings', for sure, but they wouldn't be covered by the concept of a human being that is in question. That concept expresses something more specific: it would not even cover those so-called 'twin humans' whom philosophers sometimes imagine. These are (on some versions) creatures exactly similar to us, living on a planet, Twin Earth, which developed independently of ours, but which nevertheless came to be like Earth in any respect you care to mention. The twin humans are bearers of a different life form, viz. twin human, just as the languages they speak are different languages, even if it is part of the story that they are qualitatively the same as the languages we speak.

The concept human as our naturalist employs it is a concept that attaches to a definite product of nature, one which has arisen on this planet, quite contingently, in the course of evolutionary history. For our naturalist, this product of nature is in some sense the theme of ethical theory as we humans would write it. But there is in the larger literature a kind of fear or dread of any appeal to this sort of concept in ethical theory, and this is what I want to address. The contemporary moralist is anxious to leave this concept behind, and to develop his theory in terms of 'persons' and 'rational beings', but if the naturalist is right the concept in question is everywhere nipping at his heels. There is in practical philosophy a kind of alienation from the concept human and the sort of unity of agents it expresses.

A typical difficulty that the normative naturalist means to resolve is this: how are we to account for the intuitive difference between considerations of justice and prudence, on the one hand, and those of etiquette and femininity, on the other? If I criticize an action as unfeminine or as a violation of etiquette - as 'not done' or not comme il faut - my appeal is at best, it seems, to convention only; in so speaking I am acting precisely as an arm of convention. If now I criticize an action as unjust or imprudent, or if I praise it as just or prudent, custom or convention may well be part of the story. But I seem to be aiming at something more. My evaluation purports to have what philosophers sometimes call 'normative authority'; it purports to speak directly to the genuine 'reasons' that the agent 'has'. It has been a puzzle how we are to understand what these phrases mean, what this further purport is. For our naturalist this further purport is a matter of the supposed goodness and badness of the operations of will and practical reason that would be exhibited in the action judged of. And goodness or badness in the operation of these powers is to be understood, in

point of logical position, on the model of goodness or badness of sight, or the well-formedness or ill-formedness of an umbrella jelly's tentacle. Unlike judgments of etiquette or femininity, judgments of prudence and justice claim a place on our five-fold chart. The judgments in which I criticize the actions of individual persons as unjust or imprudent, or criticize the people themselves as unjust or imprudent people, will thus be special forms of what I called judgments of natural goodness or badness, type D on our list, as judgments of blindness and etiolation are. A formulation of general normative principle, or of a basic general form of reason for action, where such a thing is formulable, will be a specific type of judgment of natural standard, a specific form of a type E judgment. The reasons that we 'have' are the ones we take account of when we are reasoning well.

That these evaluative judgments pertain to intellectual powers like will and practical reason must introduce numerous peculiarities into their description. But, on naturalist hypotheses, they nevertheless fall onto the same plane in logical space as claims about what makes for good sight. That there is a specific difference could hardly argue against the presence of a common genus.

Life form relativity

Consider, though, that no one thinks that the fact that an individual organism does or doesn't make certain color-discriminations, just by itself, shows that its visual capacity is defective or sound. In different sighted species, different discriminatory powers count as good sight. In the life of the umbrella jelly no sight is necessary at all. Similarly, what would seem lame in a hare is sound movement in a tortoise. Knowledge of what counts as good sight, or as a sound capacity to move, is thus substantive knowledge of the specific life form in question.

For a normative naturalist our fundamental practical evaluative knowledge is, as we have seen, substantive knowledge of what makes for a good will and a good practical reason in a specifically human being. What would be virtue in the bearers of another intelligent form of life we don't know. We have no more insight into what would count as a 'reason for action' among Martians, for example, than we have into what would make for good eyesight among them, supposing they have eyes. The mind goes blank at the approach of the question. Thrasymachus and Callicles, in Plato's dialogues, argued in different ways that justice as we ordinarily understand it is mere convention only, and that to take its considerations seriously is a vice in human beings. The so-called just agent is a human bonzai, or worse. Anscombe, Hursthouse and Foot all earnestly deny this, insisting that it is the unjust agent who is twisted and unsound. But I think they should grant that those immoralist teachings might be exactly right for our imagined Martians. Perhaps, that is, our writers should confess to immoralism about the Martians. Can't we suppose a sufficiently alien life form to exhibit some quite other way of getting on - that the practical life that is characteristic of their kind has some fundamentally different structure, even though it is mediated by objective judgment and conceptual representation, as ours is? The peculiar structuring imposed by considerations of justice will have no place in it.⁸ Our practical knowledge, though it is general, is not so general as to rule this out. In this respect normative naturalism breaks with the received Kantian and Humean conceptions of practical rationality, each of which appears to claim possession of a table of principles of sound practical reasoning that would apply indifferently to humans, twin earthers and Martians alike.

