

A Materialist Conception of Personal Identity

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Abstract: *In this paper I suggest some views a materialist might take on personal identity. I criticize these suggestions. I suggest that a materialist can take memory as the criterion of personal identity. I examine how a materialist might wish to make stored memories a stronger criterion for personal identity, and show that such third person access to the memories of others is impossible.*

Keywords: *Identity; Person; Body; Brain; Memory.*

1. INTRODUCTION

It is reasonable to believe that a full solution to the problem of clarifying the problem of personal identity in terms of specifying the criteria and conditions about people depends on the view we take on the nature of a person. I think we need to get clearer on the way in which perceptions, sensations, images, feelings, desires, beliefs, memories, and the like—a person's mental states—fit into our total picture of the nature of a human being as a physical thing, before we can answer the questions about the conditions and criteria for personal identity. In this paper I will explore the problem of personal identity from the point of view of a materialist conception of the psycho-physical nature of a person.¹

It might seem that what is to be said here is quite straight forward. If one conceives of the mental aspects of people to be physical in nature, the identity of a person is just the identity of a physical thing, namely, the living human body. Furthermore, a materialist will try to avoid using psychological criteria for personal identity, such as memory reports.

By “materialism” we will mean some version of the identity theory (IT) according to which every mental event is a physical event. The IT is reductionistic in the sense that it asserts a type-identity backed by psychophysical correlations. We assume the IT ranges over not only mental states such as sensations and images, but mental states such as wants and beliefs, all of which have a physiological basis in the brain and central nervous system. What we say about personal identity, if inadequate, will have no bearing on the truth of that kind of IT.

Let us begin by suggesting and criticizing some physical criteria or conditions a materialist might put forward as necessary and sufficient conditions for personal identity.

(A) The identity of a human body is a logically necessary and sufficient condition for personal identity.

This view seems incorrect as a report or explication of our ordinary conception of personal identity because we can speak of the possibility of bodily transfer without contradicting ourselves. One is not confused about the concept of personal identity if he uses some criterion besides bodily continuity or requests further evidence even after having reidentified the same human body. So view (A) will have to be construed as a proposal or redefinition of personal identity.

A more important reason for rejecting view (A) has been given by Sydney Shoemaker in what can be called “the brain transplant example.” We take the brain out of some person A and put it in the body of some other person B where B has had his brain removed. The resultant person C has the memories, personality, interests and manner of A and the body of B. If we are inclined to say that C is identical with person A, we will be giving up view (A).²

One might give up the idea that there is a logically necessary and sufficient condition for personal identity, and still hold that the identity of the body, or some aspect of it, is a necessary and sufficient condition for personal identity. It will not be a necessary truth that the same person has the same body, or that the same body is the body of the same person, but a contingent truth. We might hold that as a matter of fact, whenever we have the same human body, we have the same person. However, this contingent truth is not accidental, liked the fact that a given car has four doors. We might say that bodily identity is a nomologically necessary and sufficient condition for personal identity.

(B) It is lawlike and true that a person identified at t_1 is the same as a person identified at t_4 just in case the person identified at t_4 has the same living human body as the person identified at t_1 .

The nomological modality is the next strongest relation to a logical condition in the respect of being a necessary and sufficient condition for personal identity. One might think that a criterion, or criterial evidence, is a stronger relation. But criteria for personal identity are not thought of as necessary or sufficient conditions for personal identity. In one sense of "criterion" it is a necessary truth that the presence of bodily identity counts as evidence for the presence of personal identity.³

View (B) seems more congenial with the contingent IT than view (A) because the IT will construe the relation between a person and his body as logically contingent. If the IT is backed by correlation laws, it might seem that the relation between a person and his body is nomologically necessary, hence the relation between the same person and the same body will be nomologically necessary. View (B) is quite compatible with the IT, but view (B) is not required by the IT.

However, view (B) is untenable if there is any reason to believe that "the brain transplant case" is a real possibility. There is reason to believe that brain transplants are consistent with the way science is developing. Research on the nerves of higher vertebrates produced evidence that millions of nerves and fibres which would be involved could be induced to make the correct connections themselves.⁴ The existence of extensive psychophysical correlations with brain states may incline us to say that personal identity is transferred with the brain. A reason often given for the IT is the development of more numerous and refined psychophysical laws. Whether psychology will develop this way remains to be seen. But we can consider the possibility.

