

The Project

1. Human nature

Human beings are animals with a distinctive range of abilities. Though they have a mind, they are not identical with the mind they have. Though they have a body, they are not identical with the body they have. Nor is a human being a conjunction of a mind and a body that causally interact with each other. Like other animals, human beings have a brain on the normal functioning of which their powers depend. But a human person is not a brain enclosed in a skull. A mature human being is a self-conscious agent, with the ability to act, and to react in thought, feeling and deed, for reasons.

Animals, like inanimate objects, are spatio-temporal continuants. They have a physical location and trace a continuous spatio-temporal path through the world. In this sense, they are, like familiar material objects, *bodies* located on, and moving on, the face of the earth. They are substances, persistent individual things that are classifiable into various substantial kinds according to their nature and our interests. (What counts as such a classifying noun will be examined in chapter 2.) Animals are *animate* substances – *living* things. So, unlike mere material objects, they ingest matter from their environment and metabolize it in order to provide energy for their growth, their distinctive forms of activity, and their reproduction. Unlike plants, animals are *sentient* agents, and all but the lowliest forms of animal life are also *self-moving*. Their sentience is exhibited in their exercise of the sense-faculties they possess: for example, the perceptual faculties of sight, hearing, smell, taste and feeling, and in the actualization of their passive powers of sensation: for example, susceptibility to pain, kinaesthetic

sensation and liability to overall bodily feelings, such as feeling tired, and feelings of overall condition, such as feeling well. The perceptual faculties are cognitive. They are sources of knowledge about the perceptible environment. It is by the exercise of these sense-faculties, by the use of the sense-organs that are their vehicles, that animals learn about the objects in, and features of, their environment. Being sentient and being self-moving are complementary powers of animal agency. For an animal that can learn how things are in its vicinity exhibits what it has apprehended both in its finding the things it seeks (such as food, protective environment, a mate) and in its avoiding obstacles and dangers. The criteria for whether an animal has perceived something lie in its responsive behaviour – so perception, knowledge and belief, affection, desire and action are conceptually linked.

The abilities distinctive of human beings are abilities of intellect and will. The relevant abilities of intellect are thought, imagination (the cogitative and creative imagination rather than the image-generating faculty), personal (experiential) and factual memory, reasoning and self-consciousness. Human beings have the ability to think *of* (and imagine) things that lie beyond their present perceptual field – to think of things as encountered in the past and of the encountering of them, of past things learnt about and of the learning of them, of future things that do not yet exist and of eventualities and actions that have not yet occurred or been performed. To the extent that other higher animals possess comparable abilities, then they do so only in rudimentary (pre-linguistic) forms. Humans can think both of what does and also of what does not exist or occur, of what has or has not been done, and of what will and what will not be done. We can believe, imagine, hope or fear that such-and-such is the case, irrespective of whether things are so or not. In short, thought, both in rudimentary form in animals and in developed form in humans, displays *intentionality*. Not only can we think *of* and *about* such things, and think *that* things are thus-and-so, but we can *reason* from such premisses to conclusions that follow from or are well supported by them. And we can evaluate such reasoning as valid or invalid, plausible or implausible. Because the horizon of human thinking is so much wider than that of non-human animal thinking, so too the horizon of human feelings and emotions is far wider than that of other animals. Both humans and animals can hope and fear things, but many of the things that humans can hope for (such as salvation, or good weather next week) and fear (such as damnation, or bad weather next week) are not possible objects of corresponding animal emotions.

Like other animals, we are conscious creatures. When conscious (as opposed to being asleep, comatose or anaesthetized), we may be *conscious of* those items in our perceptual field that catch and hold our attention. Unlike other animals, we are also *self-conscious*. We have not only the power to move at will and to perceive how things are in our environment, but also the power to be reflectively aware of our doing or having done so. We can not only think and reason, but can further reflect on ourselves as having thought or reasoned thus-and-so. We can not only have reasoned desires in addition to animal appetites, feel emotions and adopt attitudes, deliberate upon goals and purposes, but we can also realize and reflect on such facts. Being self-conscious creatures, we are subject to a variety of emotions of self-assessment, such as pride, shame and guilt, that are foreclosed to non-self-conscious animals (see fig. 1.1).

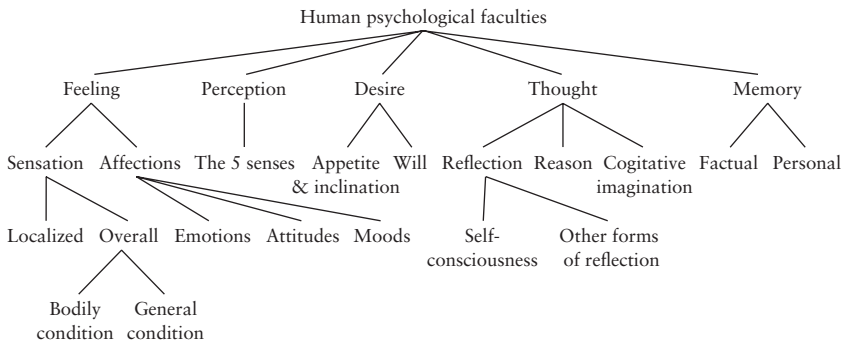


Figure 1.1. A possible ordering of human psychological faculties

Human beings can reason from given premisses to theoretical or practical conclusions. We can take such-and-such to be *a reason* for thinking that things are thus-and-so. We can also take things' being thus-and-so to be a reason for acting or reacting in a certain way. For we do not merely behave and act as our appetites and fancies incline us, we do much of what we do *for reasons*. We have not only animal desires and passing inclinations, we also have reasoned goals and purposes rooted not merely in our biological make-up, but in reflection on the desirability of objects and objectives relative to our conception of our good and of the good. Rationality is Janus-faced, incorporating both backward- and forward-looking reasons. Inasmuch as we possess an articulate memory, we can take past facts as reasons for present

actions and attitudes – as when we act out of gratitude, punish or reward desert, harbour indignation or resentment, or feel ashamed or guilty. Because we can think about and come to know truths or probabilities concerning the future, we can take future facts or the likelihood of future eventualities as reasons for us to act in certain ways here and now. Our behaviour can accordingly be evaluated as rational or reasonable, as well as irrational or unreasonable. And so too can our emotions and attitudes.

These capacities and their exercise give to human beings the status of persons. While *human being* is a biological category, *person* is a moral, legal and social one. To be a person is, among other things, to be a subject of moral rights and duties. It is to be not only an agent, like other animals, but also a moral agent, standing in reciprocal moral relations to others, with a capacity to know and to do good and evil. Since moral agents can act for reasons, and can justify their actions by reference to their reasons, they are also answerable for their deeds. To be a human being is to be a creature whose nature it is to acquire such capacities in the course of normal maturation in a community of like-natured beings.

2. Philosophical anthropology

The above thumbnail sketch in one sense locates human nature in the scheme of things – but the scheme in which it locates it is our conceptual scheme. So much of the sketch is also an indirect description of the network of concepts in terms of which we articulate our nature. It locates the forms of description of human nature in the general conceptual scheme in terms of which we describe all else. The methodical description of the structure of this finely woven network and the examination of some of the ways in which it has been and is commonly misconstrued is the objective of the following studies in *philosophical anthropology*. This term of art has a wider scope than ‘philosophy of mind’ or ‘philosophical psychology’, although, as I shall use it, it incorporates these. Philosophical anthropology is the investigation of the concepts and forms of explanation characteristic of the study of man. The systematic description of this network of concepts will enable us to shed light on a multitude of philosophical problems and controversies about human nature and the forms of explanation of human behaviour. Prior to commencing the present task,

some methodological reflections are necessary to characterize the task and to defend the methods that will be used.