These points bring out that any given normative naturalist theory will have two levels, one formal, as we might put it, and the other substantive. Critiques of normative naturalism often leave it unclear to which level their arguments are pitched. Only the first level is at issue here. This formal aspect of the theory might be accepted as much by an 'immoralist' like Callicles or Gide as

by an orthodox Aristotelian - namely the naturalist interpretation of the content of judgments of goodness and badness in practical thought as coming under our fourth and fifth headings as more determinate forms. Callicles, in the play he makes with the opposition between what belongs to nomos only and what belongs properly to phusis, would seem to be explicitly a normative naturalist in this sense. Or, to put the point another way, the formal aspect of the theory could be accepted without alteration by bearers of radically alien forms of 'intelligent life'; it is after all essentially a matter of logical analysis. The substantive part of the theory, by contrast, would be addressed to human beings in the first instance, fellow bearers of the form our writers bear, and would amount to the isolation of a table of virtues or basic types of reason for action appropriate to human beings. It is an attempt to make articulate an aspect of something that is present equally in writer and reader, namely what I am calling the specifically human life form. It is here that the struggle with the naturalist immoralist will be pursued: this is a struggle, as we might say, over different conceptions of specifically human life; or, to approach the matter from another direction, it is a dispute over which forms of upbringing damage the human individual - casting a spell on him as Callicles puts it and putting him into mental shackles and so forth - and which upbringings rather yield a sound human practical understanding.

Often in writings on practical philosophy, we find moral principles developed, or substantive formulations of reasons adopted: 'It is impermissible to do A', we read, or 'One has reason to do B'. The question of the scope of this generality, or of the form of generality contained in such judgments, is rarely posed. Suppose, for example, that our writer is rendering verdicts on sundry variants of Philippa Foot's 'trolley problem'. Is she developing the normative consequences of the particular local ensemble of practices under which we bearers of Western modernity live? Or is she proposing a cosmic scope for her propositions, speaking to Martians as well as to me? Doctrines of natural normativity may be understood as holding that the highest form of generality that can attach to such claims is the form of generality that is also found in our natural historical judgments or judgments of natural standard.

Biologistic complaints

This then is the sort of theory at issue. My thought, though, is that if the empiricist propositions are taken for granted, this naturalist line of thought will inevitably seem somehow absurd. It might seem, for example, to constitute a sort of vulgar evolutionary ethics: a system, in any case, which doesn't know how to distinguish a mere 'is' from the genuine moral or normative "ought" (for 'is's are what all of our forms of judgment, A through E, might seem in truth to record). And such a theory might seem to give a wrong position to natural facts in the formation of ethical judgment, to turn ethics into a sub-discipline of biology, and thus to deny what is legitimately called the 'autonomy of ethics'. It might seem to lend an 'unconvincing speaking part', as David Wiggins puts it, to facts about our nature. It might seem to express an unsound desire to give a sort of external 'grounding' to ethics, as John McDowell has put it, a grounding ethics doesn't need and can't have.⁹ It might, finally, seem to medicalize moral badness, to reduce it to a sort of psychological and volitional ill health.

Each of these complaints rests, I think, on at least one of the empiricist theses, all of which are, I think, false. The threat of 'biologism', as we might express their common theme, only holds if the concept human - which for the naturalist is the highest concept of practical philosophy, one which all of our genuinely normative predication implicitly involves - is an empirical and biological concept, and only if all substantive knowledge about the human life form is empirical and biological

knowledge. If that is right, then the critique of normative naturalism as biologicistic presupposes a biologicistic conception of the representation of life, a conception encoded in our empiricist theses, a conception according to which truth about the human form must come into the practical intelligence 'from outside'. Perhaps, that is, it is not the normative naturalist who is importing a coarse empiricism into the discussion, but her critic.

