Discussion

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The Early Reception of Bernard Williams' Reduplication Argument (1956–62)

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Abstract: The reduplication argument advanced by Bernard Williams in 1956 has greatly stimulated the contemporary debate on personal identity. The argument relies on a famous thought experiment that, although not new in the history of philosophy, has engaged some of the most influential contemporary philosophers on the topic. I propose here an interpretation of the argument and a reconstruction of the early reception that Williams' paper had in the 6 years immediately after its publication. The works discussed include papers by C. B. Martin, G. C. Nerlich, R. Coburn, and J. M. Shorter.

1 Introduction

In his influential book on personal identity, Harold Noonan claims that the publication of Bernard Williams' paper "Personal Identity and Individuation" in 1956 was "a major event in the history of the debate over personal identity." Noonan also suggests that the importance of this paper lies mostly in the forceful formulation of the reduplication argument, which has the great merit of starting many different and prolific chains of thought in the years following its publication. With that much granted to the merit of Williams' paper, it is worth analysing the first cycle of published reactions it received. The reasons for this interest are both historical and theoretical because, in one way or another, these early replies have interesting connections with recent developments in the literature. The initial papers in question were written by important philosophers in the analytic tradi-

¹ Noonan 2003, 125.

² See for example Parfit 1971, 3–27, Parfit 1984/6, and Wiggins 1967. Almost all of the contemporary philosophers responsible for setting the stage of the current debate on personal identity took into account Williams' arguments.

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tion such as C. B. Martin, G. C. Nerlich, R. Coburn, and J. M. Shorter and were published as a series of characteristically short *Analysis* papers in the period between 1958 and 1962, in response to which Williams also wrote a reply in 1960.

In the first part of this paper, I draw a series of distinctions between fission and reduplication cases if only to underline the well-known fact that reduplication arguments were not a novelty of the 1950s. After this introduction, I outline Williams' paper and reconstruct some of its main points with particular emphasis on the reduplication argument. In the subsequent six sections, I discuss the aforementioned series of replies in chronological order.

2 Fission, Reduplication, and Bodily Continuity: Some Precedents

In a reduplication thought-experiment – 'thought-experiment' should not suggest that the scenarios described in these experiments are necessarily fictional – we have an apparently consistent description of a situation in which there is (a) one person, A, who, at a moment of time, has a specific set of mental states and one body, and (b) at least two persons, B and C, each with different bodies, at a later time who each have a sufficient number of mental states similar to those had by A such that if only one of them existed we would identify this subsequent person with A (whether B or C). Various reduplication thought-experiments may describe the connection between the mental states of A and the two subsequent persons B and C differently. For example, B and C may both have similar mental states as those possessed by A at t or a number of mental states sufficient to ensure a degree of psychological connectedness of the type supporters of psychological theories of personal identity would accept as sufficient for identifying A with B and C.

Reduplication thought-experiments seem to emerge from certain ways of thinking about what constitutes or grounds the relation of personal identity. One of these ways – which is by no means the only one – is when criteria of personal identity over time have the following features:

- 1. The criteria are spelled out in terms of continuity, connectedness, or even identity of mental representations or states (in this context, they can be memories, beliefs, intentions, etc.);
- 2. The mental states referred to in the previous point are conceived of as being individuated by certain functional structures that can be realised in various ways at various times;

3. The structures referred to in the previous points are thought of as being, to a certain degree, independent of the particular matter in which they are realised or connected when they first happened to be instantiated.

