

Heart and Mind

The Varieties of Moral Experience

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METHUEN

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1 THE HUMAN HEART AND OTHER ORGANS

1 The Function of the Heart

If we talk of hearts today, we usually do it only in two rather restricted contexts; the romantic or the medical. A heart is either the focus of a love-affair, or the seat of a disease. These two matters seem widely separated, not connected except externally and by chance. But a much wider use of the word is possible, and deserves examination. When Lady Macbeth, sleepwalking, moans because she cannot clean the smell of blood off her hands, her watchful Doctor says:

What a sigh is there! The heart is sore charged.

and her waiting-woman replies:

I would not have such a heart in my bosom for all the dignity of the whole body.

(Macbeth, Act V scene i)

These people are talking in a perfectly natural way, but one which has become a trifle awkward for us now, partly through sentimental misuse of words like 'heart', partly because of certain changes in the pattern of our thoughts. What they are speaking of is the *core* or centre of someone's being, the essential person, himself as he is in himself and (primarily) to himself. By comparison, both the romantic and the medical aspects of his life are partial and dependent. On the one hand, love affairs do not depend only on certain special feelings, but on the whole character. On the other, someone who has to have a heart operation needs a surgeon whose heart is in his

work, a stout-hearted one, who in unexpected difficulties will take heart rather than lose it, one whose heart will not easily sink or fail him. A medical student who, at heart, has never really cared for his work, would never become this kind of surgeon whatever his brains. The surgeon too, on his side, needs a stout-hearted patient, not a faint-hearted one—a patient who will put his heart into the business of recovery. In this wide and still natural way of speaking, the hearts of both doctor and patient form an essential part of the business. Of course one of them may be *heartless* in a narrower sense—callous, selfish, unsympathetic. But to be that, to have any distinct character, he still needs this structured core to his being. It is where his priorities are formed. It is the organized set of central feelings by which he is habitually moved. Hearts may be narrow and hard, cold and flinty, but they are still a crucial element in people's activities.

How then does this centre relate to the mind or brain? Here too we can choose between a wider and a narrower use. We certainly can contrast the mind or brain sharply with the heart, as I did just now in speaking of the medical student. He may have a first-class mind—meaning that he always passes exams well—without any necessary consequences about his heart or character. But that is not the only way to think of the matter, nor the most natural one. When Macbeth says:

O full of scorpions is my mind, dear wife

this is not at all the same thing as complaining about bugs in a computer program. And again:

Macbeth Canst thou not minister to a mind diseased,
 Pluck from the memory a rooted sorrow,
 Raze out the written troubles of the brain,
 And with some sweet oblivious antidote
 Cleanse the stuff'd bosom of that perilous stuff
 Which weighs upon the heart?

Doctor Therein the patient must minister to himself.

Macbeth Throw physic to the dogs, I'll none of it.

(Act V, scene iii)

The *mind* which is diseased is not the intellect, it is something quite close to what we still call the heart. The heart is the centre of concern, the mind is the centre of purpose or attention, and these cannot be dissociated. This does not prevent the mind from being the seat of thought, because thought in general is not just information-handling or abstract calculation, such as computers do, but is the process of developing and articulating our perceptions and feelings., This is still true even if we confine the term to serious, ‘directed’ thought, ignoring more casual musings:

But men at whiles are sober,
And think, by fits and starts,
And if they think, they fasten
Their hands upon their hearts.

(A.E.Housman, Last Poems, x)

Thought is not primarily the sort of thing which is tested in exams. It is the whole organized business of living—seen from the inside.

All this matters because many things on the current intellectual scene tend to make us disconnect feeling from thought, by narrowing our notions of both, and so to make human life as a whole unintelligible. We are inclined to use words like ‘heart’ and ‘feeling’ to describe just a few selected sentiments which are somewhat detached from the practical business of living—notably romantic, compassionate and tender sentiments—as if non-romantic actions did not involve any feeling. But this cannot be right. Mean or vindictive action flows from and implies mean and vindictive feeling, and does so just as much when it is considered as when it is impulsive. In general, too, ordinary prudent action flows from prudent feeling, though this is something to which we are so well accustomed that we take it for granted. It may seem like pure habit—until a sudden threat startles us into consciousness of the motive. We are in fact so constituted that we cannot act at all if feeling really fails. When it does fail, as in cases of extreme apathy and depression, people stop acting; they can die in consequence. We do not live essentially by calculation,

interrupted occasionally by an alien force called feeling. Our thought (including calculation) is the more or less coherent form into which our perceptions and feelings constantly organize themselves. And the compromise between various, conflicting, strong and constant feelings expresses itself in our heart or character.

Of course I am not denying that there can be discrepancies and conflicts between thought and feeling, or between feeling and action. There can. (They provide some of our most serious problems, which is why we have quite a good vocabulary for talking about them.) But they have to be exceptional. In general, feelings, to be effective, must take shape as thoughts, and thoughts, to be effective, must be powered by suitable feelings. Speculative thought is no exception; it depends on the powerful feelings of interest and curiosity. When we speak of a thought as conflicting with a feeling, both thoughts and feelings are really present on both sides; the distinction is just one of emphasis. For instance, if a normally prudent housewife, overcome (as we say) by an impulse, loses everything on a wild investment, at least two thoughts and also two feelings are involved. Her habitual, steady desire for security was borne down by the detailed, but misleading, calculations which her intellect so vigorously produced. She did not operate with her normal degree of organization, but she still operated as one person, not two. Disentangling the intellectual from the emotional aspects of this whole is performing a piece of abstraction, one which needs enormously more care than theorists usually give it.

2 The Divorce Between Feeling and Reason

Why, now, does all this matter? The unity of the human personality which I am stressing seems obvious. As I have said, however, it badly needs to be plugged today because of a whole web of theoretical habits which tend to obscure it and make it inexpressible. In this book, my main business will be with the strands of this web spun by British moral philosophy, which from the eighteenth century on has occupied itself with a dispute about whether morality is a matter of reason or

feeling, ignoring the obvious fact that it is both. Its question has been, in Hume's words:

concerning the general foundation of Morals; whether they be derived from Reason, or from Sentiment; whether we attain the knowledge of them by a chain of argument and induction, or by an immediate feeling and finer internal sense.

(Enquiry Concerning the Principles of Morals Section I)

This dilemma is false. The metaphor of *foundation* is disastrous; a building can only sit on one foundation, so it looks as if we have to make a drastic choice. But we don't. Morality, like every other aspect of human activity, has both its emotional and its intellectual side, and the connection between them can't be just an external one, like that between stones brought together for a building. It is an organic one, like that between the shape and size of an insect. This barren dispute sprang up in the first place as part of a wider controversy, which was only less barren because it was more quickly recognized as being merely a question of emphasis—the dispute between rationalism and empiricism in the theory of knowledge. Does knowledge—people asked—depend on reasoning or on experience? Very plainly the answer must be—yes, on both, but in different ways, and the next move must be to go on and investigate these different sorts of dependence. Since Kant's day, this has been fairly well understood as far as theoretical knowledge is concerned. In moral philosophy, however, empiricists have been a lot slower to see that they could not treat the issue as a football match which, by vigorous cheering, they might one day hope to win. Hume's question only makes sense if it is treated as one about emphasis. It must be dealt with by accepting both elements as inseparable, and going on to a patient analysis of the parts they play in the whole.