In particular, more specific correlations may be established for memory. Many neuroscientists already think that memories are stored in the brain. The mental aspects of memory has been identified with its structural and molecular basis. Memory traces, engrams, holograms, or some such structural analogue is the physical counterpart of what has been called personal memory. According to the IT the mental aspects of memory are identified with the physical basis of memory. If the physical basis for memory is in the brain, as physiologists believe, then a brain transfer is going to transfer the personal memory of an individual. If deep seated attitudes, beliefs, and wants are transferred, it is likely that important aspects of personality will be retained.

If such factors are convincing, view (B) will have to be given up. But we might be able to make out a plausible case for taking brain identity as the sole criterion for personal identity. If the IT is true, mental events are identical with physical events, and the brain seems to be a plausible candidate for the location of the relevant events.

However, the IT is contingently true and the notion of criterial evidence has been specified in terms of necessary truth. Any memory description which serves as a criterion for personal identity will not be semantically equivalent to its physicalistic correlate. The phrase "is a criterion for" in this context will be intensional, since necessity is intensional with respect to contingent identity statements. Thus for any physicalistic description that is coextensive with a memory description, that physicalistic description will not itself be criterial evidence for personal identity.

Brain identity is a reliable indicator of personal identity only because it is nomologically connected with psychological criteria for personal identity such as memory reports. The connection between brain identity and memory is contingent.⁵

Given a nomological connection between brain identity and personal identity, a materialist can still maintain that brain identity is a nomologically necessary and sufficient condition for personal identity.

(C) It is lawlike and true that a person identified at t1 is the same person as the person identified at t4 just in case the person identified at t4 has the same living human brain as the person identified at t1.

The main support for (C) is the nomic correlations between memories and their structural basis.

In “the brain transfer case” view (C) would lead us to say that person C is identical with person A because they have the same brain. Even if some person C were to act and talk like B rather than A, we would not easily give up the nomic relations we think hold between brain states and psychological states. There is still a wealth of evidence for the nomic connections such as the effects of brain tumors, lobotomies, and the common sense belief in the causal transactions between mental events and physical events. We may well search for an alternative explanation for a deviant case, and pending a successful one, conclude that this case has anomalous results because of interfering factors we are not aware of.

Now let us consider a criticism of view (C) which shows that it is not adequate as it stands.

The possibility of manufacturing artificial human brains raises a serious difficulty for view (C) if we think that numerical brain identity is a necessary condition for personal identity. We can imagine the following case. We have invented a way of preserving human life indefinitely by manufacturing synthetic human bodies of all types and sizes. These live human bodies have a blank brain. For any individual, Jones, we can transfer his genetic code and lifelong experiences to a body that has been picked out as resembling his own body in physical appearance when he was younger. The details can be compared to a tape recorder or videotape. We tape in or imprint the brain correlates of memories of the person onto the brain and nervous system of the dummy body and its blank brain. A continuity of consciousness is preserved because Jones wakes up without noticing anything significantly different except for his bodily appearance. The old body is discarded and destroyed, which avoids any difficulty about whether Jones can inhabit two bodies.

This example has been constructed so that there can be little doubt that the resultant person is still Jones. We suppose that the relevant memories, personality, and personal relationships are preserved.

Jones will have a functionally equivalent but numerically distinct brain. Whether it is qualitatively the same in every respect is not important. If we say that the person with the manufactured brain is Jones, we will not be using numerical brain identity as a nomologically necessary condition for personal identity. We can speak here of Jones' original brain and his new brain just as we could speak of his original leg and his artificial leg. Let us call this “the blank brain example.”

We can imagine someone with a materialist bent arguing that there is reason the younger man cannot be Jones because he does not have the same set of memories. It might be thought that memory has its physical actualization in the brain, and that having the same set of memories requires having the same counterparts of memory in a numerically identical brain. Otherwise, there is no difference between one set of memories and an exactly similar but numerically distinct set of memories.