It would be misguided to suppose that the concepts invoked and their complex relationships are the concepts and conceptual network of a theory of some kind (sometimes referred to contemptuously as ‘folk psychology’) that might be abandoned if the theory were found defective. Theoretical concepts can indeed be jettisoned with the theory to which they belong, if the theory is radically awry. The concepts of phlogiston and caloric are now of mere historical interest. Non-theoretical concepts include the numerous concepts that are employed, *inter alia*, merely to describe phenomena. The phenomena thus described may or may not stand in need of explanation. In some cases, the explanation needed may be theoretical; but not all explanation is theoretical. Non-theoretical concepts do not fall victim to the falsity of an explanation or falsification of an explanatory theory.

The concepts of a human being, of a person, of the mind and body of a person, of the intellect and the will, perception and sensation, knowledge and belief, memory and imagination, thought and reason, desire, intention and will, feelings and emotions, character traits and attitudes, virtues and vices, are not theoretical concepts. They are not concepts that we could abandon after the manner of *phlogiston* or *caloric*. They *are* used, a-theoretically, to describe phenomena that are the subject matter of numerous theories in the study of human beings, in psychology, anthropology, sociology, history and economics. But that is not their sole role.

These anthropological and psychological concepts do not stand to what they *can* be used to describe merely as representation to what is represented. For our use of many of these concepts and their congeners itself moulds our nature as human beings, as concept-employing, self-conscious creatures. So their use is partly constitutive of what they can also be invoked to describe. The availability of these concepts *gives shape* to our subjective experience, for it is by their use, in the first person, that we are able to *give it articulate expression*.

In learning the vocabulary of psychological concepts, a child is not learning a theory of anything. He is, on the one hand, learning *new forms of behaviour* – learning to replace his cries of pain by ‘It hurts’ or ‘I have a pain’ and his cries of indignation with ‘No!’ and ‘I don’t like it’; to herald his deliberate actions by ‘I’m going to’ and later his plans by ‘I intend’, to prefix an ‘I think’ to, or interpolate an ‘I believe’ or an ‘as far as I know’ in, his unconfirmed assertions; and

to preface his fearful but false descriptions on waking from a nightmare with 'I dreamt'. On the other hand, he is learning to describe other people and to describe and explain their behaviour in these terms. But there is nothing theoretical about describing others as being in pain, listening to this or smelling that, wanting this and thinking that, intending, liking, loving and so forth. The mental is not *hidden behind* behaviour; but, one might say, metaphorically speaking, that it infuses it. We must not confuse the possibility of not exhibiting or expressing it, or of suppressing its manifestation and concealing it, with the idea that it is *unobservable* by others. To be sure, this is not to endorse any form of behaviourism. It is often possible *not* to show that one has a headache; but when one is injured and writhing in agony, one's pain is patent. That is what is *called* 'showing one's pain'. One can think something to be the case, and not say what one thinks; and it is often possible to keep one's thoughts to oneself. But when one says what one thinks, one's thoughts are patent, and when one sincerely confesses one's thoughts to another, one's thoughts are laid bare. Nor should we suppose that the mental is *observable* by the subject, as if one enjoyed privileged access to one's 'domain of consciousness'. There is such a thing as introspection, but it is not a kind of inner perception – it is a form of self-reflection. Such confusions and suppositions concerning psychological concepts incorporate deep and ramifying errors which infect empirical sciences of man, such as psychology and cognitive neuroscience.

Furthermore, the characteristic forms of explanation of human behaviour in terms of reasons are not to be found in the natural sciences and are not proto-scientific explanations. Teleology is, to be sure, also appropriately invoked in the study of non-human, biological phenomena. So too are the concepts of goal, purpose and function. But explanation in terms of reasons and motives is distinctive of human behaviour. This too is not part of a proto-science, although it is true that these forms of explanation characterize the study of man in history, psychology and the social sciences. But, like the psychological and anthropological concepts that are involved in such explanations, the explanations themselves are typically partly constitutive of the phenomena that they explain. To learn, as every human being does, to give such explanations at the homely level of personal action and relations is not to learn the rudiments of a science. It is to learn to be a rational human being and to participate in the human form of life that is the birthright and burden of the children of Adam.

3. Grammatical investigation

So, the theme of the following philosophical investigations is human nature. But it is simultaneously the *grammar* of the description of what is distinctively human. And it is the former because it is the latter. For the investigations are purely *conceptual*. They explore the concepts and conceptual forms we employ in our thought and talk about ourselves, and examine the logico-grammatical relationships between these concepts and conceptual forms.

The study of the nature of things, in one sense, belongs to the empirical sciences. It is the task of physics, chemistry and biology, of psychology, economics and sociology to discover the properties and relations, the regularities and laws, of the objects that fall within their domain. Empirical observation leads to explanatory theory, commonly with predictive and retrodictive power. Theories involve abstraction and generalization from observed data, and the confirmation or infirmation of conjectures in experience. The truths discovered are empirical truths, and the theories confirmed are empirical theories.

The study of the nature of things, in another sense, belongs to philosophy. This investigation has sometimes been characterized as the quest for the *essential* nature of things, and contrasted with the empirical sciences that are conceived to study their *contingent* nature. In past ages such investigation was allocated to the Queen of the Sciences – metaphysics. The *de re* essences of things provided the subject matter of metaphysical philosophy, and their disclosure its sublime task.¹ This, however, was an illusion. There is no such thing as metaphysics *thus conceived*, and no such subject matter for philosophy to investigate.

It is one thing to grant that substances of a given kind have essential as well as accidental properties, or that the instantiation of certain properties or relations entails the instantiation or exclusion of certain other properties and relations. It is quite another to hold that propositions that state the essential properties of a given substance or the relations of inclusion or exclusion that hold between properties and relations describe *mind-independent, language-independent, metaphysical necessities* in reality. What appear here to be descriptions of *de re* necessities are actually norms of representation. That

¹ A conception taken up again at the end of the nineteenth century by Husserl and the Munich circle of phenomenologists, who abandoned psychologism for a quest for *Wesensschau*.

is, they are not descriptions of how things are, but implicit *prescriptions* (rules) for describing how things are. Consider the following four propositions:

- (i) A material object is a three-dimensional space-occupying entity that can be in motion or at rest and consists of matter of one kind or another.
- (ii) Every event is temporally related to every other event.
- (iii) Nothing can simultaneously be red all over and also green all over.
- (iv) Every rod has a length.

Such propositions appear to be descriptions. They are what we think of as *necessary truths*, for, to be sure, nothing can be a material object that is not a space-occupant or that does not consist of material stuff; it is inconceivable that there be an event that is neither earlier nor later nor yet simultaneous with, or a constituent phase of, any other event, or that something be both red all over and green all over simultaneously; and it is not a contingent matter that we shall never find a rod without a length.