Inevitably, these are hasty remarks on large subjects. In this book, I cannot say much about the theory of knowledge, though to avoid misunderstanding, I had better point out at once that I am not waving a lone flag in rejecting extreme, dogmatic empiricism as no more sane and workable than

extreme, dogmatic rationalism. The impossibility of defending it has been argued by many good philosophers who are certainly the direct heirs of the empiricist tradition in its central enterprise of realism, common sense, and respect for the complexity of experience.¹ Hume's attempt to show experience as a simple receiving of bare raw material unsullied by thought—as a succession of separate perceptions and feelings, disconnected and occurring at random, will not work. He was right to explore these wilder shores of empiricist metaphysics, but the upshot of his journey must be accepted. Experience is not like this, and cannot be so represented. Humean empiricism is bankrupt in the philosophy of science, and that is something which it cannot afford to be.² It is also terribly mean and impoverished in the Philosophy of Mind. Hume himself was alarmed about this, when he realized that the self which he was treating as the only solid reality had dissolved into a loose succession of disconnected events—a 'bundle of perceptions' with no string round the bundle.³ But he saw no remedy, and this impoverishment has persisted, in the form of a strange, indeed paradoxical unwillingness in empiricist philosophers to recognize the ordered complexity of our actual experience. Since empiricism simply *is* an insistence that experience holds the key to all our problems, one might expect it to lead people to want to map experience itself in some detail, and not to be surprised if it turned out to be complex. And it has indeed taken some of its best practitioners like this—notably Locke, Butler and William James. Hume himself sometimes shared their interest, and phenomenology has been the heir of his efforts that way. At other times however, he viewed the inner life with dour suspicion, determined to make this confusing area conform with his demand for simplicity, and above all not to make use of any concept, however obvious, innocent and necessary, which might turn out to provide material for an immortal soul. Twentieth-century behaviourism is one heir of this timid and unrealistic tradition. I shall be mentioning others. In general, the unity of human life is the central theme of the essays in this book, and though my remarks about it here are somewhat brief and dogmatic I shall try to show in them more fully how I understand it and how I want to vindicate

it against false antitheses forced upon it by theory—unreal choices, resulting, I suggest, chiefly from controversial bad habits.

3 The Divorce Between Nature and Will

I begin then, deliberately, with a rather simple paper, 'Freedom and Heredity', dealing with the most troublesome and clamorous current form of this old dispute between feeling and reason—namely, the war at present proclaimed as arising between human nature and the free human will. We are called upon to choose between these concepts, to decide whether we are free beings, or members of the species *Homo sapiens*, with an inherited mental and emotional constitution. But are tomatoes fruit or vegetables? Does a house need shape or size? The two things imply each other. A being which had no natural constitution could not be free; the word freedom would make no sense applied to it. Such a creature would have nothing which it needed to be free to do. And the natural constitution which man actually has is no obstacle to his making free choices, since in fact it is so formed that it commits him to choosing. There is no football match to be won here. There are two imperfectly understood half-truths, both of which in practice we recognize, and which we must somehow fit together. This is certainly hard, because our ideas of freedom and of nature have been developed in different contexts and are not shaped to fit each other. As has long been recognized, very careful logical plumbing is needed to understand free will, and people who want to do it will always have to think hard. But the present controversy does not only flow from this general, long-standing difficulty about free will and causal necessity. It arises because the notion of the will has been fantastically narrowed and isolated, since Nietzsche, in a melodramatic attempt to expand human freedom into omnipotence. For Kant, the will meant practical reason. It was a name for the whole person, considered as a responsible chooser. Nietzsche, distrusting thought, exalted it as simply the courage to pursue one's own desires. The existentialists, seeing that desires are part of nature, and

anxious to free the individual from entrapment in anything natural, separated it off from desire as well, and exalted it still further as the seat of pure choice. But choice in this isolation becomes so pure as to be quite meaningless. And although existentialist jargon is no longer specially fashionable, this is still the only way of thinking open to those who want to divorce the essential self from human nature. That self becomes a mere vacuous abstract force without direction. What is missing is the background map of the *whole* self, within which both the natural desires and the shaping will which develops to organize them can find a context. As I remarked when discussing hearts, certain areas within this whole are brightly lit by current thought and intellectually familiar, but the brighter this light is, the darker and more mysterious we find the gaps between. A sharp beam is focused on the body as the object of medical science. This, however, makes it even harder to peer into the surrounding gloom, even at those neighbouring areas of the mind which (as Macbeth saw) must often be understood for the treatment of disease itself.

Elsewhere a different and weaker light (probably pink) vaguely illuminates the feelings, or certain selected feelings. But this is not supposed to be a very complex or important area. And elsewhere again, there looms in the darkness, uncertainly lit in green from yet another direction, a further item called the will. How are these bits and pieces to be connected? The human being who is the object of various sciences seems to bear no relation to the one who feels, or to the subject making decisions, yet he must operate as a whole. We cannot choose between these items; we need a map which contains them all.

Of course the roots of these difficulties are not new. People's understanding of themselves has always been fragmentary. Probably it always must be so, probably it would always be subject to the paradoxes which Pope noticed in the *Essay on Man*:

—Placed on this isthmus of a middle state,
A being darkly wise and rudely great,
With too much knowledge for the Sceptic side,
With too much weakness for the Stoic's pride,

He hangs between, in doubt to act or rest,
In doubt to deem himself a god or beast,
In doubt his mind or body to prefer,
Born but to die, and reasoning but to err...
Created half to rise, and half to fall,
Great lord of all things, yet a prey to all,
Sole judge of truth, in endless error hurled,
The glory, jest and riddle of the world:

(*Essay on Man*, Epistle 2, 3–18)

What *is* new in this century, however, is the contribution of academic specialization to the splitting process. Mind and body, scepticism and stoicism, god and beast, are now topics belonging to different disciplines. Each is supposed to be discussed in its own appropriate terms, and any area so far neglected is suspect; since there is no proper way of discussing it, it tends to look like unsuitable ground for academic consideration altogether. Within each discipline, there is a further tendency to keep narrowing the territory; to be suspicious of outlying areas and concentrate only on things which can be made to look perfectly clear and complete. In any given subject this leads to feuds between rival factions, each claiming to have the right centre. The only remedy for this fragmentation is to stand back and take a wider view of the key concepts as parts of a whole.

