

# BRAIN, MIND, AND SOUL

by Grant R. Gillett

*Abstract.* We view a human being as a mental and spiritual entity and also as having a physical nature. The essence of a person is revealed in our thinking about personal identity, quality of life, and personal responsibility. These conceptions do not fare well in a Cartesian or dualist picture of the person as there are deep problems with the idea that the mind is an inner realm. I argue that it is only as we see the thoughts, actions, and interactions of persons as necessarily involving physical entities in the world whose nature is not completely captured in scientific descriptions that we can understand our existence as mental and spiritual beings.

---

No matter what point of view we hold (for any one of a number of ideological reasons) it is obvious that when we talk about persons we are discussing creatures who have a physical nature as part of a physical world and also that we conceive these creatures to have thoughts. This, of course, is not a definition of what it is to be a person. Having said that such creatures have thoughts we might contend that this is all we mean by having a mind. The *soul* represents a legacy from a different background entirely. In crediting humans with a soul we may mean many things but, in the West, we will usually mean that, as an individual, he or she will be the bearer of certain moral attributes and a certain character over time. We will therefore consider him or her able to manifest the full range of emotive attitudes, beliefs, rational actions, and virtues that find their place in literature and religious thought. The most demanding Christian position need only require that a human being can be subject to moral praise or blame and can relate to a divine interlocutor as a rational and moral being, in order to support all the things that it needs to say about the relation between the human being and the divine being. The question of what happens when persons die can be addressed once the basic issues of their natures have been resolved in such a way as it is respectable to speak of a person as a rational moral being. By *rational* here I mean a condition as weak as the notion that one's

Grant R. Gillett is a research consultant at the Ian Ramsey Centre, St. Cross College, Oxford OX1 3LZ, England. He presented this paper at the Institute of Cognitive and Informational Sciences, University of Sussex, England, on 28 May 1985.

[*Zygon*, vol. 20, no. 4 (December 1985).]

© 1985 by the Joint Publication Board of *Zygon*. ISSN 0044-5614

actions and thoughts make sense or are coherent and broadly consistent or bespeak a certain identifiable character type who can be said, within one's own limits, to think sensibly about oneself and the world. This does not imply that all the thoughts and attitudes of the person should be deductively consistent with each other.

In this paper I will argue that we are not forced to split a person up into material and mental/spiritual substances to sustain a view that the mind and soul go beyond what can be understood in purely physical terms. I shall proceed by marking out the importance of our conception of persons and then defend the soundness of that conception in any adequate understanding of human life in the world. I shall go on to try and show that being stuck with talk about persons, mind, body, and soul in no way leads to a ghostly view of human beings.

#### OUR CONCEPTION OF PERSONS

Persons are central in our conception of ethical issues. We count all human beings as persons and indeed it seems true that human beings form the model or paradigm for our concept of a person (Wiggins 1980, chap. 6). Only in the face of contention do we extend the notion of persons to take in some of the higher animals. We seem to have some intuitive reason for excluding even the higher animals from the status of persons, which we freely confer on human beings, without exception. At present we have no inclination to extend our ascription of personhood to computational devices, not even to highly sophisticated robots. What is the distinction we preserve by our use of this term?

As a first pass we may consider that human beings are persons because they think and feel. Higher animals solve puzzles, and there is an IQ test available for chimpanzees. Some chimpanzees use conventional tokens to communicate—these are claimed to constitute a type of language. Computers are often referred to as machines that think. There is therefore some challenge to this distinction from work in psychology and artificial intelligence.

Other criteria, often very abstract, could be advanced, all of which place critical importance on some aspect of our thought life. This thought life is traditionally regarded as something *inner*, private, something which I have intimate knowledge of in my own case but about which I am less certain when I speak of others. Because of this rather ineffable idea of what is important about persons, the inner has often been looked to as that which matters for our moral and religious concerns. They have often been thought to stand or fall as this inner or mental essence of a person is proven or disproven to exist. The idea of an inner essence has long been the subject of philosophical debate, but

the debate has taken fresh impetus from advances in science in general and medicine in particular (Popper & Eccles 1981).