Appearances are deceptive. These sentences express *rules* for the use of their constituent terms *in the guise of descriptions*. If we characterize something as a material object, then it follows without more ado that we may characterize it as a space-occupant made of matter of some kind. We do not have to check to see whether perhaps *this* material object is *not* made of some matter or other, or whether it may have *no* spatial location. These *internal* (defining) properties and relations are *constitutive* of what it is to be a material thing: they are part of what we mean by ‘material object’. If reference is made to some event, we can infer without more ado that it is either earlier than, later than, simultaneous with, or a constitutive phase of any other event. If something is described as being red all over, it follows that it is not also green all over – this is not something that we need to confirm by looking. And if something is said to be a rod, it follows that it can be described as having a certain length. What appear to be descriptions of *meta*-physical necessities in nature are norms (rules) for describing natural phenomena. We would not *call* something a material object if it occupied no space or did not consist of matter; we would not *deem* something to be a genuine event if it were not simultaneous with, earlier or later than, or a phase of, any other given event; we would not *describe* something as being red

all over if we were willing to describe it as green all over; and we would not *hold* something that lacked a length to be a rod. These are not discoveries about things, but the commitments consequent on employing a certain form of representation or description.

While the truth of an empirical proposition excludes a possibility, the truth of such necessitarian propositions as that nothing can be red and green all over, or that there cannot be a rod without a length, or that every material object must be located somewhere, somewhere, does not. A logical or conceptual impossibility is not a possibility that is impossible. So what is excluded is not a possibility that has been described by a form of words, but only the form of words that appears to describe a possibility. And the form of words is excluded as senseless, inasmuch as it describes neither a logical possibility nor a logical impossibility. For *there is no such thing* as describing a logical impossibility, *since there is nothing to describe*. So what we are doing is *in effect* excluding a form of words from the language inasmuch as it lacks sense.² It makes no sense to say that something is both red and green all over, or that there is a rod with no length; that is, to utter the words 'A is both red all over and green all over' or 'A is a rod but it has no length' is not to say anything intelligible, but to utter a kind of nonsense. What appear to be necessary truths about the world – for example, that nothing *can* be red and green all over simultaneously, or that every rod *must* have a length – are actually no more than *grammatical propositions* that are implicitly about the use of words. These 'can-s' and 'must-s' are marks of norms of representation.

To use the term 'grammar' to refer to any sense- or meaning-determining rules for the use of words is a harmless Wittgensteinian extension of the grammarians' use of the word. I shall follow Wittgenstein's usage and apply the term 'grammar' and its cognates to rules that are not merely syntactical.³ In this extended use, apparently metaphysical propositions about *de re* necessities are merely *grammatical propositions* – that is, propositions about the usage of expressions

² This does not mean that it cannot occur in indirect speech to report someone's words. What it does mean is that if someone is reported as having spoken thus, we know that what he said was a form of nonsense.

³ The grammarian will say that the rule that 'identical' cannot form a comparative or superlative is a grammatical one, but that the rule that excludes prefixing the phrase 'north-east of' to 'the North Pole' or to 'the South Pole' is not. For our purposes this distinction is unnecessary.

in the form of descriptions of the properties and relations of things. So too, the description of the essential properties and relations of some thing (an F) is a specification of the grammar of 'F'. For it will specify the properties and relations of an F, the loss of which will be tantamount to the destruction of an F or to its degeneration (to its constituting a borderline or limiting case of being an F). Something that lacked these-and-these properties, or did not stand in such-and-such relations, would not be *called* 'an F' (unless we changed the meaning of the word 'F'). Since such propositions are commonly not *especially* concerned with the language in which they are expressed, but apply equally to any language that contains expressions used in the relevantly same way, they are also commonly and correctly said to express *conceptual* truths. So 'Red is darker than pink' is a grammatical proposition that in effect says that anything that can truly be said to be red can also truly be said to be darker than anything that can be said to be pink, and it characterizes the *concepts* of being red, pink and darker than (and not only the English *words*).

However, it would be mistaken to suppose that any clarification of the nature, as opposed to the essence, of an F must adduce characteristic marks of the concept of F – that is, conditions necessary and sufficient for being an F (for the application of the expression 'an F'). For the concept may not be so moulded, and the clarification of what it is to be an F may proceed differently; for there are many different ways of explaining what 'F' or 'an F' means. Some expressions are explained by specification of criteria (i.e. logically good evidence, as opposed to inductive evidence) for their application. Others may be explained by ostensive definition by reference to a sample, as when we point at a certain thing and say, 'That (colour) is Brunswick green' or 'That (length) is one metre' or 'That (animal) is an elephant'. Some expressions are typically explained by enumeration of examples together with a similarity rider: so, if asked what a game is (what the word 'game' means), one might reply that football, bridge, chess, hide-and-seek and suchlike are games. Such expressions, following Wittgenstein, are held to express 'family-resemblance concepts'. And other forms of explanation are licit too. It should be noted that different forms of explanation are not necessarily exclusive: that is, some expressions may be explained correctly in more than one way.

The *philosophical* study of human nature, by contrast with psychological, social-scientific and neuroscientific studies, is *grammatical* or *conceptual*. Philosophical anthropology, as I am using the term, is an investigation into *the conceptual scheme* in terms of which we

describe ourselves and our complex moral and social relationships, give expression to our inner life, explain, justify or excuse the thoughts, feelings and actions of human beings. Its product will directly or indirectly be a description of a web of words and the delineation of their forms of connectedness, as well as a characterization of forms of explanation appropriate to and distinctive of the domain. It will not, however, produce a *theory* of human nature.

This book, *Human Nature: The Categorical Framework*, investigates the fundamental categories in terms of which we think about ourselves: the two related categories of substance (for we *are* a substance of a certain kind, and *are made of* substances of various kinds); the category of causation (for we are creatures with causal powers to effect changes to things in the world around us, and causal susceptibilities to be affected by them); the category of power (for we have a wide range of different kinds of active and passive powers); the category of agency (for we are agents with the ability to act or refrain from acting, and to act on things around us). These categorial themes are commonly deemed metaphysical. If by ‘metaphysics’ one means not a study of the *de re* ‘essence of the world’ – its allegedly language-independent necessary features – but rather an investigation into the most general structural concepts that inform our thought, then so indeed they are. In *this* sense our investigation can be deemed metaphysical.

Having clarified these very general conceptual forms, I shall then turn to investigate the distinctive forms of understanding and explanation that characterize our thought and talk about ourselves – the various forms of teleological and reason-giving explanation. This elucidation of the categorial framework is preparatory to an investigation of the concepts of the body and the mind that human beings are said to have, and of the relationship between being a human being and being a person.