Against the empiricist propositions

Let us begin with the empiricist thought that the concept of a life form is an empirical concept like the concept of a quantum state or a mammal. Against this, I would like to claim that the concept life form is more akin to such logical or quasi-logical notions as object, property, relation, fact, or process.

A first and rather intuitive sign of this, I think, is to be found in the extreme plasticity of the five forms of speech and judgment we discussed at the outset. A life form, we might say, is something a representation of which can take the position of 'S' in those and perhaps some other related forms. But it is intuitively clear that we can get readings of 'S' that are utterly different from one another in material content. The umbrella jelly, the hayscented fern, the spirochete, the human being, slime molds, turnips, tarantulas: how much more different can things get? Yet in all cases our five forms of judgment find a foothold. We see nothing unintelligible in imagining even more violently different forms of life arising on other planets, or even under different regimes of fundamental physical law. It seems that a very abstract grammar finds a place in the description of all these things, the grammar we found by reflecting on your study of the umbrella jelly. This intellectual structure is not a response to a common empirical feature of things, but is somehow carried into the scene. It is in this respect, I think, that the grammar of the representation of life is akin the grammars of thing and property, thing and relation, and thing and process, each of which too can assume wildly various sorts of content and coloration.

The a priori character of the idea of a life form becomes clearer, I think, if we reflect once again on the reciprocal dependence between natural historical judgments, the general atemporal judgments about life forms, S, and the temporal or tensed vital descriptions of individual organisms X.

One's first naive thought is that a typical vital description of an individual living thing is just a matter of studying what is going on with the individual taken by itself. I set my sights on a definite region of space, one occupied by an organism, and declare what is there. It is then by intelligently assembling these form-independent vital descriptions of individuals that I first build my way up to any general claims about a life form I might suppose these individuals bear - which is of course exactly how things would stand if I were proposing to frame general propositions of a statistical nature or a proposition bearing Fregean generality.

But, as I have already suggested, almost everything we think of an individual organism involves at least implicit thought of its form. Consider, to emphasize the point, that determinate phenomena of life can be quite differently constituted, physically speaking, and that, on the other hand, similarly constituted things can add up to quite different phenomena of life. The wings of a dragonfly and the wings of a sparrow have little in common; and the wings of a dragonfly or sparrow would still have been wings even if, thanks to prompt predators, they never got to the point of actually being used in flight. By contrast, the division of an amoeba and the division of a human cell have a lot in common; the essentials are described in some detail on the same pages of the average introductory text. But while amoeba division is reproduction of amoeba-kind, human cell

division is not the reproduction of humankind. The description of something as a wing, or of a process as one of reproduction, is thus not a matter of the material constitution of the thing taken just by itself - no more than the description of a person as telling someone something is a merely physical description of sounds or vibrations in the air. In another language the same sounds might amount to telling someone something different; and the same thing might be told elsewhere in quite different sounds. Applications of the concepts wing and reproduction to individuals are everywhere implicitly mediated by an appeal to the underlying life form which the individual exemplifies, an item potentially described in a system of general propositions of the type discussed above.

This 'externalism' would seem to pervade the description of things precisely as alive: the living being, as living, points beyond itself in a quite particular way; the idea of a life form, as something atemporally describable, and as something at least potentially borne by many individuals, seems to be contained in the idea of life as a process that unfolds in time.¹⁰ On reflection, that is, it appears that our whole five-fold grammar comes into deployment together. If this is right, then we are very far from an account of the concept life form as an abstract precipitate of observation, which is the claim contained in our first empiricist proposition. The concept of a life form, or the specific form of generality associated with it - or the apprehension of the concomitant form of unity of things happening here with things happening there - are everywhere at work in any materials of experience from which it might be abstracted. We arrive at an explicit conception of it by reflection on certain of the forms of thought of which we are capable - as we arrive, for example, at the general concept relation. The opposition of individual organism and life form is, as we might say, a more determinate form of the opposition of individual and universal in general, and shares the a priori character the latter.¹¹

Skip now to the third empiricist proposition, that every singular representation of an individual organism is somehow grounded on observation. This would be obviously false if it meant that I could not think of an individual organism except where it is presented to my senses. I might manage to single out an individual organism for thinking of through memory of past observation, or through a hypothesis founded on traces the thing has left, foot prints for example; or I might acquire the use of a proper name for the thing from other peoples' testimony; or from some combination of these things. The empiricist thought would be that all of these possibilities must rest in the final analysis in some sort of observation somewhere, that is, on some sort of passivity in relation to the organism in question.