Science in general has worked toward an understanding of the universe which is comprehensive and unified. This comprehensiveness would comprise an ideal state of knowledge in which all phenomena can be understood in scientific terms without exception. Only by pursuit of this ideal can a set of explanatory laws, applicable without ad hoc and capricious disconfirmations, be pursued. The unified structure of science ensures that the kinds of laws and the kinds of explanations that are accepted conform to an acceptable pattern and allow orderly investigation by well-understood methods. These are ideals to which we approximate in scientific explanation.

These ideals have been applied to all subject matters. When applied to the mind or inner essence of humans they have imposed a kind of explanation in which the activities of what we have called persons are assimilated to the activities of all other entities in the world. In principle the distinction which has been marked by our conception of a human as a person as over against all the rest of nature, which is impersonal, has been ignored. If this were not the case, then comprehensiveness and unity would not be maintained as ideals for science (Fodor 1980).

As we have investigated the causal influences on aberrant thought and then have begun to try and study the causal regularities underlying normal thought we have sought to capture more and more of the range of human activity in the type of explanation which assimilates the human being to the rest of nature. Medicine has figured large in this process. The function of the human organism is understood as a special case of all biological function. The function of the human brain has come to be seen as that which we call sensation, thought, and action. Throughout the development of modern behavioral and brain sciences, these functions have been described and explained in impersonal terms (Blakemore 1977). We have come to understand more and more that the range and complexity of human behavior is a result of the complexity of structure and function in the human nervous system. But all animals have nervous systems. Not only that but computational devices aim to tackle the kinds of functions that nervous systems tackle. The thought life of a human is thus increasingly seen as a kind of functional contribution that his or her brain makes to his or her total biological activity. In this the human is not to be distinguished from the higher animals and perhaps not to be distinguished from the robots of the future. The body, the structure of a human being, can provide for us no categorical basis for the ethical importance we accord to the human. We must therefore turn to an activity, human thought, to find what it is that we consider marks an individual out as a person as over

against the other denizens of the natural order. We must look to the marks or features of our concept of a person to find what is important in our ethical attitudes.

First, we consider a person to have an *identity*. We consider that a person should be aware of himself as himself the same thinking thing at different times and places, to paraphrase John Locke (Locke [1689] 1975). We consider that a person should distinguish himself or herself as a source of actions and a subject of attitudes which show some consistency over time. We expect her to know who she is and thus manifest some grasp of the thoughts, feelings, desires, and intentions which are hers. We expect him to unify them in some way so we can say he has a character of a certain type which marks him out as an individual. In this way we ground our concern for the future of a person and the relevance to her of our present attitudes to her past life. These are ethical attitudes involving both sensitivity and sympathy to him and for him as a person, and moral praise and blame (Strawson 1976). They form a rational basis for our getting to know what matters to her and for our admonishments and exhortations. Not only do we thus ground our practices with respect to him, but also we provide a basis for the individual and irreplaceable value we put on the life of a given person. She is the person she is and no other article, no matter how similar, will ever completely take her place. The unique has for some reason a high value to us all, except perhaps utilitarian social engineers, but one suspects that even they treat themselves as a special case. It is obvious, therefore, that, alongside or within what science tells us about humans as exemplars of a biological type, we need to make a place for his identity as a mark of his ethical value as a person.

Second, we have some idea that a person has a certain *quality of life* which should be respected and preserved. Aristotle argued that there was a kind of *good* proper to the nature of a human being, and this kind of good seems also to contribute to our concept of a person. When we have a human body in irreversible coma on a respirator, we base our ethical attitude to continuing support of her life on the quality of life we believe her to have. We are in no doubt as to who she is. We are in no doubt as to whether we would consider her life to have the same value it always has had were she to be aware and active and taking a part in events around her. Because this quality is lacking and, we can confidently predict, will continue to be lacking, we feel justified in suspending our ethical attitudes to the sanctity of her life. Whereas she has a kind of attenuated biological life we do not think she has the quality of life we take to be the mark of a person.