Fission thought-experiments have similar but different features. For instance, fission thought-experiments may include situations in which A's body (or relevant parts of it) at t may literally split into two subsequent material entities that, in certain cases, we would regard as each having features independently sufficient for justifying a judgment of identity between each single entity, taken separately, and A at a post-fission time. Fission cases may include cases of split brains, where this kind of situation is supposed to create an embarrassment for both supporters of bodily (at least certain versions of it) and/or psychological theories of personal identity over time. (The embarrassment for theories based on psychological criteria derives from, among other things, thinking that the brain is the exclusive repository of the relevant mental states that ground the relation of personal identity.) An amoeba splitting in half would be a case of fission. What discriminates cases of fission from cases of reduplication is that in the former, but not necessarily in the latter, there is spatio-temporal continuity – whether bodily or in the causal chain responsible for psychological connectedness – between the pre-fission and the post-fission cases. In reduplication cases, such spatio-temporal or causal continuity is not presupposed.

The use of complicated thought-experiments to evaluate various conceptions of what it takes to be the same person – and thus survive – over time is hardly a modern or contemporary invention.³ Pious thinkers used such thought-experiments to ascertain whether a certain account of personal identity was compatible with certain religious doctrines such as the resurrection of the dead. For example, in the Collins-Clarke correspondence, Samuel Clarke attacked Locke's theory of personal identity, defended by Anthony Collins, because of its alleged incompatibility with some religious beliefs.⁴ Although not all of the details of their exchanges are relevant here, Clarke used a thought-experiment that is relevantly similar to the case discussed by Williams. More specifically, Clarke maintained that were personal identity not sustained by a continuous substance but rather solely by a functional or structural principle, and were consciousness intended as emerging or being the mere result of a particular configuration of matter, we could say that the same consciousness may exist in a variety of different places at the same time. If a man were to be so reduplicated, then God would hardly

³ See Walker Bynum 1995, Martin/Barresi 2006, Sorabji 2006, Ganeri 2007 and Thiel 2011.

⁴ See Uzgalis 2011.

be justified in punishing eventual crimes committed by that pre-reduplication person when the right time comes. The original discussion is much more subtle than what is appropriate to report here. Suffice is to say that cases such as this were used in the past to adjudicate debates on the plausibility of personal identity theories.5

Closer to the date of the publication of Williams' work, a reduplication scenario was described by Flew in his criticism of Locke's theory of personal identity. However, in this context, the reduplication case does not play a central role and is used to make the point that there are cases in which we are at a loss in finding a definite answer to questions of personal identity. So, Flew did not use the reduplication case to argue in favour of the necessity of bodily continuity for personal identity. Still, Williams had certainly read Flew's paper, if only because he quoted it (and moved some perspicuous criticisms to it). A paper that discusses a fission case is Arthur Prior's "Opposite Number", published in 1957 in the Review of Metaphysics. Prior is mostly concerned with logical issues in the formal representation of time and seems to have prefigured the multiple occupancy thesis at some point in his discussion. As we will see, Martin refers to this paper in his reply to Williams.

The main point I wish to make here is that reduplication scenarios were not a novelty of Williams' paper. Neither was the idea that bodily continuity (or identity of some parts of a body) is a necessary condition for personal identity. For example, Ayer, with whose work Williams was familiar, held that if we understand the self as a logical construction out of sense-experiences, then questions regarding the nature of the self are questions regarding the relationship between the sense-experiences we associate with the same self. Ayer maintained that it is a necessary and sufficient condition for two sense-experiences to belong to the same self that these experiences be organic sense-contents that are elements of the same body.8 Interestingly, Aver also claimed that it is logically impossible for any organic sense-content to belong to more than one body. The idea that the body is what grounds the possibility of proper individuation of certain mental states is expressed, although in a different form, in Williams' paper.

⁵ A study focused on the debate on personal identity that followed Locke's Essay is Martin/ Barresi 2000.

⁶ Flew 1951, 53-68. An early (and now obscure) discussion of Flew's paper is Palma 1964, 53-68. **7** See Prior 1957, 199.

⁸ See Ayer 1971, 133. Ayer also claims that this is not the only criterion to unify sense-experiences.

3 Bernard Williams' "Personal Identity and Individuation"

In his 1956 paper, Williams isolates two issues in the debate of his time on personal identity:

- a. The special status of the awareness of our own identity, generally called "self-consciousness", and
- b. The complexity of re-identification questions concerning personal identity, which cannot be decided solely by the identity of the body.