In 'Creation and Originality' I begin this process boldly with the most awkward and mysterious case, the will. Those who consider our nature as something mean, limited and mechanical are of course reluctant to allow it any part in the honourable function of creativity. They follow Nietzsche in crediting the unassisted will with the creation both of moral values and of art. But when did mere will-power, decisiveness and determination ever make an artist, or indeed a real moral reformer? Talents are gifts. It is not a deprivation, or an infringement of freedom, that each of us must live as the person he is, with the brain and central nervous system that he has, instead of shopping around for one that would suit him better. (What *him?*) Not even God can invent himself from scratch. The fear of determinism arises largely from people's habit of treating all causes as enemies rather than friends, deprivations rather than gifts. Gifts are *enabling* causes; it is hard to see

how we would manage without them. Actually, this non-religious rejection of physical causes in the name of freedom requires a far narrower, more bloodless and ascetic view of the self than does any religion. For Christianity, the true self is indeed the soul, but the body is a necessary and suitable expression for it; the resurrection of the body will ensure that whole people, not just ghosts, inhabit Heaven. For Buddhism too, the soul must find a body to fit it. But those who want to say that heredity does not shape a human personality at all seem to take that personality as something sexless and abstract, a mere standard will which happens to have got shut up in a particular body. What are our talents then?

In this paper, accordingly, I suggest that we must treat Creation and Originality, not as supernatural interventions, but as aspects of our whole imaginative capacity, and therefore of our whole nature. There is no danger in admitting their genetic sources. We need not isolate them as pure products of the parthenogenetic will. In the next paper, 'G.E. Moore on the Ideal' I discuss an equally mysterious, and related, attempt to isolate the power of moral judgement from the rest of our nature.

4 The Fragmenting of the Moral Personality

It was Moore who ruled that moral judgements could not be supported by reasoning, that all argument about them was vitiated by a 'naturalistic fallacy'. His aim in doing this was actually to clear the way for an aesthetic morality, which he thought would be self-evident once the bad arguments in support of other values were cleared away. This enterprise seems interesting, but it was the other which caught on. This was the point when moral philosophers began to make it a matter of professional pride to ignore all direct discussion of their subject. The autonomy of morals must, they declared, mean its complete conceptual isolation. Before this time, philosophers had normally started their enquiries from the mass of hard day-to-day thinking that already exists on moral issues. Even when (like the British idealists) they finally

reached conclusions distant from much of it, they thought it their business to show how and why. In the young Moore, however, a quite genuine moral fervour and insight were unfortunately linked with a strain of arrogant dogmatism which led him simply to dismiss without discussion, as bumbling amateurs, all those who did not share his method. And in an age of increasing specialization, nervous academics found it much easier to join Moore than to resist him. They soon agreed that the scope of moral philosophy must be narrowed to an examination of just *how* moral judgement worked in the absence of argument.⁴ This narrowing is of course not unique. Any kind of thinking which is vigorously practised in common life—the psychology of motive, literary criticism, the study of small children—presents academics with the same sort of problem; must they take it all seriously, or can they by-pass it? Anti-empirical take-overs are terribly tempting. The contemptuous simple-minded pundit who strides in talking like an astronomer among astrologers is easily accepted. His programme does not have to be very good. It chiefly needs to be anti-popular, to save its devotees the trouble of listening to outsiders. If it does this, it tends to catch on. At this point, the academic himself splits into two personae. As Jekyll, for professional purposes, he now accepts and studies only what the intellectual fashion allows. As everyday Hyde, however, having still real problems to solve, he cannily continues to use bits of all those forbidden but convenient conceptual schemes—Utilitarian, Freudian, Marxist, egoist, Christian, and whatnot—which he has officially forsworn, but which have neither been properly refuted nor replaced by something better. (As a by-product of this arrangement, academic books, which are always written by Jekyll, become very boring.) To sign up for a manifesto like Moore's is therefore to bifurcate oneself as a thinker. It is also, however, to fragment one's subject-matter—the moral personality. If moral judgements are really exempt from argument, then whatever faculty makes them is split off from all intelligible relation to the rest of the character. The point at which this split occurs varies according to which faculty we take to do the judging, and this is the next issue to be determined.

Out of Moore's ruling about the 'naturalistic fallacy', then, arose one of those disputes where academic narrowness produces its own echo, where the joiner who insists that the only legitimate tool is the hammer is hotly answered by his colleague who will only allow the saw. Moore's own suggestion that we directly *see* moral truths like colours was soon abandoned. Morality is, in the first place, far too disputable to be treated like this, in the second it is far too practical. Serious value judgements give rise to *action*—but why should simply accepting a truth have this effect? Perhaps, philosophers suggested, these judgements are not a matter of sight but of feeling. (This is emotivism.) The change of metaphor from one sense to the other is at once attractive. What we see is the same for all of us and may not matter; what we feel is private, and moves us. Emotivism grasps a very important piece of the truth. Feeling and action *are* essential elements in morality, which concentration on thought has often made philosophers overlook. Hume was right to stress them. And today there is yet stronger ground for doing so in the increased problem of disagreement. This has now become so confusing that we welcome any excuse to stop thinking about it. The suggestion that thought is in fact quite impossible on moral questions, and indeed nothing to do with them, has a strong appeal. And the tradition of opposing feeling to reason in moral philosophy made it look plausible. So people readily concluded that moral judgements are indeed just expressions of personal feeling, and that to 'judge' in any stronger sense would be either wrong or impossible. They welcomed emotivism as a way of saying this. But in doing so they often entangled it with relativism, which is (approximately) the somewhat puzzling view that duties bind only in particular cultures, and that their bindingness is actually just some sort of bargain—an entrance fee exacted for belonging to a particular group, and meaningless outside it. A loose and shifting combination of relativism with emotivism gives rise to the way of thinking which I have called moral isolationism, and have discussed in the essay 'On Trying Out One's New Sword'. On the surface, this mixture looks like a particularly high-minded and flexible kind of immoralism, well-adapted to deal with

the clashes and confusions of our day. I argue that in fact it is a fraudulent mess. Clashes and confusions cannot be dealt with only by feeling; they need thought, and no culture can be thought about in isolation from its fellows. Liberal principles depend, quite as much as any others, on serious moral judgements, articulated and endorsed, not just by emotion or some other selected faculty, but by the personality as a whole.

