

NEW BODIES FOR SICK PERSONS: PERSONAL IDENTITY WITHOUT PHYSICAL CONTINUITY

By AARON SLOMAN

I N his recent Aristotelian Society paper ('Personal identity, personal relationships, and criteria' in *Proceedings of the Aristotelian Society*, 1970–71, pp. 165–186), J. M. Shorter argues that the connexion between physical identity and personal identity is much less tight than some philosophers have supposed, and, in order to drive a wedge between the two sorts of identity, he discusses logically possible situations in which there would be strong moral and practical reasons for treating physically discontinuous individuals as the same person. I am sure his main points are correct: the concept of a person serves a certain sort of purpose and in changed circumstances it might be able to serve that purpose only if very different, or partially different, criteria for identity were employed. Moreover, in really bizarre, but "logically" possible, situations there may be no way of altering the identity-criteria, nor any other feature of the concept of a person, so as to enable the concept to have the same moral, legal, political and other functions as before: the concept may simply disintegrate, so that the question 'Is X really the same person as Y or not?' has no answer at all. For instance, this might be the case if bodily discontinuities and reduplications occurred very frequently. To suppose that the "essence" of the concept of a person, or some set of general logical principles, ensures that questions of identity always have answers in all possible circumstances, is quite unjustified.

Shorter's examples (op. cit., p. 169, ff.) involve situations in which it is fairly common for two people suddenly to exchange mental and physical characteristics: where Mr. A was a moment ago we now find someone who looks, feels, behaves, thinks, etc., exactly like Mrs. B, and *vice versa*. Despite any temporary embarrassments, it would surely be most sensible and morally justifiable, in the long run, to say that Mr. A and Mrs. B had suddenly changed places, rather than that they had both suddenly undergone strange and distressing transformations, while remaining where they were. Shorter seems to think that this shows not only that *physical continuity* is not required for personal identity, but also that *bodily identity* is not required for personal identity. However, the latter follows only if bodily identity requires physical continuity, and Shorter's own pattern of argument might be used to undermine this: there might be good practical reasons for saying that two bodies (e.g. Mr. A's and Mrs. B's) had suddenly changed places rather than that each had suddenly changed its shape, for example. I wish now to describe, without much comment, a possible situation in which this loophole in Shorter's discussion is closed. In my example both physical continuity

and bodily identity are clearly separated from personal identity. Moreover, it does not, as Shorter's apparently does, assume the falsity of current physical theory.

Whether human bodies are physical systems is an empirical question. Although many aspects of the physics, chemistry and engineering of human bodies are still hardly understood, it is at least clear that all the substances of which human bodies are composed are themselves composed of physical elements which can exist in inanimate matter. What is not so clear is whether every physical change, including movements, occurring in a human body conforms with the laws of physics (which, in view of quantum theory, is not to say that every such event has an explanation). No known processes or events in human bodies are known to be incompatible with current physical theory, but some might turn out to be. However, for the sake of our conceptual investigation let us accept the empirical assumption that all physical and chemical processes in human bodies conform to current physical theory, or at least something like current physical theory. In that case, if my body were suddenly duplicated in all its detail, down to the last sub-atomic particle, then all the physical processes in that body thereafter would be similar in character to the processes in mine, and consequently the observable behaviour of the new body, including facial expressions, verbal utterances, and all the other details which matter in personal communication, would be exactly the same as in mine except for the differences arising out of subsequent physical inputs and the differences permitted by quantum indeterminacy.

We already have machines which can transcribe a pattern of molecules from one magnetic tape to another with sufficient fidelity for most, if not all, listeners to be unable to tell whether they are listening to the "master" tape recording of a symphony concert or a copy. It seems to be at least logically possible that one day physicists will construct machines with still more spectacular reproductive capacities. Place your watch in box A, make sure the machine has the requisite supply of power and chemicals, then, when the green light shines another watch exactly like yours will be found in box B. The watches will probably not behave exactly alike forever, since the margin of indeterminacy in current physical theory and different subsequent treatment will allow differences to emerge: but if the original was very well made these differences should prove slight.