In regard to the metaphysical question (b), Williams distinguishes two ways of denying the idea that bodily identity is not a necessary condition for personal identity. According to the weak form of this denial, (W) there is at least one case \mathbf{c}_1 in which bodily identity is a necessary condition of personal identity and at least one case \mathbf{c}_2 in which bodily identity is not a necessary condition of personal identity. The strong form of the denial (S) holds that bodily identity is never a necessary condition of personal identity. A specification of what a process of 'identification' amounts to is not explicitly given in Williams' paper, and there are moments in which he oscillates between a metaphysical and an epistemological understanding of the concept.⁹

In any case, Williams' explicit aim is that of defending the idea that bodily identity is always a necessary condition of personal identity. What this criterion amounts to is not thoroughly specified, but Williams claims that he assumes that such a specification would include the notion of spatio-temporal continuity. Williams recognises, as did many at the time, that our concept of a person allows us to use personal pronouns to refer to a body (or parts of it) and situations in which such a reference would not sound correct. He further distinguishes cases of 'mere' qualitative changes in persons (for instance, cases of changes in the personality of

⁹ At that time, Strawson was already working on the notion of identification and related themes that would eventually inform his first major book, *Individuals*. See Strawson, 1953/4, 233–50; Strawson 1956, 433–54; Strawson 1958, 330–53; and Strawson 1959. In these works, Strawson discusses the importance of a spatio-temporal system for the reidentification of particulars in the context of demonstrative reference and the use of singular terms. This was seen as a response to Quine's thesis concerning the theoretical eliminability of singular terms in his 1950 *Methods of Logic* and his 1954 *From a Logical Point of View*.

¹⁰ Williams, 1956/7, 2. See Olson 2006, 242–59, for a contemporary discussion of various formulations of what a bodily criterion of personal identity could be.

one individual) and questions concerning numerical identity. Although his main aim is that of emphasising the role of bodily continuity. Williams also claims that the notion of memory properly belongs to the discussion of personal identity.¹¹ One of his main points, which was not sufficiently emphasised in his subsequent short Analysis paper, is that the concept of veridical memory seems to require a form of identification that can be obtained only through demonstrative reference, which in turn requires a spatio-temporal identification. This last point will be better appreciated after unpacking the reduplication argument. Williams claims that "A remembers x" implies that x really happened and that not all *claims* to the effect that we remember something are veridical.¹² After this clarification, Williams invites us to imagine a series of situations. The first involves Charles, a person who has undergone a radical change of character overnight. Charles claims to have witnessed a particular event E, which was not known to him before going to sleep. Williams asks what we are justified in believing in this situation and how we can come to verify Charles's claims. If Charles was bodily present to E, then Charles remembers in the normal way, contrary to the hypothesis. If he was not present at E, then we cannot corroborate his claims. Williams seems to conclude that a criterion for adjudicating the normal functioning of the mental operation of remembering involves bodily continuity.¹³ This idea echoes Clarke's remark that if consciousness depends on matter and such matter can be subsequently arranged so as to have a functional analogue, such a new person would only have the *appearance* of remembering what happened to him/her and God would not rightly punish him/her. The person would have "a representation without reality of matter of fact" and not a real memory.

Williams further elaborates on the previous example by imagining a second case in which Charles claims to remember events that seem to identify the life-history of one person in the past, say, Guy Fawkes. Possibly following Locke and his tale of the prince and the cobbler, Williams notes that many would identify

¹¹ Williams corrects Flew's formulation of Locke's views on personal identity in terms of memory along these lines: "if x claims to remember doing such-and-such, then he is the person who did it". Few Locke scholars would now accept the simple equation "consciousness = memory" as a correct understanding of what Locke had in mind when discussing his theory of personal identity. See Mackie 1976; Noonan 1978, 343-51; Ayers 1991; Thiel 1998, 212-62; Coventry/Kriegel 2008, 221-242; and Weinberg 2012, 387-415.