This paper is an extremely short and simple one. The three that follow it are rather more detailed. They deal at closer quarters with attempts of moral philosophers, from the early 1950s on, to find a less flimsy, more workable approach to their subject. The background of these attempts must be briefly sketched here. And the story does not take us as far from everyday thinking as it might seem to. Essentially, philosophers were grappling here with the same problem as everybody else—namely, the moral confusingness of our age. Constant change, and the clash of standards drawn from different cultures, bewilder us, sometimes completely. Moreover, the conceptual tools with which we confront this chaotic scene were largely forged in the last century, and designed to be used against a single, stifling, monolithic Christian tradition. (It is remarkable how many people still talk as if this were now our problem.) Dostoevsky, Kierkegaard, Freud, Nietzsche, and Samuel Butler supply us with plenty of arguments against complacent, dogmatic conventionality, but few ways of finding our way in chaos. Opening windows is a healthy habit, but it is not much use when you are lost in a snowstorm. In this predicament, both philosophers and ordinary people tend to swing violently between two opposite strategies. The destructive response of declaring all thought impossible is followed by the constructive one of having another try. Emotivism was essentially destructive. Seeing its unreality, philosophers made stout attempts to bring back an element of thought into the business of moral judgement. But this was hard, since they still wanted it to be detached from all other thought. The dominant picture remained that of a distinct functionary within each of us, isolated in a separate office for the issuing of value judgements. In A.J.Ayer's original, simple, boo-hurray emotivist theory,⁵ this person only had feelings, and was interested only in

producing feelings and acts in others. In time, however, he became less crude. P. Nowell-Smith⁶ and C. L. Stevenson⁷ taught him to deal in attitudes instead of feelings. This is certainly an advance in realism. Attitudes are perhaps structured arrangements of feelings; they involve thought and they generate rules. R. M. Hare, seeing how much this mattered, grew bolder still and suggested that this official's job was not to feel at all, but to direct or prescribe actions.⁸ The moral judge was, in fact, our will, our power of deciding to see to it that certain sorts of things should be done. In doing this, he could even reason deductively from general principles. But these principles themselves must still be seen as detached from all other thinking. No reason could be given for them, except where a general decision gave the reason for a more particular one. They were seen as pure commands directing certain outward actions. The emphasis on outer action remained, but the line to other thought was still cut, and there was now no mention of feeling. Prescriptivism was meant to succeed emotivism, as emotivism has succeeded Moore's brand of intuitionism, not as a supplement, but as a rival exclusive claimant. This position has many bizarre consequences, some of which I point out in 'The Game Game'. Various philosophers, following Wittgenstein, had invoked the metaphor of a game as an explanation of situations (including moral ones) which were clearly governed by rules, but where it was not easy to see why the rules held. But this metaphor cannot be a terminus. It only raises a larger question: Why do the rules of a game hold? To understand this, we need to ask what need games satisfy; what is involved in being a game-playing animal? This is just the kind of far-reaching and partly empirical enquiry into our nature and that of other creatures which the metaphor had been designed to exclude. 'Prescribing' was supposed to work in a vacuum, to constitute alone the single crucial operation in morality. But why should there be any such single operation?

5 Naturalism and Reductivism

The insistence on narrowing the notion of morality sprang from fear that, if it were more widely conceived, it would become contaminated, that autonomy would be sacrificed. To understand why the philosophers swung their small search-light over the moral scene like this, refusing to spread its beam, we have to grasp the danger which they were trying to avoid. They called it naturalism. It was the danger of distorting and degrading morality by resting it on the wrong sort of arguments, and particularly on arguments taken from the natural sciences. The clearest case of this distortion is one Moore gave—crude ‘evolutionary ethics’ or Social Darwinism.⁹ You are an ethical naturalist if you say that ‘good’ simply means ‘evolved’, so that more evolved societies—i.e. more civilized ones—are necessarily better than less evolved ones. Or again, if you say that the fittest—that is, the most successful—individuals ought always to prevail because evolution demands it, and ‘ought’ means something like ‘is called for by evolution’. These examples are striking; anyone can see that there is something wrong with them. But actually so many things are wrong with them that they are not very useful; they do not help us to isolate the fault we are after. Evolutionary ethics is an outstanding conceptual pigs’—breakfast, a classic showpiece of non-thought. Every term in these contentions needs defining, and any reasonable definition of the terms will wreck the conclusions. To condemn this sort of ostentatiously muddled thinking is not to condemn all argument from the natural sciences, or from the concept of nature: it is to condemn bad argument. Consider now a clearer case; the defence of Moore’s own position about the value of contemplating art and beauty. Is it *naturalism* if I argue (for instance in a dispute about education), that attention to art is very important, and support this view by reference to the facts about the various capacities of children, and about what experience shows us of how people and societies develop without art? Or if I give a similar account of the importance of play? These are facts about human needs, facts which really might have been different. (It does not seem to be necessary that any *intelligent*

being would need art, beauty or play in exactly this way.) Experience is required for the understanding of such needs, and that understanding is necessary if we are to build a priority system. It is an understanding, not just of odd impulses, but of our nature as a whole. If 'naturalism' means arguing in this way, it is absolutely necessary for ethics.

The real danger to the autonomy of morals, in fact, is not naturalism, but crude reductivism, and the characteristic vice of reductivism is not its reference to nature, but its exclusiveness, its nothing-buttery. A crude reductivist claims, for instance, that, 'after all, a person is *really* nothing but £5 worth of chemicals.' This sounds hard-headed; besides the chemicals, what else is there? But in fact if we deliver £5 worth of chemicals—or even £6 worth—to an employer, after promising that we will get another person for him by Monday morning, he will detect a difference and is likely to be dissatisfied. He will be so too if we deliver a corpse. This is not necessarily because he demands an extra entity, such as an immortal soul. It is because the word 'person' necessarily means a certain very highly organized, active item, and raw materials are not what it refers to at all. The whole is more than the sum of the parts, and there is nothing superstitious about this. In the same way, anyone who said that, after all, 'good' meant nothing but 'pleasant' or 'evolved' would be grossly distorting language. But of course this does not stop him showing some less direct relation between the concepts if he will take the trouble to make it plausible. It certainly cannot show that the notion of goodness is conceptually isolated from all relations to other ideas. Permanent conceptual quarantine is impossible and autonomy does not require it. It is reductivism that wrecks many attempts to find a 'scientific basis (or foundation) for morality'.

What is a *basis* or *foundation*? The words evidently do not mean here what Hume chiefly meant by them—namely, the essential element in morality itself. They mean something more like an explanation or justification (Hume had this meaning in mind as well, as he shows when he asks how we know moral truths, but it is a different question). A model which naturally occurs to us here is that of the Foundations of Mathematics. These are the logical principles which mathematics must take

for granted—the set of assumptions which are necessary if mathematical reasoning is to be valid. Is there a similar set for moral reasoning? Now there do seem to be some forms of thinking which it needs to use. These may centre (as Hare suggested) round the idea of universalizing, of regarding oneself as just one among others, so that each should do as he would be done by. They may also include the larger cluster of notions within which Kant first put forward this suggestion—ideas like responsibility, freedom, rationality, respect for persons, and treating others as ends in themselves. Without these ways of thinking, we may say, there could be no morality. But it does not follow that they alone would be enough to constitute it. Our reason for adopting this way of thinking is certainly not just an intellectual one.¹⁰ As far as mere intellect goes, either calculating egoism or identification with the whole species would do just as well. To think in terms of distinct individuals capable of mattering to each other, and so think morally, we need our emotional constitution too. Intelligent psychopaths who lack normal emotions are amoral; they do not arrive at a moral position by pure reasoning. Our emotional constitution is not revealed by logic. It is a very large and general empirical fact—something which might in principle have been otherwise. The attempt to reduce morality to its minimal logic is itself reductive; it is one more piece of illicit nothing-buttery. Mathematics actually is in the surprising position of having no empirical part, of being essentially a branch of logic. Morality is not. It, like most other realms of thought, involves empirical considerations as well. These determine the detailed forms of thought it needs. In speaking of such a creature as man, it makes no sense to isolate the rational will.