Third, we consider that persons have a degree of *responsibility* for their own lives. We ground our moral reactions to a person on the fact

that we consider that he thinks about his life and acts in ways explicable by those thoughts. A person exercises choices and formulates intentions. A person has purposes and pursues goals. The actions of a person express who she is and are part of her proper activity as a human being. It is because of these things and the relation they bear to the quality of life and the character of a person that we reason with a person and do not regard it as acceptable merely to compel or coerce him or her to perform certain acts. Because we regard a person as responsible for his own life we respect his opinions as to what ought to happen to him and what he would count as being of value to him. We do not feel free to legislate in these matters as we may do in certain areas where all that is at stake is biological well-being. We do not regard the actions of a person as a set of natural events which we are entitled to manipulate despite the fact that, in her own interests, we are prepared to manipulate certain of her bodily reactions. We are even prepared to interfere, chemically or behavioristically, with certain of her thoughts if we do not think them conducive to the rational and responsible conduct of her life. Thus we treat confusional states and psychoses in order to afford the patient the ability to resume responsibility for himself or herself.

We regard normal people as having a certain identity over time, as enjoying a certain quality of life, and as being responsible for and in control of their own actions. These things ground our ethical attitudes and seem to mark off for us the class of persons. That class seems to coincide with and distinguish the class of human beings. These marks of personhood do not figure in the deliverances of biological science and the description of human beings it affords. The medical sciences accept the ethical attitudes grounded in the concept of persons but work with the description of humans which does not mention them. Some see the concept of a person as running counter to the scientific view of humans. It is to be hoped that in studying the concept of a person under these heads that apparent conflict can be resolved. It will be obvious that were these marks of personhood able to be asserted with the same authority that is accorded the picture delivered by the natural sciences, then the person would be seen as an apt interlocutor for a divine intelligence and the apt object of concerns that could not be expressed in purely natural terms.

#### THE PLACE OF PERSONS IN THE WORLD

René Descartes assumed that all our enquiries about the world must pivot around what could be possible in the light of human reason and its certain ideas. In this he was not far wrong. He went on to conclude the only thing he could not doubt was his own existence as a purely

thinking being. He therefore advanced a dualism in which the certain deliverance of reason gave us primary knowledge of mental substances and then secondary knowledge, via a conception of the perfect creator, of an external world.

His dualism ran up against certain problems: first, the epistemological problems of other minds and solipsism, second, the problem of interaction between the mental and the physical and the closed nature of physical causality, and, third, the fact that the mind seems causally dependent on the workings of the brain in such a way as we are led to suspect the latter constitute the former. Dualism still survives, but most philosophers who are concerned with the nature of the person seek to find an account which is compatible with a monistic conception of the world.

It might be urged that there are private, conscious aspects to experience which do not appear in the impersonal descriptions of physical or computational states that some regard as an adequate picture of the mind. Against this view we might deploy the considerations of private language that are to be found in the later works of Ludwig Wittgenstein (Wittgenstein 1953). If I attain my knowledge of the world by virtue of certain internally appreciated events which I alone experience and which lend the subjective and personal quality to my life, then certain problems must be faced. First, how do I know that what I am calling "red" today is the same as what I called it yesterday? How do I know that I am making the same judgment each time I think of a certain concept in relation to a given experience? Might I not seem to be thinking of it in the same way but yet my mind have deceived me? But I do recognize that what seems so to me may not necessarily be so. How can this be? If I cannot set my own standards, as all I have to go on is my own mental contents, then where do those standards come from? Here the idea that I know by virtue of the ideas or experiences inside my mind or head does not help at all. Second, how do I communicate with others? When you say the word *red*, what idea is accompanying that in your head? Might you mean by *red* what I mean by *blue*? But then how can we learn from each other, describe the world, correct each other's mistakes? To these conundrums Wittgenstein brought the notion of rules and the following of rules. Somehow the way I speak and think must form a part of a public practice, in principle available to others so that we appeal to the same criteria in settling our differences and in training ourselves and each other to think and talk in consistent ways. The content of our thought becomes ordered and structured according to the practices in which we participate with other human beings and thus, as Immanuel Kant had noted long before but for different reasons, the internal knowledge we each have of our own minds is

derivative upon the external knowledge we have of others and of the world.