Two people would be able to have the same set of memories, but we do not think this is possible for one person to be two people.

It should be clear that the IT does not require the foregoing line of argument. A transfer of one person's memory from one brain to another is compatible with the IT so long as the mentalistic elements of memory are physical in nature, and there is no nonphysical element in memory during the transfer.

An analogous case occurs in recording a song from one tape to another. If we tape a song from another recording we would not say we have the same recording of the song if the original recording of the song remained. We could just record a song on one tape and duplicate the recording on another tape and destroy the original tape in the process. We can say that there is a sense in which we have the same song. We can say this because the two recordings are similar enough to satisfy our interests, are functionally equivalent, and form a spatio-temporally (s-t) continuous causal chain.

Memory in the blank brain case is similar to the taped song recording in the following respects.

We can suppose that at the time of the transfer of memories to the blank brain, the memories of the original brain are eliminated. The set of memories in the previously blank brain are similar enough to serve our interests.⁶ Within limits there is no right answer. It partly depends on what serves our interests. If we cloned five copies of Michael Jordan, they could all be called Michael Jordan, but five

different examples of Michael. Or we can say they are five copies of Michael.

In the blank brain example the two sets of memories are functionally equivalent since the person is able to remember most of the same things about his past history as he was with his original brain. The memories in his blank brain form a s-t continuous causal chain of the memories of the old brain. This latter feature is a necessary condition for saying we have the same memories.⁷ If the set of memories were duplicated in two or more blank brains, we would have to make some decision about what to say in such cases.

We can formulate the following necessary condition for the transfer of memory of a person to a different brain: a set of memories in a given brain B2 at t2 is the same as the memories in a different brain B1 at t1 only if the memories in B2 are part of a causal chain that is s-t continuous with the memories in B1. In cases where a set of memories are duplicated in more than one blank brain, we shall have to decide what to say.

When we speak of memories we are referring to correct memory beliefs. We assume that memory beliefs are part of a causal chain that originates with some perception or experience a person has that is part of a causal chain of his present memory belief. We think there is a causal element in the concept of memory.⁸ We do not think a person can remember a past experience of his unless his current memory belief is a causal result of a past experience, and the intervening causal links between the past experience and the current memory belief are of the appropriate sort.

In the blank brain example the causal component for our notion of memory is preserved, even though the causal chain is more complicated. It is worth noting that this example emphasizes the functional aspect of memory, and is coherent no matter what the physical realization of memory might be. For instance, if memory consists of traces they be persistent particulars like bits of matter or impressions in brain material rather than like an electric current or light waves. Impressions or grooves can be reduplicated and functional criteria for identity used as a reason for saying we have the same memory trace in a different physical impression as long as there is s-t continuity between old and new memory impressions.

In the face of the blank brain case view (C) must be given up. In order for some sort of brain identity to be nomologically necessary and sufficient for personal identity, we will have to allow for the possibility having the same personal with a functionally equivalent yet numerically distinct physical brain. Let us formulate this view as:

(D) The numerical identity of the physical brain is a nomologically sufficient condition for personal identity; and the s-t continuous causal chain of a numerically identical set of numerically identical set of memories is a logically sufficient condition for personal identity.

Having the same set of memories is not normally thought to be even nomologically necessary for personal identity. There are cases of amnesia. But once we have established the physical correlate in the brain it might be argued that the physical realizations of memory will be present even in cases of amnesia. Memory traces would not be eliminable without eliminating a part of the brain. If we were to eliminate the physical correlate of memory realized in the brain and remove the possibility of a person remembering his past, we would have to use other evidence for personal identity or deny it is the same person. Bodily identity can be sufficient for personal identity in cases of complete loss of memory.

Now consider dualism. What makes view (D) favor materialism over dualism is the requirement that the same set of physically identifiable memories be present to preserve personal identity.⁹ Without this requirement it might seem that the puzzle cases provide sufficient motivation to adopt some conditions and criteria which repeat themselves in dualism. But a dualist will have no reason to require that there be a s-t continuous causal chain in all cases where we have the same person in different bodies or with different brains. For a dualist there is no reason why memories could not be transferred from one brain to another when they are great distances apart, or why memories cannot exist disembodied for a long period of time after leaving one brain and entering another. The requirement that memories form a s-t continuous chain should be incompatible with what is required by dualists.