Though it has the ring of truth about it, it seems plain that the proposition is false. It fails to take account of the peculiar singular representation mature humans are able to effect, a representation, namely, of themselves through the first person, or through the I-concept. This representation has a completely different status from any we might have envisaged in thinking about your intellectual labor upon the umbrella jellies. Its connection with the thing it is about does not arise from the user's sensuous passivity in relation to the intended object. A use of I or 'I' is connected to the thing it is about by the fact that the thing it is about is using it in thought or speech. As not resting on link to observation, the I-concept is in some sense a non-empirical or a priori representation. This of course does not keep it from acting, in each case of its use, as a singular representation of what is in fact an individual thinking organism, one which, say, occupies a certain amount of space.

Let us piece together these two facts - the apriority of the idea of a life form and that of the first person concept. It is then easy to see that each of us can readily come into possession of an a priori representation of what is in fact the human life form, thus defeating the second empiricist

proposition. This holds despite the fact that this life form is one with a natural history like any other, characterized by a certain number of teeth and bones and an unusually large brain. Each of us can lay hold of this item in thought under the title 'my life form' or 'the life form I bear', descriptions which contain no empirical content at all. Just as I can think the empirical thought, I have a wounded knee, using a non-empirical representation as subject, so I can think the empirical thought, the life form I bear has several other bearers in this room, with this non-empirical subject term.

Someone might raise the objection that it might be open to doubt whether I actually bear any life form. So maybe the definite description 'the life form I bear' could fail to answer to anything, as the description 'the present King of France' does; though the concept is pure, perhaps it is empty. Certainly it doesn't seem to carry its referent onto the scene as each use of 'I' and the I-concept does. But this of course is to overlook that deployments of the idea of my life form will be in acts of self-conscious thought or speech. Thought and speech are phenomena of life if anything is. So the characterization of an individual organism here and now as thinking or speaking, like the characterization of it as eating or breathing or leaving out, is a life form-dependent description: take it away the life form and we have a pile of electrochemical connections; put it back in and we have hunger and pain and breathing and walking, indeed, but, in suitable cases, self-conscious thought and discourse as well. The life form underwrites the applicability of these diverse state- and process-types in individual cases.

Though it might seem an unwholesome Cartesian manoeuvre, it is I think harmless to re-express the a priori concept in question, or anyway to formulate another, in some such terms as these. Rather than speaking of 'my life form' we might speak of 'the life form of which this very thought is a manifestation' or 'the life form that underwrites the character of this very thought as thought'. So I might think, on empirical grounds, but truly, something like this: the life form that underwrites the character of this very thought as thought has several other bearers in this room. Though this is an empirical proposition, it contains a non-empirical representation which is in fact a representation of the human life form. My life form comes into this thought by its being manifested or exemplified in the thought itself, rather as I come into my I-thoughts by being the thinker of them.

In the self-conscious representation of myself as thinking, as in all my self-conscious self-representation, I implicitly represent myself as alive, as falling under life-manifesting types. And in bringing myself under such types I bring myself under a life form. I carry our five fold grammar onto the scene, and with it the life form position. Self-consciousness is thus always implicitly form-consciousness. I might now engage in the sceptical doubt whether this life form of mine has any other bearers, and I might not know much about how to fill in the blanks in our five forms - but I bring the basic duality of life form and individual bearer into the picture.

Whichever path we take, it seems to follow then that every reflective human being is able to lay hold of the human life form through something other than observation, and is thus able to conceive it through something other than a so-called biological concept.

Though these remarks, if they are right, suffice for a refutation of the second empiricist proposition, it might be thought that the characterizations I have offered are a bit sophisticated. They don't seem quite to capture the concept human, or quite what is expressed by words like 'human', Mensch, homo or anthropos, though they designate what is in fact the same thing. The concept human seems to be a simple and rustic concept, one not involving any subtle use of the first person or a covert reference to something like 'this very thought'. That is quite right, it seems to me, but can easily be remedied without introducing any empirical material into the story.