I am suggesting that exclusive concentration on the will is itself a form of reductivism. This may seem surprising, since ‘reductivism’ is a name usually given to campaigns proceeding from the opposite direction. But the central fault—the arbitrary contraction of scope—is the same in both cases. To put this point in context, I deal next with the more familiar forms of reduction. In ethics, these come in two main kinds—psychological and physical. Psychological reduction flourishes most today in the form which Moore already concentrated on,

namely hedonism, the reduction of good to pleasure—whether private pleasure, as Freud believed, or, as Bentham thought, the pleasure of the greater number. Physical reduction on the other hand deals in the entities of biology and, through them, of physics. Thus, when an honest man insists on revealing an awkward truth in the teeth of bribes and threats, the psychological reductivist explains that (in spite of all appearances) this man is really only maximizing pleasure—either his own or other people’s. The physical reductivist, however, retorts that *he*—the truth-teller—is not really doing anything. What is really happening is just activity in his glands, brain and nerves, or even (still more bizarrely) in his genes. The trouble with these high-sounding views is simply their obscurity, and particularly the obscure use of the word *really*. Do these two views compete? Or can both be true? Does either eliminate the ordinary descriptions of the event? What do they actually claim? The psychological version looks at first like a simple accusation of humbug. But humbug is only possible where the real thing sometimes occurs to imitate, and the case we consider should clearly be the real one. As for the physical version, that version must apply to both. Real humbug and real heroism are for it equally to be described as—after all *really*—only activity in the cells. But this seems idle. The social and moral descriptions (humbug and heroism) which we started with still apply, and are still needed, they make an essential distinction. The physical one which we add does a different job; it is perfectly compatible with them but it cannot replace them. What special honour is being claimed for it?

To make sense of the reduction we must drop the metaphysical word ‘really’ and treat both suggestions as claims about explanatory power. The idea then is not that we were mistaken about what happened, but that it is best explained in a certain way. But to say *best* here lands us again in the same trouble about competition. Is there (why should there be?) any single explanation which is for all purposes the best one? To explain something is to remove a particular doubt or misunderstanding. And there is no limit to the number of doubts and misunderstandings that can arise. Normally, when we say that a particular explanation is the right or real one, and supplants others, we are taking for granted a definite question

which it was meant to answer. We share with our hearers an unspoken assumption about the job for which explanation is needed. This gives it no licence to monopolize the whole subject indefinitely. In the case of truthfulness, it is obscure how physical explanation could be helpful at all. Hedonism is much more obviously relevant. We may raise the question why truthfulness is so important, and hedonism is directly designed to answer such questions. As it happens, however, it is rather bad at answering this particular one. And even in more favourable cases, it usually seems to provide only part of the truth. Psychological reductions usually start from genuine and useful insights, but distort them by wild claims to exclusive status. I discuss their meaning in 'The Notion of Instinct'.

This is the general background of difficulties about reduction. We come now to a more alarming recent twist in them, produced by academic specialization and imperialism—the tendency to exalt one's own subject as the only explainer. With endearing abandon, Edward O. Wilson shows his flag:

The time has come for ethics to be removed temporarily from the hands of the philosophers and biologicized (*Sociobiology* p. 562). Having cannibalized psychology, the new neurobiology will yield an enduring set of first principles for sociology (p. 575). We must shift from automatic control based on our biological properties to precise steering based on biological knowledge (*On Human Nature* p. 6). Neurobiology cannot be learnt at the feet of a guru.... Ethical philosophy must not be left in the hands of the merely wise (p. 7).

Academic imperialism on this scale is a straight bid for sole power. It does not just offer to supplement other disciplines by showing that it can help with certain jobs at which they fail. It writes their distinctive methods off completely. Wilson engagingly reveals what many specialists discreetly conceal—his conviction that actually, outside his own area, no standards operate at all. Outsiders are only 'gurus' or 'the merely wise', slopping around and flying aeroplanes nonchalantly by automatic pilot. In general he makes it very clear that this is his view of the humanities (history, literature, linguistics, etc.)

considered as ways of understanding the human condition. But about ethics he is still more explicit. He takes it that the professed business of ethical philosophers is 'to intuit the standards of good and evil' (*Sociobiology* p. 3) and points out, rightly, that here they can have no advantage over the general public. 'Like everyone else, philosophers measure their personal emotional responses to various alternatives as though consulting a hidden oracle. The oracle resides in the deep emotional centres of the brain' (*On Human Nature* p. 6). The right procedure therefore, he thinks, would be to find the organs involved and examine them properly in the laboratory.

There are two resounding and extremely common mistakes here. The first and most amazing is the general one of suggesting that we ought to take to dissecting our brains instead of using them, and that doing the first would somehow make the second unnecessary. The absurdity of this is obvious if we apply it to any area of thought—say mathematics or logic, history or indeed sociobiology. But in the special case of ethics a further error emerges, one for which Wilson does have some slight excuse in contemporary—or at least recent—philosophy. He assumes that ethical thought is in a different position from other thought because it is not really thought at all but feeling—simply a sounding out of one's responses to see whether one is for or against something. Now both Moore and the emotivists did indeed take it to be that. And on this view the psychology of the emotions certainly is particularly relevant to ethics. But this will not help Wilson's physicalist reduction. The psychology of the emotions is not carried out merely by introspecting one's own reactions, any more than ethics is. Wilson has no idea at all of the scale on which conceptual analysis is needed, or the enormous part it plays in life. He takes philosophers like Kant, Rawls and Nozick, when they discuss rights, to be simply expressing their own feelings—simply coming out in favour of certain familiar positions. It never strikes him that there already exists a most complex framework of thought, communally evolved and in daily use, which can go very badly wrong, and which it needs great care and skill to put right. Philosophers engaged on this naturally *describe* the framework—make remarks on what the notion of right or justice which we work with already

is, and what this seems to imply—before going on to make suggestions about what is wrong and how we may have to alter it. Many of these schemes or ways of thinking are enormously complicated. Being used to them, we seldom realize this, and are accordingly bewildered when they go wrong. But they do. They will not just develop faultlessly without attention. In fact the amount of work that has gone into building them is inconceivable, and our debt to the people who have managed to set right serious faults in them is immense. The name for what they do is philosophy. Of course this does not mean that they all need to be full-time philosophers. The ‘merely wise’ (if wisdom is indeed something mere) have carried a vast burden in the business, and for a long time carried it alone. But as both our culture and our thought developed, the problems grew, and some specialized attention to these difficulties became necessary. Socrates already found the problems of his day so tricky that he decided to abandon his profession (sculpture) and give his whole attention to the matter. It is usually held that his decision was worth while. And since his time, things have certainly not got easier. Not to mince words, Wilson’s impression that no special methods of thought are used or needed in this area is a monstrous piece of ignorance, as bad as the ignorance of science which he rightly deplores in humanists. That academic specialization makes both sorts possible is a cultural disaster.