¹² Grice had previously discussed the idea of memory-knowledge to distinguish a true belief that an experience occurred without that experience having been an experience of the person remembering something from a true belief indexed to the specific person who has a memory. See Grice 1941, 344.

¹³ Williams 1956/7, 5.

Charles with Guy Fawkes. However, Williams suggests that another description of the situation is possible (and indeed, according to him, preferable): Charles has become, except for the body, just *like* Guy Fawkes used to be. Williams claims that memory was supposed to rule out this alternative description because it is impossible that two distinct persons can veridically remember being the person who did a specific spatio-temporally exclusive action A if A is not a case of multiple agency. Rather, it is possible that two people *claim* to remember being the person who did A. However, the description of this last case, which includes a clear spatio-temporal discontinuity, seems to exclude the possibility of having veridical memories and so does not exclude the alternative description. Thus, Williams suggests that we are not forced to accept the description of the Charles-Guy Fawkes scenario as a case of identity.

Williams then introduces the famous reduplication case to show that the alternative description was not merely possible but also preferable. My reconstruction of his reasoning is as follows:

- 1. If it is logically possible that Charles (C) can undergo the changes described, then it is logically possible that his brother Robert (R) can be found in the same situation.
- 2. But, they cannot both be Guy Fawkes (GF) for the following reasons:
 - 2.1. If they were, GF would be in two places at the same time, which is absurd.
 - 2.2. If they were both identical to GF, they would be identical to each other, which is also absurd.
- 3. And it is not the case that either C or R could be said to be identical with GF for the following reason:
 - 3.1. There is no principle determining which description is to apply to which (that is, there are no grounds for identifying GF with just one of the reduplicated instances).
- 4. So, the best description would be that both C and R had mysteriously become *like* GF.
- 5. If the description in (4) is the best description of the case at issue, a similar description should be used in the case in which only C and GF are involved separately for the following reasons:
 - 5.1 The relation between C and GF (RE1), and the relation between R and GF (RE2), hold solely in virtue of the related entities involved in each single relation (e.g., RE1 holds only in virtue of C and GF) and both are one-to-one relations, if they are to count as instances of the relation of personal identity. However, given 2., 3., 4., there is a situation in which the holding of RE1 and RE2 are each not sufficient for personal identity. So, instances of solely these relations, which involve alleged memory continuity, should at most be described as instances of the relation of similarity.

Williams further suggests that talking about identity in the simple case (that involving only GF and C separately) would appear to be vacuous. In what follows, I provide my reconstruction of Williams' subsequent application of the idea that identity and similarity can be distinguished only when we have bodily identity to the case of personal identity.

- Suppose that GF and C are individuated *also* by two separate spatio-temporal objects, namely two different bodies, B-GF and B-C.
- Suppose that the moments of time in which B-GF exists do not overlap with the moments of time in which B-C exists.
- If we claim that C, who lived at a later time, remembers doing A, where A is an action performed by GF, then we imply that C properly remembers doing A.
- It is necessary that, if A is a singular action an action involving only one individual or person – occurring in space and time, then A is individuated by one spatio-temporal entity, in the case at issue, by one body.
- Let us use "M_A" to refer to the memory of doing A.
- It is necessary that M_A, to be veridical or proper, has the same content at different moments of time. In other words, it is necessary that M_A at $t_1 = M_A$ at t_2 (where t_1 is a time prior to t_2) if M_A at t_2 has the same content as M_A at t_1 , and/ or if they are individuated by the same action A.
- Let us use "ME_A" to refer to the ersatz memory of M_A, where ME_A is relevantly similar to M_A but is individuated neither in virtue of the agent who performed A nor in virtue of A itself. The similarity may amount to an identity of some but not all of the phenomenological aspects of an A-experience or to an identity of certain spatio-temporal components of the memory external to the individual who performed A.
- Suppose that GF remembers $M_{\scriptscriptstyle A}$ at $t_{\scriptscriptstyle I}$. It follows that C can be taken to remember only ME, at t, because we supposed that C does not have the same body as GF and (3), (4), (6), and (7).