Everyone grants that it is in the nature of the first person concept to refer to the thinker of the thought in which it is deployed; that is the kind of concept it is; that is its 'character', in Kaplan's language.¹² It would be inept, though, to analyse the I-concept as the complex concept the thinker of this very thought. But only slightly inept: it is an equivalent concept, at least in ordinary extensional contexts; it can replace the I-concept in any such thought. The thinker of this very thought is wearing shoes, I might judge.

There was perhaps a similar slight ineptness in our account of the concept human. Here too we should simply say that it belongs to the character of the concept human to refer to, or lay hold of, the life form manifested in particular deployments of that concept; that the kind of concept human is. It is, if you like, the 'first life form' concept. Its function is to bring into explicit thought the life form that mediates the relation between the thinking subject and the act of thought in which this concept is deployed, i.e., the life form that underwrites the character of the latter precisely as thought. Its reference thus depends on the thought in which it appears, but it does not itself refer to that thought or to the thinker of it. This entails that in some sense Martians and twin humans might deploy the same concept, or work the same intellectual function, as we do, but that in deploying it they will be bringing their own different life forms under discussion. Similarly, a Martian might possess the first person concept, as I do, but his deployments of it will refer to himself and not to me.

I said that our normative naturalists are marked off by the central place they give to the concept human in practical philosophy, as its highest concept and the index of the generality of its most abstract principles. This feature of these doctrines has been greeted with alarm by the larger literature as introducing something empirical or even biological into ethical theory. If the present line of thought is sound, we can I think see that there is nothing in this. The concept human is a pure concept of the understanding devoid of even the least empirical accretion. We no more poison our practical philosophy by using it to set our theme therein, than we do our rational psychology by taking the I think as setting our theme therein.

In suggesting, for example, that the concept human marks the most extensive scope that I can intelligibly attach to my substantive general practical thoughts - e.g., to my judgments about what reasons 'one' 'has' - our naturalist is saying that the most extensive scope these thoughts can have is whatever scope may be had by the life form that is manifested in these very thoughts, and which underwrites their character as thoughts. That is: wherever we may find instanced that by which this thought is thought, there this thought may have application. In this exposition of the generality of fundamental practical propositions there is no appeal to any biological concept nor to any concept alien to practical thought: there is appeal only to what, as its formal element, constitutes practical thought as thought and as practical.

Materials are now in place for a prompt refutation of the two empiricist propositions that have to do with knowledge. We have seen that certain representations of individual organisms, of particular life forms, and of at least one abstract category, viz. life form itself, do not derive from observation - and thus for sure are not specifically biological representations. Can we now find substantive thoughts into which these representations are inserted, which likewise do not depend, for the knowing of them, on empirical observation?

The first of these empiricist propositions, the fourth on my list, says that all knowledge of vital descriptions about individual organisms is founded on observation.

Again it seems plain that this proposition must fall immediately. The self-knowledge you possess in self-conscious awareness of your psychological states would once again seem to supply

an easy refutation. That you are in pain or are hungry or that you are thinking something are, after all, as much vital phenomena as that your heart is beating. They presuppose among other things the presence in you of a life form with pain- and hunger-potential and a power of thought (see below); yet you are able to bring yourself under these particular vital descriptions - I'm hungry, I'm in pain, I think there's something wrong with my liver - without adverting to any inner or outer observation of yourself much less of your life form or kind.

A more interesting type of case for our ultimately practical purposes was familiarly investigated by Elizabeth Anscombe: namely, my knowledge of what I am doing, where I am doing it fully intentionally.¹³ This knowledge is, at least in many ordinary cases, again not founded on observation of the thing known. Consider for example my knowledge that I am taking the camera upstairs to put it away, if that's what I'm doing. I might declare this knowledge to you as I leave the kitchen table. Of course, this is the sort of thing I could be wrong about. Maybe an abyss has opened between me and the staircase, or maybe I'm confused, and the house I'm in doesn't have a second floor. Then it wouldn't be true and I wouldn't have knowledge. But in many ordinary cases my thought that I am taking the camera upstairs will be true, and it will be knowledge. But this knowledge will not be founded on any sort of observation, inner or outer, of my movements. For one thing, having just got up from the kitchen table, there has simply been too little to observe. Any number of things can happen after a man gets up from the kitchen table. As it is, though, I'm taking the camera upstairs, and I know this. It would indeed be strange to call this cognition a priori, but it seems it would also be wrong to call it empirical or observation-recording. Of course, the self-same fact, the same worldly process, might be known by another human being through observation - once, say, I make it to the point of getting to the stairs, camera in hand. Here there are two forms of knowledge, but not two things known.