Now there is of course another way in which the exclusive reductivist claim can be pressed—namely, the full-scale metaphysical one. It is possible to set up as a dogmatic materialist and say, ‘After all, Matter is real. Mind is less real; or perhaps altogether illusory. Therefore, even if other forms of explanation succeed very well in ethics, history or psychology, these explanations are still incomplete, not just in the way in which all explanations are incomplete (more may always be added), but in a quite special way, because they refer only to something which is itself unreal. Physical explanation is the only *real* explanation because only it deals in reality.’ But this too is extremely obscure. Metaphysical reductive claims of this kind look like literal, factual statements. But they cannot be so. They do not bring new factual evidence.

What they do is, still, to demand certain methods of interpretation. Thus, to continue with examples from Wilson:

The organism *is only* DNA's way of making more DNA (*Sociobiology* p.3). The human mind *is* a device for survival and reproduction, and reason *is just* one of its various techniques (*On Human Nature* p. 2). 'Beliefs *are really* enabling mechanisms for survival.... Thus does ideology bow to *its hidden masters* the genes (p. 3–4).

And more fully—though with a gesture to the more intelligible point about explanation:

If the brain *is* a machine of 10 billion nerve cells and the mind *can somehow be explained as* the summed activity of a finite number of chemical and electrical reactions, boundaries limit the human prospect—*we are biological* and our souls cannot fly free (*On Human Nature* p. 1). (Italics mine throughout.)

This is no doubt subtler and more ambitious than saying that people are only consignments of chemicals. Wilson is in fact making a perfectly reasonable and important point, which he wrecks by the meaningless reductive claim to exclusiveness. This reasonable point can be expressed by saying things like 'the human mind is a device for survival and reproduction', provided one understands that these are metaphors, and that one leaves out all words like *only* or *really*. The mind is that, among a lot of other things. Words like 'device' and 'mechanism' have a fairly clear and unpretentious sense in biology. They refer simply to function, without superstitiously invoking a planning agent. Remarks using them therefore do not conflict with remarks about individual agents and purposes, and cannot replace these. Our appendix is a device for digesting grass; but we today have no use for it. Again, the eye is, in an important sense, a device for informed movement and so for survival. But this does not mean that it can serve no other purpose. Constable and Rembrandt used it for all sorts of other ends and it would be mere confusion to suggest that these ends were somehow unreal, or that they were illicit and ought to be abandoned. Again, play no doubt has a function. It has been developed among human

beings, as it has among the young of other intelligent species and sometimes among adults too, for evolutionary reasons which presumably have something to do with the satisfactory working of the higher faculties, with the need for practice in developing them, and with the sort of social interactions needed in a society which is much freer and less mechanical than those of the insects. It seems sensible to say that this tendency evolved because it had some value in promoting survival—that is, *as a result* of its having that value. But to say ‘then it is only a means to survival’ would miss the point entirely. *What* evolved was not only a tendency to act in certain ways, but a capacity for delighting in certain things, and thereby of taking them as ends. The ends of art and sport are now our ends. They are not delusions, nor provisional and superficial forms of the real end, survival. And the end of reason, similarly, is not survival, nor reproduction, but consistency and truth. People, even childless people, can die for these things. There is nothing confused in their doing so.

The remarks I have quoted from Wilson have the form of a familiar kind of debunking remark about human affairs, something like ‘Jones’s political principles are really enabling mechanisms for survival.... He bows to his hidden masters in the Kremlin’, or ‘Smith’s school is just his way of making more people like Smith’. Here we choose certain accounts of these people’s motives in preference to others. But since there is no competition between evolutionary function and immediate motive, what Wilson is saying cannot possibly work like this—*unless*, as his language constantly suggests, genes or DNA were conscious agents, sitting in some inner Kremlin and masterminding events. Since nobody believes this piece of fatalistic hocus-pocus, what does he mean? The clue lies, I think, in his most mysterious metaphysical pronouncement of all, ‘we are biological’. Clearly this cannot just mean ‘biology can be done about us’. Physics and chemistry, history and anthropology and linguistics can also be done about us, without requiring that the soul should ‘fly free’. But he does not call us physical, chemical, historical etc. Biology has a special place. What this means, I think, is that the essential or real self is the biological self, that what biology tells us about ourselves matters supremely, and is the only sort of psychology that does matter. To make sense, these metaphysical reductions have to

be seen as indirect claims about explanation. Wilson's reductivist language takes us right back to the problem of the fragmented self.

6 Inside and Outside

I have discussed the evils of Reductivism at some length, partly because they are really important, partly to make it clear that I do see what philosophers were objecting to in their somewhat obsessive resistance to Naturalism. Undoubtedly, however, they over-reacted, giving so wide a sense to 'naturalism' in the name of autonomy that they were left with an impossibly narrow territory for moral thinking.

'The Objection to Systematic Humbug' discusses one form of this narrowing, namely the sharp line which some moral philosophers have drawn between motive and action. They insist that the business of morality is really only with outside action—or alternatively, that it is really only with motive. This is a fine example of the kind of reductive mistake which has found itself a special jargon today by misusing the word *about*. Is architecture really about people? or about the principles of safe construction? Is morality about acts, or about motives? The falsity of these dilemmas is obvious and the usage stinks. In moral philosophy, the effect is to separate the judgements passed on acts and motives entirely, and therefore to dislocate the inner and outer aspects of life. Recently the preference has been given to the outer, on grounds rooted in metaphysical behaviourism—the view that nothing except outward action is fully real, so that questions about feeling and motive must be secondary. A person, on this view, is (after all) nothing but his behaviour-patterns.

Here psychological questions about the self become entangled with the ontological ones already touched on; questions about 'what there is' or rather about what it means to say that various kinds of things *are*. There is a tradition, going back to Plato, of treating mind and matter as rival candidates for complete reality—of considering one *less real* than the other. Extreme practitioners deny the reality of one