4. Philosophical investigation

It is not the task of philosophy to compete with the psychological or neuropsychological sciences. It is not its business to come up with empirical theories and conjectures that stand in need of experimental confirmation. That is the business of the empirical sciences. It is not the task of philosophy to produce non-empirical theories either – for there are no such things for philosophy to produce. What would a non-empirical philosophical *theory* look like? And how might it

be confirmed or disconfirmed? What the non-empirical sciences of arithmetic, geometry and formal logic can do is produce concepts and conceptual relationships for the empirical sciences to deploy in *their* theories and reasoning about phenomena. These mathematical and logical tasks are *concept formation by proof construction* and *determination of formal canons of validity*. To be sure, the term 'theory' is used in this domain. Mathematicians speak of the mathematical theory of functions, for example, and logicians speak of quantification theory. But this invokes the term 'theory' in a quite different sense from that which it has when we speak of empirical theories in the natural sciences. The concepts formed by the mathematical sciences have their *primary* use, directly or indirectly, in the transformation of empirical propositions concerning magnitudes and quantifiable attributes of things and in the transformation of descriptions of spatial relations between things, and so forth. But the task of philosophy is not to generate *novel* concepts and conceptual connections for use in the empirical sciences or for use in everyday discourse. Rather, it is to *clarify* existing concepts and conceptual connections and to discern the very general patterns they exhibit. To be sure, this does not imply that in the course of fulfilling that task and ordering the concepts it investigates with the aim of obviating confusions, philosophy may not introduce new distinctions among concepts or classes of concepts, or between different kinds of proposition for purposes of philosophical illumination.

Philosophy is, of course, a *theoretical*, not a practical, *activity*. But there is nothing hypothetico-deductive or predictive, on the model of theories of natural science, about its methods or results. Nor is there any novel concept formation for the purposes of the natural sciences, on the model of many theories in mathematics. But this does not mean that philosophy is not, or cannot be, *systematic*. Nor does it mean that it cannot aspire to whatever degree of *generality* its conceptual elucidations admit of.

The motivation for philosophical concept clarification may be twofold.

First, especially when operating at a high level of generality, there is an intrinsic interest in detecting the most general structural features of our thought. For the ways in which we think about ourselves and our fellow human beings, the concepts we use in expressing or reporting our inner lives and describing those of others, and the distinctive forms we invoke in explaining our own behaviour and that of others, have very general structural features of which we are not

ordinarily aware. Indeed, there is no reason why we should be, since the *realization* of affinities and differences, analogies and disanalogies, between different concepts and concept types is not a condition for mastering the uses of those concepts. But achieving an understanding of such general structural features is simultaneously achieving a certain kind of understanding of human nature. For what we come to understand are the *forms* of our understanding of ourselves.

Secondly, the psychological and anthropological concepts and forms of explanation with which we are concerned are the source of deep, widespread and perennial conceptual confusions. Although the concepts are ordinary, everyday ones, which we employ unthinkingly and correctly in the stream of our lives, reflection upon them generates puzzlement. Although the forms of explanation are altogether familiar, and constantly invoked in our daily discourse, they are subject to widespread misconstrual in philosophy, in the human sciences, and in cognitive science and neuroscience, being typically viewed as epiphenomenal, or forms of causal explanation, and so no different in principle from the forms of explanation characteristic of the sciences, or as reducible to such forms.

Many of the most general and problematic concepts, such as *mind*, *soul*, *body*, *self*, *person*, were moulded by, and in some cases generated in the course of, centuries of Greek, Jewish and Christian philosophico-theological reflections in the ancient and early modern world. Some of the resultant misconceptions still cling to our thought about what they signify. The employment of many psychological concepts in the human and zoological sciences is characteristically confused and riven with misconceived scientific theory, precipitously hypothesized without the conceptual clarification that should precede theory construction. So misconceptions and incoherences are masked under the rubrics of theological doctrine and its vulgarization in the understanding of religious believers, on the one hand, and scientific as well as pseudo-scientific theories of psychology, of the mind and the brain, on the other. For the puzzlements often masquerade as mysteries, which, it is alleged, it is not given to man to comprehend, or as forms of empirical ignorance, which will allegedly be solved by the march of science. Whereas in fact the puzzlements and apparent mysteries are knots that we have tied in our understanding. The disentangling of such knots and the explanation of how we tied them and why they hold us captive are primary goals and a full justification for the activity of philosophical clarification. What are clarified are concepts and forms of explanation. What the clarification aims to

achieve is the dissolution of misconceptions about our nature and the attainment of a correct conception. The method of clarification is primarily, though not exclusively, an examination of the uses of words and patterns of reasoning.

5. Philosophy and ‘mere words’

Is a philosophical inquiry into human nature, then, primarily lexicographical? Is it just a matter of language? Surely we are interested in the nature of mankind, not in mere words! To suggest otherwise seems repulsive – a trivialization of a profoundly important subject.

It is inappropriate to denigrate such an interest in words. We do not condemn the investigations of theoretical linguists as trivial because they are concerned with ‘mere words’. Why should a corresponding philosophical concern seem of lesser importance? A philosophical interest in language is anything but trivial. Of course, it differs from the grammarian’s. The questions that engage our attention are of no concern to linguists. But it is possible to be interested in language and word usage for many different reasons. Even philosophy of language is not a branch of linguistics, although it focuses upon such linguistic concepts as *name*, *referring expression*, *predicate*, *quantifier*, *sentence*, *logical connective*. Philosophical anthropology and philosophy of mind are obviously not branches of linguistics either; but they too are concerned with the elucidation of a segment of language – with the anthropological and psychological vocabulary.

Philosophical elucidation of a segment of language, however, is not a form of glorified lexicography. We do not need to engage in socio-linguistic surveys to establish how the expressions that concern us are used. Being competent speakers of the language, we know perfectly well how to use the relevant expressions, and at most need to be reminded of the familiar. We may take usage (ordinary or technical, as the case may be) for granted, just as the competent chess-player may take the moves of the game for granted, and the competent mathematician may take the use of numerals for granted. But we may not have *realized* similarities between different kinds of expression and differences between apparently similar kinds of expression. Such failures of realization may be a source of far-reaching conceptual bafflement and error. We commonly construe substantives on the model of names of substances, and run into dire confusion over ‘mind’, ‘self’ or ‘substance’. We typically construe verbs on the model of names

of actions and activities, and lose our bearings when confronted with 'to mean', 'to think' or 'to intend'. We assume unreflectively that adjectives name properties, and become confused by 'true', 'real' or 'good'.

The words and phrases we use, and the complex network of relationships between their uses, are, to invoke Kleist's metaphor,⁴ the spectacles through which we view ourselves and the world. It would surely be foolish to suggest that only lense-grinders should be interested in the lenses through which we look, that only grammarians should be interested in the linguistic forms by means of which we articulate our understanding of ourselves and of the world around us. If the lenses are dirty and obscure clear vision, if it is all too easy to mistake reflections on the lenses for things seen, if the curvature of the lenses leads to certain distortions, then careful attention to the spectacles through which we view the world is imperative.

To put the same point less metaphorically, what is thinkable is what is expressible. The primary means for the expression of thought, and the only means for the expression of the kinds of thoughts that we are concerned with, is linguistic. If, in subtle and unnoticed ways, we misuse the words of our language, we shall, often in subtle and unnoticed ways, talk nonsense. We may pose problems that need not solution but dissolution (e.g. 'How is my mind related to my body?'); we may make assertions that transgress the bounds of sense (e.g. 'I am my brain'); we may fall into confusion (e.g. 'If I have a mind, a body, a soul and a self, what is it that has all these things?'). Such misconceived questions, misguided assertions and bewildering confusions are *conceptual*, not empirical. They can be eradicated not by empirical discoveries but only by conceptual investigations. But these transgressions of the bounds of sense are not to be cursorily dismissed as nonsense. They must be explored in detail in order to expose the *roots* of the nonsense, which can *then* be extirpated. The philosophical interest in language – in our forms of representation – *is* an interest in our conceptual scheme. For it is the grammar of our language that determines what it makes sense to say – what we can render intelligible to ourselves.