This argument captures the idea expressed by Williams according to which when we try to "prise apart 'bodily' and 'mental' criteria; [...] we find that the normal operation of one 'mental' criterion involves the 'bodily' one."¹⁴ The notion of ME, captures the idea that there is a distinction between identity and similarity of memories: all that can be said in the case of C and GF is that they have similar memories, in particular that C has some memories that are similar (or ersatz) memories of GF. What is missing in C's ME_A that prevents it from being a proper GF's M_A is that the latter is not individuated by the same spatio-temporal object as the former, by supposition.

Now, (8) can be used as a further premise for an argument against the idea that having a sufficient number of memories at various times is sufficient for two persons to be the same and in favour of the necessity of bodily continuity:

- Suppose that identity of (a sufficient number of) memory (or memories) is a
 sufficient condition for personal identity and that bodily continuity is not a
 necessary condition for personal identity and/or for the memory continuity
 or identity. It follows that
- 10. It is possible that C and GF have different bodies and that GF at $t_1 = C$ at t_2 in virtue of (or because of) C at t_2 having (a sufficient number of) GF's M_A .
- 11. However, given (8), C cannot have any M_A.
- 12. So, the situation in which GF at t₁ = C at t₂ is not possible unless GF and C have the same body (and unless we exclude other criteria of personal identity as equally viable). Having the same body would ensure that C could genuinely be said to have M_A (although this is not a sufficient condition).

The reduplication case described by Williams can thus be seen as the first step of an argument in which the role and metaphysical individuation of different types of memories, M_A and ME_A , is made explicit. As it may be expected, discussions of the features of memory were not something new at the time. However, Williams does not acknowledge where his ideas come from. It can be argued that, besides reasons of identification, the role of spatio-temporal continuity plays a crucial role here because of its connection with causation. Williams suggests that spatio-temporal continuity is a useful criterion for individuation because we can in principle track back the history of a specific individual in space and time. This process can be thought to be feasible if we suppose that causal connections run along spatio-temporal connections. An influential causal theory of memory was

¹⁵ Shoemaker, in his paper "Personal Identity and Memory", which was published in *The Journal of Philosophy* only a couple of years after Williams' paper, suggests a similar point, namely that "checking on the truth of a memory claim" involves, in certain cases, establishing whether the person who claims to remember E was there when E happened. This process, in turn, may involve "bodily identity". See Shoemaker 1959. Shoemaker does not mention Williams' earlier paper. On the other hand, Penelhum, in a reply to Shoemaker in the same issue of *The Journal of Philosophy*, acknowledges Williams' point that bodily and mental criteria are intertwined. See Penelhum 1959, 891.

¹⁶ In addition to the classical discussions by Hume and Reid on memory, other possible sources for Williams' account of memory include Russell 1921, Harrod 1942, Furlong 1948 and 1951, and Ryle 1949, 248–254.

proposed a few years later by Martin and Deutscher. 17 It is interesting to notice that, as we will see, Martin was well aware of Williams' discussion.

In the second section of his 1956 paper, Williams makes another interesting point: when we are asked to distinguish a man's personality from his body and to imagine a situation in which only his mental features are transported into another body, it is not always so clear whether we really know what to imagine and which features remain constant. 18 For instance, what happens to Pavarotti's identity if we imagine, mutatis mutandis, a reduplication case involving him, Andrea and Vincenzo, two different persons who do not have similar voices? A situation that many would 'intuitively' describe as a body transplant or body switch may make impossible the expression of certain character traits or capacities that, on reflection, may be taken to be essential for the identity of a specific person.