or the other entirely. Here idealists (like Berkeley and Leibniz) are balanced by materialists (like Hobbes and Marx). Descartes thought both contenders equally real, but so different that there was no intelligible relation between them. All these positions are very mysterious. The trouble is that, once you begin to think of mind and matter as distinct things, rather than as aspects of a single world, it becomes remarkably hard to bring them into any intelligible relation. And—to return to my present theme—this difficulty reflects and aggravates that of relating the various parts of the self. Behaviourism therefore is an important element on the scene, and its story is an interesting one. It was originally invented, and still officially serves, simply as a guiding principle of method in psychology. Reacting against psychologists who relied heavily on introspection, J.B. Watson and his followers proclaimed early in this century a programme in psychology which would ignore data from consciousness and deal only with outward behaviour. This policy-declaration need not have carried condemnation of other kinds; after all, there could in principle be as many legitimate ways of doing psychology as there are of doing geography. But in fact it was put forward, especially in its early stages, with a good deal of crusading zeal, involving, not just a distrust of other methods, but a metaphysical conviction that their data must be invalid, since inner consciousness—was indescribable, unknowable, and perhaps actually unreal. Behaviourism is thus the mirror opposite of subjectivism. Subjectivism, in its various forms, doubts the reality of the outside world and accepts as certain only the deliverances of consciousness. Behaviourism reverses this process. The piquant thing about this antithesis is that both extremes are often favoured by rather similar people and for similar reasons. Both parties want to be tough-minded, economical and realistic; both are suspicious of religion and the subtler aspects of traditional morality. But which metaphysic to choose? Here is another of those numbing dilemmas which I have been describing. Without a proper connecting background, there can be no choice. One must simply toss up. In the social sciences, the choice often makes itself very simply on occupational grounds. A sociologist can hardly be a subjectivist; a

subjectivist would hardly have taken to sociology in the first place. Philosophers, however, have more positive reasons for moving towards behaviourism. They have tried subjectivism, and, as may happen with an unreliable brand of car, many of them still bear the scars. Modern philosophy starts from Descartes' 'I think, therefore I am', which is deliberately chosen as the most subjective position possible. Descartes himself of course did not mean to stay locked up in the self. He meant to prove the reality of the external world in such a way as to make it safe for the physics of Galileo, and so, finally, for common sense too. But this has turned out a desperate project. Repeatedly, Descartes' systematic doubt has led its users away from their goal. Hume pursued its sceptical branch, which stresses the isolation of the single self, to a terminus in total paralysis and confusion.¹¹ At that end lies solipsism, the view that there actually is nothing except one's own consciousness—and anyone who can make sense of that is welcome to it. (If he were right he would, of course, be by definition in a very different situation from the rest of us....) Along the idealist branch, which allows many selves, Hegel built on a grandiose extension—the Absolute—a superself containing all the others. But this causes serious alarm by its metaphysical top-heaviness. British empiricism, always wedded to economy, cannot join the Hegelian orgy; it must take something nearer to Hume's path. But British empiricism is polygamous. It is also wedded to science and to common sense, and it cannot finally accept a notion of the world which is too mean for their purposes. Economy is an important ideal to it, but it is not committed to the life of a starving miser. Bertrand Russell was the last great empiricist who tried hard and systematically to give a credible account of the world from the subjective starting-point. He still asked; granted only my consciousness with its sense-data, what else need exist? His various attempted answers depict a series of bizarre universes, each stranger than the last, presenting no foothold either to common sense or to any science except certain selected aspects of physics. (In particular *The Analysis of Matter* really deserves the attention of science-fiction addicts.) Now, outraging common sense never worried Russell. He was content, indeed pleased, to suppose it unable to penetrate the

real world. But science was another matter. Unlike Hume, Russell had no interest in scepticism as such. He lived in a scientific age and took science very seriously. His failure there marks the end of an empiricist epoch. It is perverse and unrealistic to form a metaphysical notion of the world which is too limited for the purposes of one's actual thinking. Metaphysical notions exist to be *used*. The scepticism which started as honourable unpretentiousness begins in such circumstances to look very much like humbug.

In emergencies like this, the kaleidoscope of thought must be shaken and a new starting-point found. G.E. Moore, in his 'Defence of Common Sense' gave the right shake,¹² and Wittgenstein made use of it to call attention to a new pattern. Philosophers began to look at language. This has given rise to a certain amount of groaning from those who accuse them of preferring to think about words rather than about reality. Whatever their incidental vices, however, the reason for the move is a quite different and completely sound one. Language is public. If you talk, you cannot possibly be the first of your kind. *I* makes sense only by contrast with *you, he, she, it* and *they*. A solipsist could not say *I*.¹³ If Descartes had thought about this, he would not have assumed that he must start his enquiry, like a doomed escapologist, from the awkward position of being locked up inside his own consciousness, with no accomplice to release him. If we did start there, escape really would be impossible. But we don't. Those of us who are lucky enough to begin life at all to the extent of being able to talk, begin it in a shared world. Our inner lives, like other people's, occur within that world, as parts of it. From the start, a great deal of communication flows in and out of our various minds unnoticed and without difficulty; we take it for granted. Of course elsewhere the stream can be blocked, and in bad cases people really can be trapped inside their private towers or cellars. Naturally, we attend to such blocks more than to the satisfactory background flow, on the sound general principle of neglecting what is all right. But to do this is to recognize blocks as a special, if common, misfortune, not as the normal condition of life.

The subjectivist philosophical approach, from which so much was hoped, has infiltrated literature and coloured our

imaginations in a hundred ways which I cannot go into here. My present business is just to point out that, on its own ground as a tool of thought, it has terrible faults, and has certainly come to the limit of its usefulness. About the relation of mind and body in particular, it has produced vast problems which it can do nothing to solve. That question, then, must be somehow restated. We must pose it in a way which avoids the suggestion of a race where two contenders—mind and body—compete for a prize, namely, the status of reality. In any decent sense of *real*, both are quite real. And ‘reduction’ of one to the other will not help. We are not making some sort of quasi-physical enquiry about what material the world is really made of—mind or matter, earth or fire, rock or gas. That kind of thing must be left to physics. Instead, we are talking about the relation between two real aspects of everybody’s life, the inner and the outer—our consciousness, and the outer world of which we are conscious, which includes human bodies. Economy does not call on us to get rid of either. Since our problem concerns their relation, to sink one of them will not solve it. Subjectivism, which offers to melt down the outer world into a relatively insubstantial mirage, does not make sense for beings like us who can successfully reach out to that world’s other inhabitants by language. Behaviourism, which offers to ignore the inner experience, also splits on the rock of language, because speech is essentially a transaction between two conscious beings. We do not speak simply to our hearer’s behaviour-patterns. Proper speech is only possible where we regard the hearer as having a state of mind which we address—as receiving and interpreting what we say. (This is why it is so exasperating to find that one has been talking to a telephone-answering machine.) The kind of being that can talk cannot possibly be just a mind or just a body. Neither can he be a mere loose combination of these, considered as two separate items. The mind is not *in* the body as a pilot is in a ship, but much more as the inside of a teapot is inside the outside. The fit need not be perfect—there are places where the contour diverges quite a lot. But they are still parts of a whole, and in general both can only be understood together, by grasping the nature of that whole. We are not compelled to say ‘a man is really his body’. He is the whole, of which mind and body are

equally just aspects, much more like temper or size or intelligence than they are like teeth or toes. Unquestionably this is a far better way to think of human beings as they are in this world, and I do not think that problems about how they may have to be envisaged in the next world ought to be allowed to interfere with it. If there is a next world (a point on which I have no views) it will naturally call for quite different ways of thinking. But in this world, we must deal with a person as a whole.