However that may be, our fourth empiricist proposition has evidently fallen. Let us turn then to the fifth, which is that all substantive general knowledge of the human or any life form must arise from observation. It seems to me that we can give a few easy counter-examples to this empiricist proposition as well, based immediately on the arguments we gave against the last one. The epistemologies of pain and hunger and thought and perhaps of intentional action are, we saw, non-observationalist in the first person. But consider again that pain and hunger and thought and concept-governed action are not the sorts of things that we can attribute to individual organisms as private peculiarities, like a small scar on the forehead, or a thought about the far corner of this room. Individual states and episodes coming under the general types pain, hunger, conceptual thought and intentional action must always be realizations of a capacity that is characteristic of the life form of the pained or hungering or thinking or intentionally acting individual organism. These are not things that could break out in a rogue individual where they have no place in the description of the life form it bears; no more than a case of long division could break out in a person unacquainted with any methods of calculation, whatever it may be that he is doing with his pencil. Of many kinds of organism I recognize by observation that they possess capacities for pain or hunger, that these phenomena are a part of how they live and get on - that there is, as Ludwig Wittgenstein would say, a "place" for pain and hunger in such life. These are propositions of type B on our list. And of Martians I may perhaps recognize by empirical study, through my telescope, that they possess the powers of conceptual thought and concept-governed action; this is again a proposition of type B. But it seems I, as a human, may reach the same general facts about the specifically human form without a telescope. I can reach them by reflection on the logical conditions of particular facts about myself which are not themselves matters of observation. These general facts about the human

would once again be expressed in propositions of type B. But I do not know these facts about my kind or form 'from the outside' or 'from sideways on'; they are for me not matters of a properly biological awareness. Of course, the self-same facts would be matters of empirical cognition for a Martian investigator, and in that case known very much from sideways on, as the correlative facts about Martian are for me. Here again there are two forms of knowledge, but not two things known.

These examples are perhaps in some respects recherche, but they are, I think, quite enough to kill off our fifth empiricist proposition. They show that we have ways of knowing some substantive propositions that bear the generality that is our theme apart from anything like biological observation; we have, if you like, ways of knowing things about our own life form 'from within'.

Conclusion

And this means - doesn't it? - that we have provided an opening, however narrow it may be, for the possibility of a naturalist interpretation of the content of normative judgment. We have provided an opening, that is, for the view that our fundamental moral and practical knowledge - our knowledge of good and evil and of what is rational and irrational in human action - is at the same time knowledge implicitly about the specifically human form, knowledge of how the well-working human practical reason reasons, yet in no way a biological or empirical knowledge or any sort of knowledge that derives from observation. For it seems that the character of knowledge as knowledge of a substantive general proposition about a life form does nothing to settle its character as empirical or biological - no more, as the case of intentional action shows, than the character of knowledge as knowledge of a process unfolding in the world does anything to settle its character as observational or otherwise empirical.

We have non-observational knowledge in self-consciousness of certain of our inner states, and a special practical knowledge of certain of the processes of which we are the subject, and moreover a knowledge by reflection of some of the powers characteristic of the form we bear; what is to be said against the idea that we might have another kind of practical knowledge - ethical knowledge, if you like - of certain norms that attach to us as bearers of a particular life form characterized by practical reason? As my thinking representation of what I am doing intentionally is an aspect of what this representation itself is about, so this latter cognition will be an aspect of the life characteristic of the developed human subject and will characteristically mediate her practical operations. Such cognition goes to constitute the form of life in question as one in which the things cognized are true. I speak, as usual, of what is 'characteristic': in individual bearers of the human form, some of this knowledge will often enough go missing, of course, as often some teeth are missing; or the knowledge will be present but nevertheless fail to make it into the determination of action.