Once the dualist position has been undermined a certain kind of theorist may wish to develop the idea that persons are objective entities in a physical world. Such a theorist may say that what is obviously involved in thought and language is a certain set of causal relations between organisms and the world, which come to take on a structured or syntactically articulated form. The form that the internal states of the organism exhibits relates to the form of objects in the world in such a way as the states of the organism can be said to represent the world. This orderly relation between input states, representations, operations, and output states we describe using terms which refer to mental activities such as thoughts, beliefs, desires, intentions, hopes, and so on, but in reality all that are involved are computational states of a certain biological kind. This theorist would conclude that any realistic description of the world, of what fundamentally constituted all states of affairs in the world, would omit mention of persons, minds, and souls except as metaphorical terms.

In the face of these contentions I would advance a set of arguments about the irreducibility of mental terms, an examination of what it means to describe or represent the world, and the only conditions under which we can understand those projects and certain claims about what is real. These will, I believe, reinstate persons and their souls to their proper place in the world.

First, let us consider *mental terms*. Donald Davidson has pointed out several important features of mental terms (Davidson 1981). They are holistic, that is, one cannot ascribe one of them, say a belief that Sussex is the most attractive county in England, without ascribing many others. One could not imagine a person who knew, believed, or wished nothing but this thought. He or she must know about names, counties, relations of degree, evaluations of beauty, countries, comparisons, and so on. One does not have a thought by virtue of being in a certain state but by virtue of also grasping a whole range of thoughts in which the one in question figures. What is more, these thoughts must be connected in a broadly rational way. The connections that hold between them must be rational and involve reasoning of some sort and not obey some different set of laws. What makes a thought be such as is fit to explain someone's behavior is that it makes sense of that behavior. The laws that are here invoked are laws of reason, ground and consequent, and not laws of cause and effect described in some arbitrary, physical way. The right explanation of someone's action will be so because it meets these requirements of rationality, or making sense, not just because we observe a certain set of conjunctions of happenings for

which no rationale can be given. The fact that neuronal states A cause neuronal states B might figure in the causal chain leading to a certain set of muscle contractions, but I will not know what the human being concerned is doing unless I know something about the being's thoughts with respect to the people and things in the world. Is the person concerned replenishing the water supply, exercising his arms, poisoning the inhabitants, or seeking to change the government (Anscombe 1961)? Which of these he is doing, and he may be doing more than one, will not be given by the causal processes in his brain. Mental states are also not closed as a system of lawlike explanations. Many events disrupt and impinge upon chains of mental activity which do not figure in mental explanations as lawlike members. People have strokes, sudden inspirations, hear loud noises, bump into friends, and so forth. All of these things have mental effects but cannot be mentally explained. This means that the mental cannot have the same regular, closed, and law-governed structure that a domain of scientific explanation has; it is too messy, or anomalous. It will not fit into the tidy account of the world offered by natural science. For all these reasons the mental is not a level of scientific explanation but a different kind of explanation of events altogether. "All the worse for mental talk," you may say, "leave the understanding of reality to the physical sciences."

We can now ask whether the physical sciences can cope with the data needed to understand the world. The physical sciences claim to give us knowledge about the world, to tell us the truth about nature, to represent things as they are. Knowledge, truth, and representation, as consistent notions, are presupposed in the pursuit of scientific understanding. But what are these ideals which give the whole enquiry its point and purpose? If we hark back to Wittgenstein it will be seen that we cannot do away with persons so easily. The consistency, coherence, and meaning of our thought and talk, those things by virtue of which we claim to understand truth, represent the world, and achieve knowledge, can only be explained and understood by means of discussing people and their practices. It is people and their intentional communicative acts which establish the standards of correctness of representation by which we judge truth and knowledge. Without speaking of the acts of people, as rational agents we cannot grasp what we are about in seeking these things (Strawson 1979). But thought is holistic; reason, character, morality, and virtue do not so easily come apart. Is truthfulness a rational or a moral attribute? How then are we to categorize honest enquiry, diligence, curiosity, patience, insight, creativity, or tolerance? Some of these things form part of our norms for right thinking but also our conception of virtue.