Usage, the rules or conventions for the correct use of expressions, determines what does and what does not make sense. And in thus determining the bounds of sense, the bounds of what is logically

⁴ H. von Kleist, *Geschichte meiner Seele*, ed. Helmut Semdner (Insel, Frankfurt am Main, 1977), pp. 174ff. In a letter to Wilhelmine von Zenge (22 March 1801), Kleist used this as a metaphor for Kant's transcendental idealism.

possible are also fixed. So what it makes sense to say and think about human nature, about the mind, about the relationship between mind and body, about the person and about the survival of the person after death, depends upon what we mean by these words. What we mean by them and what they mean must generally coincide. And what they mean depends upon the rules for their employment. For the meaning of a word is what is given by an explanation of meaning. And to explain what an expression means *is* to give a rule for its use. So the kind of grammatical investigation in question is not distinct from an investigation into the *a priori* nature of mankind. For the nature of a thing just is the range of attributes and powers (possibly related only by a family resemblance) which that thing possesses in virtue of which it may be counted as the kind of thing it is. Possessing those attributes and powers is a ground for characterizing the thing as being of such-and-such a kind. It should be borne in mind that what we now deem the nature of a thing may have originated in empirical discovery, which was subsequently hardened into a rule.

Our investigations are conceptual. This does not mean that they are not *also* linguistic. The philosophical inquiry into human nature is an inquiry into the general concepts we employ to characterize humanity and the distinctive powers of man. Concepts are best thought of as no more than abstractions from the uses of words. For to possess a concept *is* to have mastered the use of a word or phrase. (It is not a mere recognitional ability, a power to distinguish, e.g. F-s (or things which are F) from things which are not – which non-language-using animals possess.) The conceptual investigations in question *are* investigations into the uses of those words we employ to characterize ourselves and our powers. So they are, in the extended sense, grammatical investigations. We are interested in the concepts of agency, mind, body, person, consciousness self-consciousness and so forth; we are interested not in the English words *per se*, but in the *role* of those words and any equivalent words in any other languages.

Of course, different cultures may employ a distinctively different conceptual scheme to talk and think of human beings and their nature. We are much given to representing ourselves and features of ourselves in the faculty terminology that we have inherited from the Greeks. But other forms of representation may eschew this mode of description and classification, or may group human faculties differently. It is a striking fact that German (like many other languages) has no word that corresponds exactly to the English expression 'the mind', but makes do with 'Geist' and 'Seele'. All this means is that the confusions

and unclarities that bedevil the thought of English speakers in this domain *may* differ in subtle ways from those of German speakers.

We are trying to elucidate *our* conceptual scheme, a conceptual scheme largely shared by many cultures and manifest in many languages. Such elucidation is not merely conceptual cartography for its own sake, interesting though that may be. It is intended to help us find our way around when we encounter conceptual puzzlement and fall into confusion. The clarification of our concepts, of our uses of words, contributes to the eradication of *our* conceptual confusions. These, to a large degree, are rooted in the grammars of our languages. But this does not mean that our investigation is not really into human nature. Nor does it mean that there are not other roots of conceptual confusion than deceptive features of language.

6. A challenge to the autonomy of the philosophical enterprise: Quine

In the second half of the twentieth century some American philosophers, led by Quine, argued that there is no distinction between conceptual and empirical truths (truths of reason and truths of fact), that the propositions we believe, typically conceived conjunctively to constitute a theory, confront reality for their confirmation as a totality.⁵ Any and every proposition within a given theory, including what are conceived (wrongly in Quine's view) to be a priori and necessary propositions (e.g. truths of logic and mathematics) can be relinquished in order to adjust the theory as a whole to the deliverances of experience and experiment. Were this correct, then there would be no categorical distinction between philosophy and science, and philosophical reflection would be a part of general theory construction concerning the world – as indeed Quine argued. So philosophical reflection on human nature would be a part of the human sciences, subject to their jurisdiction, and confirmed or infirmed with them. It is, however, incorrect.

Quine's holistic picture depended on repudiating Carnap's articulation of a distinction between analytic and synthetic propositions (disregarding Kant's, Bolzano's and Frege's different construals of analyticity). It is correct that from his reflections on his distinction between analytic and synthetic propositions, Carnap drew the misguided

⁵ W. V. O. Quine, 'Two Dogmas of Empiricism' (1953), repr. in *From a Logical Point of View*, 2nd edn. (Harper & Row, New York, 1963).

conclusion that analytic truths *followed* from conventions. But whether his distinction between analytic and synthetic truth itself is irremediably flawed, as Quine argued, is debatable. Quine's accusation was contested by Carnap himself,⁶ and arguably successfully deflected by Grice and Strawson.⁷ Whether the rejectability of Carnap's distinction between analytic and synthetic propositions implies the rejectability of the different analytic/synthetic distinctions drawn by Kant, Bolzano, Frege and others is also debatable. But, more importantly for present purposes, the distinction between a priori conceptual truths and a posteriori empirical propositions does not depend on the viability of any distinction between analytic and synthetic propositions. Among a priori conceptual truths we should distinguish truths of logic and mathematics, and both from general grammatical truths, no matter whether these are analytic truths (appropriately explained in logical terms) or other non-analytic grammatical truths (e.g. that red is darker than pink, or that nothing can simultaneously be only 2 metres long and also 3 metres long). It should be evident that the distinction between conceptual (including grammatical) truths and empirical ones, unlike the distinction between a priori and a posteriori truths, is *not* epistemic, even though conceptual truths are, of course, a priori. It is a distinction between different roles and uses of propositions. Such differences of role are, of course, connected with differences in grounds for assertion, and with differences in criteria of understanding, misunderstanding and not understanding. Furthermore, the distinction between grammatical and empirical truths is not exhaustive, for there is a class of diverse propositions that constitute the inherited background against which one distinguishes truth from falsehood (e.g. 'The world has existed for many years', 'Cats don't grow on trees', 'My name is NN'). Such propositions are empirical – concern the world and what is in it, yet have a role similar in certain respects to that of grammatical propositions, since they may function as rules for testing other propositions. They are neither self-evident or evident to the senses or reason, nor inferred from such propositions as are; yet they are not supported by any evidence that

⁶ R. Carnap, 'Quine on Analyticity', in R. Creath (ed.), *Dear Carnap, Dear Van* (University of California Press, Berkeley, 1990), pp. 427–32.

⁷ H. P. Grice and P. F. Strawson, 'In Defence of a Dogma', *Philosophical Review*, 65 (1956), pp. 141–58. It is noteworthy that Quine himself rehabilitated at least a version of the Carnapian distinction in *The Roots of Reference* (Open Court, La Salle, Ill., 1973), sect. 21.

is more certain than they are in themselves. They are held in place by what surrounds them, like the keystone of an arch.⁸ The kinds of proposition which we have been discussing are represented in Figure 1.2 (many further kinds of proposition, such as ethical, aesthetic and religious propositions are excluded).