In the third section, Williams claims that having self-consciousness is not a sufficient condition for our own personal identity. As this does not directly impinge on the reduplication argument, I will not discuss this point in detail. Suffice it to say that Williams reiterates the idea that the world of public criteria (which involves the identification of spatio-temporal continuity) is where the individuation of persons is better grounded. In the final section, Williams discusses cases of multiple personality and argues that they do not represent an objection to his main points.

4 C. B. Martin's "Identity and Exact Similarity"

Martin's 1958 paper in Analysis is one of the first published criticisms of Williams' reduplication argument. 19 Martin argues that a case of fission in which a person divides like an amoeba proves Williams' point that Charles (C) and Robert (R) cannot both be Guy Fawkes (GF) to be false.²⁰ Martin claims that C's and R's having been identical to GF up to the moment of fission does not exclude that C and R might not be identical to each other at a later time. Prefiguring the multi-

¹⁷ Martin/Deutscher 1966. This paper, in turn, will provide the basis for Shoemaker's formulation of the concept of quasi-memory in his famous 1970 paper "Persons and Their Pasts".

¹⁸ Williams, 1956/7, 12. Williams discusses the relationship between imagination and various kinds of thought-experiments involving the self in a subsequent paper, "Imagination and the Self", reprinted in Williams 1972, 26-45.

¹⁹ Martin, 1958, 83–7. Similar criticisms are repeated in Martin 1959, ch. 6.

²⁰ This case had been previously discussed in Prior 1957 but not in relation to Williams' argument.

ple-occupancy or cohabitation theory, Martin suggests that a fair description of a person splitting like an amoeba is that "the original amoeba has become two and these two have had an identical life history in the past, namely when they were one". Amount of the seems to suggest that Williams' reduplication case can be described as a case in which GF has become C and R (or that, in a formulation that seems to be equivalent, that C and R had in the past an identical life history). Martin claims that we understand the sense in which the two divisions are identical to the pre-fission case, whilst being different from each other. Williams' reply in his 1960s paper "Bodily Continuity and Personal Identity" is that Martin confuses identity with a different concept, namely, "having the same life-story as". Williams claims that the two concepts display a different logical behaviour; more specifically, saying that A and B are identical amoebas is to say that *pro tanto* there is only one amoeba. However, to say that A and B share the same life history is compatible with saying that there are two amoebas.

In any case, a fission scenario such as this one does not directly show that what Williams wanted to argue for, namely the necessity of bodily continuity for personal identity intended as including spatio-temporal continuity, is wrong. Quite the contrary, it seems to support the bodily criterion, given certain presuppositions. The reason is that, in Martin's amoeba case, there is spatio-temporal continuity between (a) the GW-amoeba and (b) the two amoebas, C-amoeba and R-amoeba, where these last two are the result of GW-amoeba's splitting. If Martin claims that the best description of the fission scenario is that C and R are now GW and that an equal amount of the matter constituting GW has been equally distributed between C and R (Martin does not explicitly specify the distribution of GW-matter between C and R), then we can be justified in claiming that there is an adequate spatio-temporal connection between GW and both C and R. If Martin claims that, in the amoeba case, C and R are GW, then, absent defeaters, the relation of bodily continuity is not disrupted between the original amoeba and C and/ or R. In order for fission cases to be considered counterexamples to the necessity of bodily continuity, these examples would have to show that one or both of the results of the split are not spatio-temporally continuous with the original and that we would describe the non-spatio-temporally connected individual as identical to the original entity.

²¹ Martin, 1958, p. 84. A *locus classicus* of the multiple occupancy theory is Lewis 1976, and, for a recent defence Langford 2007.

²² The notion of a "life-history" is credited by Prior to Wilson 1955 paper.

²³ Williams, 1960, 23 n. 2.