The *real* is itself a puzzling notion. Tables are real, as are hammers. Proteins are real, and we can squirt electrons at things so they must be



real too. There are laws about electrons and proteins but not about tables, at least not laws in the natural sciences. Colors and shapes are real, they cause things to happen. Red lights stop cars, and yellow lines prevent them from parking. Black roofs on cars cause babies to die of hyperthermia, and green pigments allow plants to photosynthesize properly. Colors explain many of my actions in the world, and my actions explain many events. The thoughts of persons are what science consists of, and the knowledge of laws of science is explained by the ways in which those thoughts have come to be grasped. Without a conception of persons we could not grasp what is going on, thus persons must also be real. Are they more real or less real than protons? Is that really a table or really a collection of atoms? These are nonquestions.

Human beings are complex biological organisms, and they are also thinking beings whose thoughts and actions explain much that happens in the world. I do not believe they *could* think were they not constituted in a certain way, and I do not think that explains their ability to think, it merely provides the conditions for that activity.

#### PERSON TALK AND BRAIN TALK

I have argued that an understanding of persons is what permits us to understand meaning and knowledge and what grounds our conception of truth. Persons thus enter into any picture we construct of the world as a presupposition of the enquiry. I have contended that talk about mind, thought, and meaning is not reducible to talk about brain processes as it has a different kind of conceptual structure than that evident in impersonal causal talk. It is in this conceptual structure that we confront the marks which distinguish our concept of persons. It is by virtue of our description of persons as acting, rational, moral beings that we come to appreciate that they have an identity which involves more than just their biological individuality. It is by virtue of the thought life we ascribe to persons, on the basis of their participation in our linguistic and other practices, that we come to conceive of them as having a certain quality of life. This quality of life seems to involve the biological constitution which a person has as well as what he makes of his life, his attitudes toward himself, and the way he weaves the events of his life into a kind of autobiography. Once we realize that what we are talking about, when we talk about the person, is a being whose nature is manifest in intentional actions, of which she is aware, over which she exerts control, and in which she gives expression to her concerns, interests, and projects, we see that personal responsibility is part of the very business of appreciating the person as a person. To understand the nature of knowledge and thus the scientific enterprise

is to presuppose that it is performed by persons who are constituted by these properties which ground our ethical concerns.

But persons only manifest these properties when their nervous systems are working properly: these are highly sophisticated performances. Thus persons are what they are because they possess the biological nature that they do. If persons were any less well equipped they may not be fit to interact with the world and each other in such a way so that truth, morality, and character could be terms properly applied to them. It is only toward creatures of this nature that God could adopt certain attitudes, and it is only from them that God could expect a certain response. The soul of a human being *shows* that he or she is of a certain biological complexity and the sciences of humanity *show* that he or she has a rational soul. The truths of natural science, however, do not give us an understanding of the soul, nor do the truths of religion and morality give us an understanding of the brain. Both together enable us to understand mankind, and each separately is adequate to its own sphere of knowledge.

#### REFERENCES

- Anscombe, G. E. M. 1961. *Intention*. Ithaca, N.Y.: Cornell Univ. Press.
- Blakemore, Colin. 1977. *The Mechanics of Mind*. Cambridge: Univ. Press.
- Davidson, Donald. 1981. *Essays on Actions and Events*. Oxford: Univ. Press.
- Fodor, Jerry. 1980. "Special Sciences, or the Disunity of Science as a Working Hypothesis." In *Readings in the Philosophy of Psychology*, ed. N. Block, 120-33. Cambridge, Mass.: Harvard Univ. Press.
- Locke, John. [1689] 1975. *An Essay Concerning Human Understanding*, ed. P. H. Niddich. Oxford: Clarendon.
- Popper, Karl R. and John C. Eccles. 1981. *The Self and Its Brain*. New York: Springer-Verlag.
- Strawson, P. F. 1976. *Freedom and Resentment*. London: Methuen.
- . 1979. "Meaning and Truth." In *Philosophy As It Is*, ed. T. Honderich and M. Burnyeat, 515-39. London: Penguin.
- Wiggins, David. 1980. *Sameness and Substance*. Cambridge, Mass.: Harvard Univ. Press.
- Wittgenstein, Ludwig. 1953. *Philosophical Investigations*. Trans. G. E. M. Anscombe. Oxford: Blackwell.