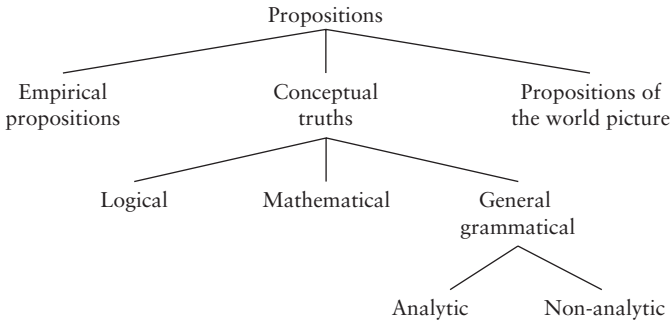


Figure 1.2. *Proposition types*

Contrary to Quine's view, truths of logic and mathematics do not 'face the tribunal of sense' for confirmation or infirmation conjunctively with the empirical theories in which they have been utilized. Their truth is established by deductive proofs, and the acceptance of a proof is tantamount to insulating the propositions in question from empirical fact. No logical or mathematical theorem is shown to be false by the rejectability of the empirical theory in which it is invoked. Nor does confirmation of such a theory (e.g. Newton's theory of gravity) render more certain the mathematics which it employs (e.g. the theorems of the differential calculus were not rendered more certain by the success of Newton's physics).⁹ Nothing will *count* as showing that a proven arithmetical proposition is true only for the most part, or only under certain specifiable conditions. But this, *contra* Quine, is not because we shield such propositions from disconfirmation more than others out of considerations of simplicity of theory. Rather, such propositions are given a quite different *role* from empirical propositions

⁸ Wittgenstein characterized such propositions as propositions of one's 'world picture'; see his *On Certainty* (Blackwell, Oxford, 1969). For illuminating discussion, see A. J. P. Kenny, *Faith and Reason* (Columbia University Press, New York, 1983), lecture 2.

⁹ See D. Isaacson, 'Quine and Logical Positivism', in R. F. Gibson, Jr. (ed.), *The Cambridge Companion to Quine* (Cambridge University Press, Cambridge, 2004), p. 254.

– they are normative, not descriptive. What we hold rigid in the face of experience is not a truth about the world, but *the expression of a rule* – for example, a rule for transforming descriptions of how things are in the world. To say that an arithmetical proposition such as $25 \times 25 = 625$ is true is to characterize it as licensing the transformation of other, in particular empirical, propositions concerning quantities or magnitudes of things. ‘ $25 \times 25 = 625$ ’ licenses one, for example, to transform the proposition that there are 25 boxes of 25 marbles in the drawer into the proposition that there are 625 marbles in boxes in the drawer, without counting afresh.¹⁰

Non-mathematical and non-logical conceptual truths (i.e. grammatical truths) are equally a priori. To distinguish these from a posteriori empirical truths does not depend upon a Carnapian (or any other) distinction between analytic and synthetic propositions. It depends upon a distinction between implicit statements of rules for the use of words and applications of words in accordance with the rules thus stated. That vixens are foxes (which is analytic, i.e. transformable into a logical truth by substitution of a definitional synonym), that red is more like orange than like yellow (which is not an analytic truth thus understood), that a person is a subject of rights and duties, that to have a mind is to have a certain range of abilities, are specifications of *the nature of their subject* and simultaneously *expressions of rules for the use of their constituent terms*. They license redescriptions of phenomena and inferences from their description.

Analytic truths such as ‘Vixens are foxes’ or ‘Bachelors are unmarried’ are a subclass of conceptual truths. It was an error of Carnap and the logical positivists to characterize such truths as true *in virtue of* conventions, and to claim that their truth *followed* from the meanings of terms and laws of logic alone. They do not follow from the meanings of their constituent terms (nothing follows from the meaning of a word, but only from a proposition), but are partly *constitutive of* the meanings of those terms. So it would be more correct to characterize them as *conventions* – as expressions of rules for the use of their constituent words in the misleading guise of descriptions. Of course, to say that such propositions are true is not to say that the rules

¹⁰ To be sure, there are many kinds of arithmetical propositions that are not, or not *directly*, rules for the transformation of empirical propositions about quantities or magnitudes, e.g. the proposition ‘There are more primes between 1 and 20 than there are between 20 and 40’. It does not follow that such propositions are not normative. They are the result of applying arithmetical techniques to arithmetic itself, and they forge constitutive connections within the body of arithmetic.

they express are true – for there is no such thing as true or false rules. It is merely to confirm their role as expressions of rules. Similarly, we say that ‘The chess king moves one square at a time’ expresses a rule of chess, and we also say that it is true that the chess king moves one square at a time. To say the latter is merely to affirm that this is the chess rule for the movement of that piece. For an empirical proposition to be true is for things to be as it says they are. But for a grammatical proposition to be true (no matter whether analytic, like ‘Vixens are foxes’, or non-analytic, like ‘Red is darker than pink’) just is for the proposition to express a constitutive rule for the use of the constituent terms. A false empirical proposition is intelligible – it describes a possible state of affairs that does not actually obtain. What we *call* a ‘false’ grammatical proposition (e.g. that pink is darker than red) does not describe a possibility that does not happen to obtain. It does not describe anything. Nor does it state a false rule for the use of its constituent terms, since rules are not true or false. Indeed, it conjoins words in a manner inimical to the rules for their use. So one might say that it is a peculiar form of nonsense. Of course, rules for the use of words are not immune to revision. But if we revise them, then the words the use of which they determine will have a different meaning – that is, be used in a different way.

In the sequel, I shall not rely on any analytic/synthetic distinction. But I shall constantly invoke the distinction between grammatical or conceptual propositions and empirical ones, even though there are uses of sentences on an occasion, the status of which is unclear; there are sentences the status of which has changed with time (‘Acids turn litmus paper red’ was once used to define what an acid is, but is no longer so used); and there are sentences that may be used on one occasion to express a grammatical proposition and on another to express a quite different kind of proposition (Doris Day’s song ‘Que sera, sera’ was not a celebration of a theorem of tense-logic). For the distinction between the grammatical and the non-grammatical (including the empirical) is not a distinction between type-sentences, but between uses of sentences.

7. The Platonic and Aristotelian traditions in philosophical anthropology

It is fruitful to view philosophical reflection on human nature as following one or the other of two great paradigms: Platonic and

Aristotelian. The Platonic paradigm is dualist, although its post-Cartesian forms are prone to degenerate into one or the other of its duals (e.g. idealism, on the one hand, and behaviourism or physicalism, on the other). The Aristotelian paradigm is predominantly (non-degenerate) monist.

Dualism has roots in religious doctrine, in the human fear of death and irrational craving for immortality, and in the character of misunderstood experiences, such as dreams or delusions (e.g. of ghosts, of 'out-of-the-body' experiences), on the one hand, and in features of the grammar of personal pronouns, logico-grammatical asymmetries between first- and third-person psychological utterances, and grammatical and idiomatic peculiarities of discourse about mind, soul and body, on the other. Platonic dualism takes a human being to be a creature composed of body and soul. The soul is conceived to have existed prior to birth and embodiment, and to survive the death of the body. The identity of a Socrates turns on the identity of his soul, and the survival of Socrates despite the death of his body is the survival of his soul.¹¹

The Aristotelian tradition, as one might expect of its originator, is inspired primarily by biological reflection. The Aristotelian concept of the *psuchē* (a term commonly translated, somewhat misleadingly, as 'soul') is a biological concept, not a psychological, let alone a theological or ethical, one. The *psuchē* is conceived to be the source of the distinctive activities of a living thing – the 'principle' of life that makes it the kind of being that it is. The soul, as Aristotle conceived it, is the set of potentialities the exercise of which is characteristic of the organism. Consequently, it is not only human beings that have

¹¹ . . . either this or something very like it is a true account of our souls and their future habitations – since we have clear evidence that the soul is immortal – this, I think is both a reasonable contention and a belief worth risking, for the risk is a noble one. . . .