This, as I take it, is the first message for ontologists of Wittgenstein's *Philosophical Investigations*. And it is perhaps the central reason why, if Wittgenstein had not existed, someone else would have had to attend to language. The second is the better-known point that *metaphysical* language must be examined. It really is not clear what we mean by calling such very general things real or unreal; translations must be given. These two moves together release us from the subjectivist prison and give us back the world. Many philosophers, however, view such largess with suspicion and continue to look the gift horse in the mouth. They see subjectivism and behaviourism as the only possible alternatives, so that releasing us from one of them must bind us to the other. The outer world, it seems, may now be real, provided only that *we* are not present to inhabit it. *We* must be reduced to our outward actions: any inner accompaniment that is conceded must be unreal and ghostly. This discreet and sophisticated form of behaviourism appears in the ethical view which I discuss in 'The Objection to Systematic Humbug'. According to it, morality is entirely concerned with outward acts, and has nothing to say about thoughts and feelings except indirectly as causes of action. I argue that this gives us a quite distorted view of morality. And in 'Is *Moral* a Dirty Word?' I go on to point out that this distorted view is indeed sometimes found in normal speech—but only when we use the word 'moral' and its derivatives as terms of abuse. Morality which is confined to outward behaviour already has a bad name, and with reason.

7 Putting Reduction in its Place

Crude reduction is always exaggeration, and exaggeration feeds on opposition. When Tweedledee shouts that man is (after all) only a naked ape, a device for making more DNA, an economic unit, a pollutant, a set of behaviour patterns or a consignment of chemicals, he is usually responding to Tweedledum's over-ambitious assertions of transcendental status. Once this game starts, indignation and narrowness on both sides interact and increase each other. Each party is liable to become so obsessed with the other's vices that eventually it mirrors them and the contestants become indistinguishable. But we ought to be looking for the serious message behind the shouting.

It is, I think, peculiarly unlucky that the arguments for taking our nature seriously have often of late been put forward in a crude and sometimes grotesque reductivist form. As I have just suggested, much of the blame for this lies on the opposition. From Darwin's day on, people claiming to champion the spiritual aspect of humanity have been strangely unwilling to admit quite harmless and indisputable facts about his natural aspect. Blame, however, is not our present business. What we need now is to put together the scattered fragments of the psychological map. The first step here, I suspect, is to get rid of the gratuitously narrow and crude psychological notions which have become associated with attention to our inherited nature. There is no reason at all why supposing a tendency to be heritable should commit one to treating it as crude. The facts about our psychological needs usually are extremely complex. 'Naturalistic' views like hedonism and evolutionary ethics treat them as simple, and this is a factual mistake. These views are bad psychology before they are bad ethics, and the two sorts of badness are interdependent.

This point about the complexity of natural facts brings us back to the question already touched on of what a 'basis' or 'foundation' for ethics would be. People who now offer to supply such a basis commonly mean by it, not logical principles, but some set of scientific facts—for instance, the facts about

evolution. This is a different usage from that in ‘the foundations of mathematics’, but it is no less correct. We can talk of a rumour or tradition as having ‘no basis or foundation’; this is a criticism of its facts, not of its logic. Actually the word can be used impartially for any badly needed element which seems to need supplying. Now I have suggested that a great many kinds of fact about human needs, and therefore about our inherited emotional and intellectual constitution, really are needed for morals. Intelligent beings with a different constitution might have quite different duties and a different concept of duty; they might even have no duties at all. So we can certainly speak of these facts as *a* necessary foundation for morals. But this does not mean that they are *the* exclusive foundation, because both logical considerations and other facts (for instance cultural or economic ones) are needed too. No simple set would do.

The point of stressing biological facts is to suggest that our nature matters—that it defines our range of choice quite firmly, and must be understood if we are to give any meaning to the idea of freedom. For practical purposes all of us, I think, accept this inoffensive idea and appeal to it frequently—for instance in discussions of sexual needs, or of the natural needs of children. It only becomes a menace when it is made reductive and exclusive. When this happens, good controversial practice demands of us that we should attend to the positive meaning of these exclusive claims rather than the negative one. (This is on the general principle of attending to what your opponent is actually trying to say rather than simply to his mistakes.) If someone says, ‘man is only an animal’, we should treat the ‘only’ as a controversial grace-note added for emphasis, and attend to the main point. Man *is* among other things an animal. He can correctly be so described. He could not be a rational animal, or the paragon of animals, if he were not. The question is, what follows from this?

What follows is an intellectual gain, namely, that we can use, in trying to understand him, many very rich conceptual schemes which have been developed for the understanding of other animals. We have to emphasize that they are many and rich, not crude and simple, and that they never require us to ignore the species difference. Reductive claims can usefully be

stood on their heads here to indicate, not the diminution of man, but the increasing subtlety and power of the life sciences. Wilson's remark that 'we are biological' can be accepted if it is taken to mean, 'biology is much more developed than you think; it can say something, not just about our bodies, but about *us* as a whole'. And this is true. To investigate (for instance) the biology of speech is not just to dissect the relevant hardware—larynx and vocal chords, cerebral hemispheres and connecting nerves. It is also to study the function of speech in social life by putting it in a context of the whole range of other sorts of human and non-human communication. Only against this background can we understand its uniqueness; refusing to compare would never reveal it. This usage is not new. William James said of the elements of religious experience that 'we are obliged, on account of their extraordinary influence upon action and endurance, to class them among the most important biological functions of mankind' (*Varieties of Religious Experience*, 1902, p. 482). This is not reductive. It does not ban or diminish other sorts of explanation. It supplements them. Used in this uncontentious way, words like 'biological' do not lose their meaning, but they do cease to be weapons of war. It is possible to consider any important human activity biologically—that is, in the light of its function for the health of organisms and its probable evolutionary history. But it is equally possible to treat what we commonly think of as biological topics from other angles. For instance, the course of evolution is itself a piece of history, and—as palaeontologists well know—historical methods are often much more appropriate to it than those commonly thought of as marking the natural sciences. Knowledge of that piece of history is quite as essential to modern biology as chemistry and physics are. Here again, there is no football match to be won. All the disciplines supplement each other; none is king. In the last paper in this volume, 'The Notion of Instinct' I try to illustrate this point by showing how a concept which has been discredited by a reductive use can and ought to be rescued from it, and restored to a serious one. This paper is of course merely a set of signposts and recommendations for further work—some of which I hope to do myself—not an attempt to mark out a final position for battle. Instinct is one example of a concept

which needs imaginative development, but the point must not be reduced to my examples. It is a general one. As I said when quoting Pope's *Essay on Man*, the notion people form of their self is always and in any culture liable to paradox and confusion, because the topic is really difficult and the material so enormous. Heraclitus said, and he was not being silly, that unsearchable are the depths of the human soul. It would be a really wild and paradoxical development if the greatest increase in learning which the world has ever seen turned out actually to make that important topic less comprehensible than it had been before. But it could happen.