In representing my propositions as possessing so-called normative authority, or as expressing something more than private taste or local custom - in reaching, that is, for the concepts good and well in this connection - I implicitly represent my propositions, the naturalist will say, as possessing the status just described. I represent them not simply as manifestations of the form I bear, as all my thoughts (and heartbeats) are, but as characteristic of the form I bear. I thus represent myself as in this respect in possession of a sound practical understanding qua bearer of this form. If all has gone well in the development of my understanding - improbably enough - then my propositions will in fact have this status. And, moreover, I will not be damaging my daughter, or casting spells on her, or binding her feet spiritually speaking, or turning her into a practical bonsai, if I coax her into accrediting them as well, by example and precept; for this, on any view, is part of

how an organism of this type is brought into apprehension of practical truth. Of course we have no way of judging what practical thoughts and what range of upbringings might be characteristic of the human, and sound in a human, except through application of our fundamental practical judgments - judgments about what makes sense and what might count as a reason and so forth. And these are judgments each of us must recognize to be the result of his own upbringing and reflection.

As these very preliminary remarks suggest, a developed normative naturalism will no doubt assign our general practical knowledge a precise epistemological position that differs from any we contemplated above. It would take another essay, or a treatise, to develop the matter properly - in particular to resolve the very difficult problem of the mediation of a human's apprehension of fundamental practical truth by his induction into more local, specific, determinate so-called social practices, or shapes of Bildung or 'second nature'. My present point is only this, that the idea that cognition of the human form is everywhere empirical cannot be permitted smugly to operate as an a priori impediment to the development of a naturalist account.¹⁴

The specifically human form does not come into our thoughts and intelligences as something alien, from without, through the medium of the senses, but as the form these things themselves manifest it is utterly transparent to them.¹⁵

1. The next three sections and the first part of the next to last section adhere closely to the claims of my essay 'The Representation of Life,' Reasons and Virtues, R. Hursthouse, W. Quinn and G. Lawrence (eds.) (Oxford: Oxford University Press, 1995), though the discussion is structured differently and much abbreviated. I hope that it is independently intelligible and persuasive.
2. Of course we have use for a past tense version of natural historical propositions, for example in the description of extinct life forms. But I think that this is a secondary conceptual development (see the paper mentioned in note 1 above, section 4.1). It seems we could enjoy the capacity for just this form of judgment though the formation of past tense expressions of it is grammatically excluded or nowhere envisaged. In this respect natural historical judgment is unlike, say, present progressive judgment (X is doing A), which presupposes the possibility of forming the opposing past perfective (X did A). I should perhaps rather speak of a 'relative atemporality' than of 'atemporality' simply. Consider that in statements of exemplification a past particular fact can here be used to illustrate a 'present' generalization: 'S's characteristically do F,' I might say, '-for example, this S did F just yesterday.' The forms of generality described in logic textbooks do not admit of this phenomenon.
3. G. E. M. Anscombe, 'Modern Moral Philosophy,' Ethics, Religion and Politics (Minneapolis: Minnesota University Press, 1982), 26-42, 38.
4. Charles Darwin, The Origin of Species (1876), P. H. Barrett and R. B. Freeman (eds.) (New York: New York University Press, 1988), 386. He is discussing the principles of hierarchical classification, defending a genealogical or historical conception as ideal.

5. The linguistic analogy might make clearer the priority of a sort of 'atemporal' use of the present tense in these two connections (life form and language). Part of our linguist's task, it is natural to suppose, is to give propositional representation to the knowledge that her informants possess as competent speakers of the language under investigation. But it does not seem that this 'implicit' knowledge operates with an opposition between what is past and what is present in the use of language. It is not part of linguistic competence to know anything that a linguist might report in a past tense use of her sort of generality. Thus our linguist's inevitable use of some sort of grammatical present in the representation of this competence should not be taken as committing her to the attribution of robustly temporal contents.

6. The linguistic analogy suggests a slight rectification of vocabulary. I have been making a somewhat crude use of the words 'life form', 'species' and 'kind' (of living thing) as more or less equivalent. This seems to me justified for present purposes, and I will retain it, but sharper metaphysical implements would incline us to split things up, as we certainly would in the case of language: the concept life form might be kept strictly parallel to the concept language or form of discursive interaction; the concept species might then be understood as parallel with the concept linguistic community; finally the concept of a given kind of living thing would be parallel to that of a given 'speaker-kind,' i.e., the concept speaker of L for a given language L. The first of these is the principal object of my attention in this essay.

7. On Virtue Ethics (Oxford: Oxford University Press, 1998); Natural Goodness (Oxford: Oxford University Press, 2000).

8. The special logical character of 'considerations of justice' is addressed in my essay 'What is it to Wrong Someone?' in Practical Reason and Value, R. J. Wallace, P. Pettit, S. Scheffler, and M. Smith (eds.) (Oxford: Oxford University Press, forthcoming.)