We shall try our best to do as you say, said Crito. But how shall we bury you?

Any way you like, replied Socrates, that is, if you can catch me and I don't slip through your fingers.

He laughed gently as he spoke, and turning to us went on, I can't persuade Crito that I am this Socrates here who is talking to you now and marshalling all the arguments. He thinks I am the one whom he will see presently lying dead, and he asks how he is to bury me! . . . you must assure him that when I am dead I shall not stay but depart and be gone. . . . you must keep up your spirits and say that it is only my body that you are burying, and you can bury it as you please, in whatever way you think proper. (*Phaedo* 114d'–116a)

a *psuchē*, but all living creatures, including plants. What is distinctive about the human soul is that it incorporates not only the vegetative powers of growth, nutrition and reproduction, and the sensitive powers of perception, desire and motion, but also the uniquely human rational faculties of will and intellect. The soul is not an entity attached to the body, but is characterized, in Aristotelian jargon, as the ‘form’ of the living body. The soul stands to the body of a human being roughly as the power of sight stands to the eye. The powers of a thing cannot survive the death of the thing itself. However, Aristotle equivocated, sometimes arguing that the rational soul, in particular the capacity to reflect on necessary truths (later denominated ‘the agent intellect’), is itself immortal. This, not obviously coherent idea, was to be the handle that Aquinas seized in order to accommodate Aristotelian philosophy to Christian doctrine.

The Platonist conception of human beings as combinations of body and soul, conceived as two separable entities, was transmuted and transmitted by Plotinus, and synthesized with Christian doctrine by St Augustine. Augustine’s conception was to inform the philosophy of the most influential of thinkers of the modern era – Descartes. However, a major and long-lasting period of Aristotelian dominance intervened in the High Middle Ages, as a result of the rediscovery and translation of the bulk of Aristotle’s surviving works in the twelfth and thirteenth centuries and of Aquinas’s great synthesis of Christian and Aristotelian thought. Aristotelian dominance waned with the rise of Renaissance Neoplatonism consequent upon the rediscovery and translation of the bulk of the surviving Platonic dialogues. It was destroyed by the rise of modern science in the seventeenth century, which disproved a host of Aristotelian empirical hypotheses and replaced a teleological and normative conception of nature with a causal, mechanistic one.

Descartes’s philosophy marks a dramatic break in Western thought. On the one hand, he, like Bacon, was the ideological spokesman for the principles of the scientific revolution. The natural sciences had undergone a qualitative change through the mathematicization of physics and its extension from the sublunary sphere to the solar system (including the comets) as a whole, and through its espousal of meticulous observation, experiment and testing of hypotheses by means of newly invented instruments. Cartesian metaphysics sharply divided the study of nature from the study of human thought and consciousness. In opposition to the Aristotelian tradition, Descartes advocated the ontological, nomological and methodological unity of all the natural

sciences. *All* natural phenomena (other than human thought and action) were to be explained in terms of the mechanical laws of matter in motion. Hence, contrary to Aristotelian and scholastic thought, the operations of what had been conceived to be the vegetative and sensitive souls were held to be explicable in wholly mechanical terms and required no separate principles for their explanation. While Aristotle thought above all as a biologist (and was, indeed, the greatest biologist until Darwin¹²), Descartes thought as a physicist. It has been a major misfortune for philosophy in the modern era that no great philosopher was a biologist.

Descartes shaped the modern conception of the mind. While the Aristotelian tradition conceived of the human mind primarily in terms of the intellect and the will (all that pertains to the ‘rational soul’, which is distinctive of mankind), Descartes characterized the mind in terms of thought. But he redefined *thought* to incorporate ‘everything which we are aware of as happening within us, insofar as we have awareness of it’.¹³ To have a mind, according to Descartes, is to have experience and to be aware of oneself as having experience. So the mind is defined in terms of *consciousness*, narrowly conceived as the awareness of ‘thoughts’ or experiences ‘within us’. So he denied that non-human animals are conscious or have experiences at all, taking them to be mere biological mechanisms. To have a mind, according to Descartes, is to feel sensations as if in the body, to seem to perceive, to feel emotions, to have mental images, desires and likings, as well as to exercise the powers of rational thought and will. This conception of the mind and of the mental still bedevils contemporary thought.

With modifications, Descartes reinstated the Augustinian conception of the mind. So he continued the Platonic tradition. A human being, he argued, is not a unitary substance – an *ens per se*, as the scholastics had held¹⁴ – but a composite entity consisting of mind and body. The soul, contrary to the Aristotelian conception, is not the principle of life in its various forms, but a separate substance – a *res cogitans*. Although united with the body, it is separable from it. The mind and the body interact causally. Impact of corpuscles upon

¹² Ernst Mayr, *The Growth of Biological Thought* (The Belknap Press, Cambridge, Mass., 1982), p. 87.

¹³ Descartes, *Principles of Philosophy*, I, 9.

¹⁴ Aquinas, in his *Commentary on St Paul’s First Letter to the Corinthians*, remarked: ‘My soul – that’s not what I am (*Anima mea non est ego*).’ Hence the orthodox Catholic requirement of the resurrection of the body.

the body generates sensation (feeling sensations as if they were in the body) and perception (seeming to perceive) in the mind, and the mind causes the body to move by the exercise of the will. Mind and body are closely ‘intermingled’. For one is not ‘in one’s body’ as a sailor on a ship – one *feels* the impact of the world upon one’s body in the form of sensations and apparent perceptions; one does not have to examine one’s body as the sailor has to examine his ship to find out how it is affected.¹⁵ The human person, the *ego*, is to be identified with the *res cogitans*. The mind has no parts, and since destruction of an entity is decomposition into component parts, the mind – the person – is immortal.

Cartesian dualism provided the framework of thought about the nature of mankind for the modern era, not merely in the sense that the dominant trend was some form or other of dualism (which is true as far as both popular and scientific thought was concerned until the middle of the twentieth century), but in the much deeper sense that it set the categories in terms of which reflection took place.

Locke, agnostic about man’s being composed of two distinct substances, demanded only a duality of a body, on the one hand, and a set of psychological properties (ideas) annexed to it, on the other. Identity of a person, he thought, required only psychological unity and continuity annexed to some substance or other (and not necessarily the same substance throughout the lifetime of the same person). Berkeley abandoned the notion of material substance, but retained the idea of a spiritual substance. Hume jettisoned the concept of substance altogether, denied the intelligibility of material things, and held a human person to be no more than a mere bundle of impressions and ideas bound together by causal and mnemonic relations. This bizarre idealist conception was a *reductio ad absurdum* of the Cartesian world picture, but it displayed quite amazing lasting power, surviving into the middle of the twentieth century. The materialist trend, exemplified by Hobbes, La Mettrie, D’Holbach and Diderot, which involved jettisoning the other side of the Cartesian duality, was very much a minority movement until the twentieth century. Its heirs were behaviourism and various forms of physicalism.