Similarly when the machine is developed, after about a hundred more years, so that it can duplicate human bodies: granted the aforementioned empirical assumption that human bodies are physical systems, then, although there may be very slight differences in the behaviour of the two persons stepping out of boxes A and B, these will not suffice to enable anyone, not even his nearest and dearest, to distinguish the original from the copy.

Notice that if the copy always turned out to lack some important feature of humanity, or to be different in intelligence or personality from the original, this would be evidence (though inconclusive) against the hypothesis that all the physical behaviour of human bodies conforms to physical theory. But we are assuming this does not occur.

Of course, the use of the transcriptor to multiply persons beyond necessity could cause dreadful moral, social, political and economic problems. However, a modified version of the machine might be very useful, and quite justified morally, as we shall see.

It will be a long time before engineers make a machine which will not merely copy a tape recording of a symphony, but also correct poor intonation, wrong notes, or unmusical phrasing. An entirely new dimension of understanding of what is being copied is required for this. Similarly, it may take a further thousand years, or more, before the transcriptor is modified so that when a human body is copied the cancerous or other diseased cells are left out and replaced with normal healthy cells. If, by then, the survival rate for bodies made by this modified machine were much greater than for bodies from which tumours had been removed surgically, or treated with drugs, then I should have little hesitation, after being diagnosed as having incurable cancer, in agreeing to have my old body replaced by a new healthy one, and the old one destroyed before recovering from the anaesthetic. This would be no suicide, nor murder.

I expect my family and friends would be pleased with the outcome. So would the families and friends of other incurably sick persons, except perhaps the impoverished surgeons. Because of the moral and practical benefits (who's going to quibble about spatio-temporal continuity when, in place of the ailing and helpless patient carried to hospital on a stretcher, the hale and hearty substitute walks in?), the business could well grow, until it became quite reasonable to say 'I'm going to hospital next week, to get a new body', or 'I like my new body much better than that sick old one'. Surely this is a simple extension of what makes it reasonable to say 'I'm going to get a new heart', or 'I much prefer this new trachea they've given me'. (As Shorter suggested, in commenting on the first draft, various intermediate cases between a new heart and a whole new body can be envisaged.) However, this way of speaking could only be tolerated if the original bodies were destroyed, or at least somehow kept out of circulation. Many, more or less macabre, variations on this theme, illustrating different points, are easily envisaged.

It might, of course, turn out on analysis that this concept of a perfect physical transcription machine, or its modified version, is incompatible with some aspect of modern physical theory. Indeed this is more than likely. However, that would show that my little story is physically impossible, not that it is logically impossible. Its advantage over

Shorter's, apart from its resistance to the comment that there's no loss of bodily identity only change of place, is then simply that its physical impossibility is less obvious.

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A NOTE ON STRICT IMPLICATION AND ENTAILMENT

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GEACH shows¹ how to dig in one's heels against the conclusion that a contradiction entails everything entailable. The idea is, roughly, to explain entailment of B by A as the obtainability of the conditional with A as antecedent and B as consequent, by substitution, from a truth-functionally valid conditional with a truth-functionally consistent antecedent and truth-functionally non-valid consequent. (To extend the idea to quantificational logic, one would omit 'truth-functionally' throughout and insert 'closure of a' before each occurrence of 'conditional'.) The result prevents us, in particular, from saying that the conjunction of A with its negation *entails* everything entailable—even though, as is conceded, everything entailable is *deducible* from it by a chain of entailments.

However, it may be worth noting that, on Geach's own view, the conjunction of A and its negation *entails*, for any given entailable E, something which is *equivalent* to E—if we are willing to understand by 'equivalent to': *entailing* and *entailed by*.

This can be seen from what follows:

$$r \supset . \bar{r} \supset s$$

is a tautologous conditional whose antecedent is truth-functionally consistent and whose consequent is truth-functionally non-valid. Hence the substitution-instance:

$$p \ \& \ \bar{p} \ . \supset . \ -(p \ \& \ \bar{p}) \supset q$$

guarantees that:

$$p \ \& \ \bar{p}$$

entails:

$$-(p \ \& \ \bar{p}) \supset q$$

But this last is *equivalent*—in the sense explained—to:

$$q$$

¹ P. T. Geach, 'Entailment', *The Philosophical Review*, LXXIX (1970), pp. 237–239.