There is another interesting feature of view (D). Instead of making the identity conditions for personal identity less like the identity conditions of other physical than other things, like human artifacts. We will call a bicycle the same bike we bought ten years ago even though all of its parts have gradually

been replaced, so long as it is s-t continuous with the olde bicycle and its functional unity has been preserved. Given the possibility of replacing the parts of a person the way we do our artifacts, we may be tempted to adopt a materialist conception of personal identity. If we adopt materialism, there is a sense in which mental conditions for personal identity are identical with physical instances of memory.

Now we shall look at some views on memory that refutes all of the foregoing. The whole discussion so far presupposes that memories are stored in the brain. This view has been seriously questioned by some philosophers, particularly some Wittgensteinians. There is also a vast literature on general skepticism about the reliability of memory. Consider the alleged storage of memory. Exactly what is stored? Some say that we have perceptions in the past that cause us to form a train of mental images of the past that is like a movie of the past events. What about mental imagery? Some people claim not have any mental imagery, but still have a good memory of their past. Given the existence of a bunch of mental imagery, how can we tell whether it is actually a remembered event or just something we are imagining? You cannot tell that imagery is an accurate representation of the past by examining any mental images. Mental images are not memories. There may not be any memories or physical correlates of memory in the brain. We remember the past when we truly believe what happened. One way of checking our memory is to get another eyewitness. But we cannot otherwise show that our memory beliefs are reliable. We retain things that happened to us in the past. But retention does not necessarily involve storage. If memories are not stored in the brain, then it is pointless for a materialist to suppose we need s-t continuous causal chains of memories as a sufficient condition for personal identity. There would be no memories in the brain at all. I am inclined to adopt this view. We will never be able to read off the past experiences of other persons because memory is not stored in the brain.

What is said about memory has been said about other mental states such as desires, beliefs, and intentions. These states are not to be found in the brain either. This means that the scope of the IT has to be confined to a few mental states like sensations and images. If there is no physical correlates of memory in the brain, the IT will not help us in the way I outlined in this paper. A materialist conception of personal identity will not make use of what is stored in the brain. But the criterial evidence and the conditions for personal identity are not changed considerably. We just will not be able to read off the past of a person by examining their brains for physical realizations of memory.

REFERENCES

- [1] It is interesting historically to note that philosophers who have seriously addressed themselves to questions about personal identity have been committed to denying that the psychological aspects of human beings are physical in nature. Most of them accepted some form of dualism. Thomas Hobbes raised an interesting puzzle about the identity of ships over time, but he did not discuss physical object identity in connection with his materialist view of the nature of a person.
- [2] Sydney Shoemaker, Self-Knowledge and Self-Identity, (Ithaca, N.Y. :Cornell University Press, 1963), pp. 23, 24. In his "Persons and Their Pasts," American Philosophical Quarterly, 7, (October, 1970), In his article Shoemaker says it is correct to identify C with A when certain conditions governing memory are satisfied, p. 283.
- [3] Ibid., p. 4.
- [4] R. W. Sperry, "The Eye and the Brain," Scientific American, (May 1956), pp. 48-52, restored vision in a toad after cutting the optic nerve. In "The Growth of Nerve Circuits," Scientific American, (November 1959), pp. 68-75. Sperry says that nerve fibers seek out correct pathways themselves.
- [5] Shoemaker makes a similar point on p. 23.
- [6] What a person remembers is variable throughout their life. But there is usually a gradual and continuous transformation in the memory of a person.
- [7] S. Shoemaker, "Persons and Their Pasts," suggests that this be used as a criterion for personal identity.
- [8] Cf., C. B. Martin and Max Deutscher, "Remembering," Philosophical Review, 75, (April 1966).
- [9] S. Shoemaker, "Wiggins on Identity," Philosophical Review, 79, (October 1970), puts forward the view that nonbranching s-t continuous causal memory chains are logically sufficient

conditions for personal identity; cf. also Derek Parfit, "Personal Identity," Philosophical Review, 80, (January 1971).