Twentieth-century behaviourism too was an attempt to jettison the immaterial substance while retaining the material one of the Cartesian duality. *Ontological behaviourism*, as espoused by Watson, was a

¹⁵ Ironically, the simile is Aristotle’s, *De Anima* 413^a9, in what is apparently an allusion to a lost Platonic analogy.

dogmatic assimilation of the mental to the status of mythical entities or misguidedly postulated entities (such as witches). Its crudity was noteworthy, and it infected empirical psychologists with a deleterious methodological behaviourism until the equally misconceived, though slightly less crude, cognitivist revolution of the 1960s. *Logical behaviourism* was a programme, espoused by a few philosophers (e.g. Carnap in the early 1930s¹⁶), for the *logical* reduction of all psychological attributes to behavioural attributes and dispositions to behave. It correctly stressed that certain psychological concepts (e.g. knowing, believing, understanding) had often been misconstrued as signifying mental states, acts or activities. It rightly insisted upon a conceptual nexus between psychological attributes and behaviour. But the crude reductionism was misconceived, and the character of the conceptual nexus with behaviour was misunderstood.

One reaction to the failure of the behaviourist programme was to identify the mental with states and activities of the brain. This took various physicalist forms. Central state materialism held types of mental state to be identical with types of brain state. Anomalous monism held 'tokens' of mental states to be identical with 'token' brain states. Advances in cognitive neuroscience led scientists to jettison the Cartesianism of their teachers (such as Sherrington and some of his pupils), and to ascribe psychological attributes to the brain in order to explain how human beings exercise their cognitive and perceptual faculties. It was unfortunate that the cognitivist revolution in psychology in the 1960s opted for a computationalist, modular conception of the mental, which identified perceptual and intellectual powers with information processing familiar from the latest technology of the era. This in turn encouraged the idea that it is the brain that processes information, hypothesizes, computes and so forth, and that human perception is

¹⁶ But *not*, despite a mythology fostered in the USA, Gilbert Ryle, who wrote, 'we employ for saying things about the mental life of people many active verbs which do signify acts of mind . . . correctly list[ing] *calculating*, *pondering*, and *recalling to mind* as mental acts or processes'. What Ryle objected to was adding to the list such verbs as *believing*, *knowing*, *aspiring*, and *detesting* (see 'Phenomenology versus "The Concept of Mind"', repr. in his *Collected Papers*, vol. 1 (Hutchinson, London, 1971), p. 189.

It has been argued by S. Soames (*Philosophical Quarterly* 56 (2006), p. 430) that 'Ryle was clearly a logical behaviourist. Since he was neither a dualist nor an eliminativist, and he rejected the view that mental states are brain states, his views left nothing else for [mental attributes] to be but behavioural dispositions.' This is like arguing that if someone is neither a Republican nor a Democrat, then he must be a Communist.

to be explained in terms of the computations and hypotheses constructed by the brain. These developments in cognitive science led to the emergence of various forms of functionalism in philosophy of mind (see fig. 1.3).

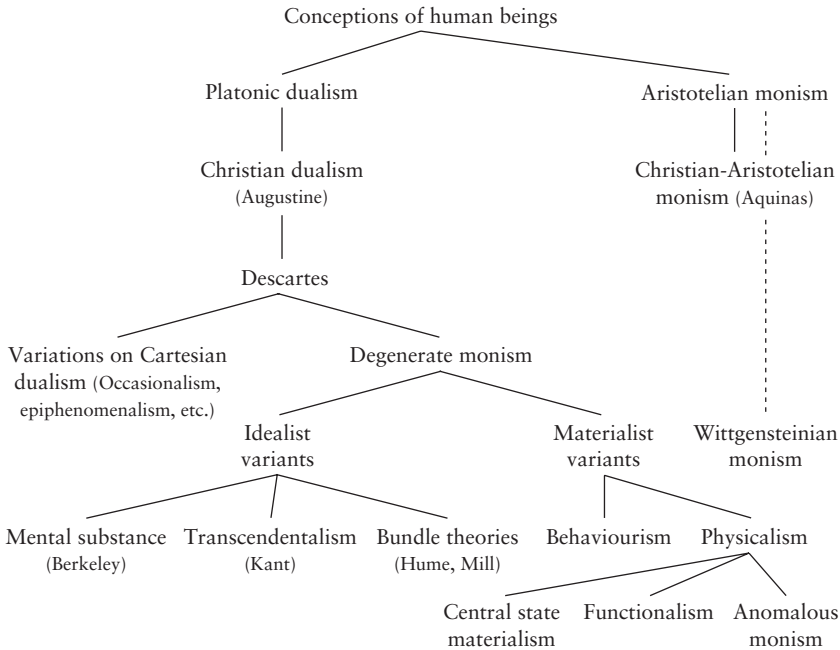


Figure 1.3. *A rough schema of conceptions of human beings and their constitution*

What is most noteworthy about the evolving tale is the extent to which it took place within the shadow of Descartes. For, by and large, responses to Descartes involved rejecting one or the other side of the Cartesian duality of mental substance and material bodies and the attempted reduction of one or the other type of property that Descartes had allocated to the mind or the body. What is most important about current neo-Cartesian views, espoused by many cognitive neuroscientists and self-styled cognitive scientists, as well as by many philosophers, all of whom conceive of themselves as adamantly anti-Cartesian, is the extent to which the Cartesian conception of the relationship between the inner and behaviour remained intact despite abandonment of the Cartesian conception of the mind. For what was characteristically

done was to ascribe cognitive and perceptual attributes to the brain, in the course of trying to explain the generic cognitive and perceptual activities and achievements of human beings.

The deepest challenge to the dominance of the Cartesian tradition and its degenerate offshoots came in the mid-twentieth century from Wittgenstein's philosophical psychology.¹⁷ For Wittgenstein did not merely reject one or another of the Cartesian principles and dichotomies. He wiped the board clean of Cartesian doctrines. In an important sense, he unwittingly revived (breathed fresh life into) the Aristotelian tradition. Like Aristotle, he held that such attributes as consciousness, perception, cognition and volition are attributes of the living animal, not of its material parts, such as the brain, let alone of its alleged immaterial parts, such as the mind. He repudiated the Cartesian *res cogitans*, but also denied that the mind is just an aspect of the body ('I'm not that hard up for categories', he remarked drily¹⁸).

This Gigantomachia will doubtless continue, as each generation struggles to find its way through the jungles of metaphysical speculation, and religious and scientific myth-making about human nature. The following chapters do not aim to contribute a new pathway, but to clear old pathways from overgrowth and to uproot misleading signposts misguidedly placed by recent travellers.

¹⁷ But also, less perspicuously and systematically, Heidegger in *Being and Time*.

¹⁸ Wittgenstein, *Remarks on the Philosophy of Psychology*, vol. 2 (Blackwell, Oxford, 1980), §690. He was here objecting specifically to Nietzsche's remark to this effect in *Thus Spake Zarathustra*, Pt 1, chap. 4.