9. David Wiggins, 'Truth, Invention and the Meaning of Life,' in his Needs, Value and Truth, 2nd ed. (Oxford: Blackwell, 1991), 87-138, 134 note 53; John McDowell, 'Two Sorts of Naturalism,' in R. Hursthouse, W. Quinn and G. Lawrence, eds. op. cit., 149-80, see, e.g., 150-1.

10. This point is labored with numerous examples in my essay 'The Representation of Life', part 3. The language of 'externalism' is perhaps inapt, suggesting as it might that the vital description of an individual depends somehow on facts about other 'external' individual bearers of the life form in question. The look beyond the individual in the framing of a vital description is not to the 'community' of bearers of the life form but to the life form itself. (The parallel distinction should be observed in the interpretation of Wittgenstein: an appeal to features of the 'practice' into which the use of a word is inserted, or of the 'form of life' of which it is a part, is very different from an appeal to facts about the 'community' of bearers of that practice or form of life considered in extenso. A form must in general be distinguished from the manifold of its bearers.)

I am not sure that it is apriori that a life form must have (or have had or be going to have) more than one bearer, though I think we know of no other way for the duality in question to be realized in nature as we know it to be - in particular I think we know no other way for such a thing to be constituted than by a system that includes, inter alia, a phenomenon of reproduction. (A

theological theoretical infrastructure, for example, might lead one to entertain other possibilities.) What seems to be excluded a priori is the idea of a life form that is essentially bound to just one material bearer - a 'logically private' life form, so to speak.

11. It might be suggested, in view of the linguistic analogy developed above, that a similar argument could show that the concept language is a pure or a priori concept. It may be so, but it seems clearer that the superordinate concept of a 'practice' or 'social practice' possesses the desired apriority, as is shown again by the distinctive turn taken by the intellect in apprehending such a thing, in particular by the distinctive form of generality contained in the propositions that describe it. See my 'Two Forms of Practical Generality,' Practical Rationality and Preference, C. Morris and A. Ripstein (eds.) (Cambridge: Cambridge University Press, 2002).

It is of course clear that the words 'species' and 'life form' might be assigned a content that presupposes facts of terrestrial biology. In the literature on method in biology there is a contest among various 'species concepts,' and the contestants inevitably contain some empirical content. Consider, for example, Ernst Mayr's famous 'biological species concept.' A 'species,' he says, is a group of interbreeding populations. This can be criticized on the ground that not every kind of organism breeds: dandelions don't for example. But it works in many terrestrial cases and where it does it gives clear answers to the question whether two organisms belong to the same or different species. But it seems to me to presuppose the vaguer more abstract conception we are after, a conception for which we might reserve the title 'life form'; it presupposes it because it presupposes vital description, e.g. in the use of the concept of breeding, and this is everywhere form dependent. But this more primitive concept would not lead us a priori to expect that sameness and difference of life form should be clearly specifiable, a task empirically informed definitions like Mayr's are attempting to execute.

The idea of a language might once again be used as a model here. We do not expect that the question whether two speakers speak the same or different languages should always have a clear answer. But this unclarity does not lead us to drop the idea of language in philosophy. We say, despite this inevitable vagueness, that it is only because they are speaking a common language, or inhabit a common discursive structure, that any determinate content can be assigned to the noises traded by the parties to a discussion.

12. David Kaplan, 'A Logic of Demonstratives,' Themes from Kaplan, J. Almog, J. Perry and H. Wettstein (eds.) (New York: Oxford University Press, 1989).

13. Intention (Cambridge: Harvard University Press, 2000).

14. Very much less, of course, can a manly wisdom about the bloody course of human history be set against the claim that, say, justice belongs 'according to nature' to the human practical understanding; no more than knowledge of the bloody - well, not exactly bloody - course of umbrella jelly history considered in extenso - in which what happens in your natural history has so rarely happened, almost everything have been thrown against rocks, starved, or eaten by predators - be brought as proof of Pollyannaism against your monograph. This point does not turn on epistemological subtleties, but on the logical form of the propositions in question.

15. To paraphrase Gottlob Frege's summary remark about our apprehension of the numbers, The Foundations of Arithmetic, trans. J. L. Austin (Oxford: Blackwells, 1974), 115.