Martin also proposes a "more seductive case" in favour of Williams' main thesis. More specifically, he describes a case that clearly resembles a reduplication scenario (not simply a fission case): A disappears into thin air and subsequently B and C appear out of thin air, both having the same features A had (B and C are qualitatively the same as A in terms of bodily and psychological features). Martin maintains that the two cases, the amoeba-fission and the disappearance-reduplication, can be used to point at a philosophically important distinction. More specifically, it can be argued that the difference between saying that the two amoebas are similar to the original and saying that the original has become two can be drawn by referring to bodily continuity. In other terms, numerical identity, in contrast to mere qualitative identity, requires spatio-temporal continuity, and this difference is allegedly shown when the two cases are contrasted. The two amoebas are the same because there is spatio-temporal continuity, but the reduplication case, due to the spatio-temporal gap, cannot be properly described as a case of numerical identity because "A completely disappeared and is supposed to have passed out of existence". 24 However, Martin claims that some of the key words used to make the previous point in favour of bodily continuity - "sameness" and "exact similarity" - do not necessarily have a bearing on assessing the debate. According to Martin, the reason for this is that it is not always true that the word "same" changes its meaning when it is used to link two singular terms that refer to individuals spatio-temporally disconnected. In addition, "exactly similar" can be used so as to be neutral to the personal identity debate. Martin emphasises the conventionality of how such words are used in relation to different cases. The example he gives in support of his point involves Merlin's pearl, an artefact that disappears and comes back into existence intermittently. According to Martin, there is no necessity to describe the temporally distinguished appearances of the pearl (or pearls?) as cases involving sameness or exact similarity in respect to the original pearl. In any case, Martin suggests, while ordinarily "exactly similar" has an implicit and perhaps contextual criterion of evaluation, these terms lack such a feature in the Merlin case (or in other reduplication cases). Interestingly, he concludes his short but dense essay by claiming that there may well be an element of linguistic convention in regard to determining the identity of people and physical objects. Martin claims that this last point can be especially appreciated when we are called to evaluate the previous puzzle cases, the purpose of which may also be taken to show how some of our concepts do not always have a straightforward application.

²⁴ Martin, 1958, 58.

5 G. C. Nerlich's "Sameness, Difference and Continuity"

In his 1958 paper Nerlich correctly notes that Martin's criticism should not be that Williams' argument is invalid, but rather that one of the (hidden) premises used by Williams, namely that identity is symmetrical and transitive, is not true, at least for the amoeba case at issue.²⁵ Nerlich also questions Martin's description of the amoeba case, in particular, the intuitiveness of the identification of the post-fission amoebas, C and R, with the original one. Nerlich further isolates an important principle that has been discussed extensively in the literature on personal identity in the terms used here. The principle in question is that the notion of (personal) identity should entail *uniqueness*. C and R cannot both be GW because there would be one entity too many.

Nerlich makes another important remark: the debate on personal identity has frequently been connected historically to debates about resurrection, survival and future expectations. Nerlich brings this to bear in the discussion of the amoeba case in the following way. If GW is the original person undergoing an amoeba-like fate, it would be puzzling, according to Nerlich, to understand how GW might anticipate its future concerns. Parfit will later claim that, in similar cases, such a fate should not be rationally evaluated to be as bad as death, even when personal identity would eventually fail.²⁶

Another interesting part of the paper is the description of a disappearing-pearl thought-experiment aimed at showing that Martin's previous case was not as straightforward as its author suggested. Suppose there are two pearls similar to each other, A and B, and suppose that these pearls disappear and two pearls, C and D, appear. Nerlich claims that Martin seems to be forced to say that "C and D are both identical with A and both identical with B."²⁷ This description, which would be problematic if transitivity of identity holds, is absurd, or so Nerlich claims. He maintains that the problematic description is a consequence of having dropped the requirement that identity entails uniqueness. Nerlich also claims that Martin's reasoning has another problem: if the B-pearl and the C-pearl come into existence exactly similar to A, then there is no way of telling which one is A now, supposing that A ceased to exist before they came into existence. The problem is that there would be no reason or evidence to identify A with either B

²⁵ Nerlich, 1958, 144 f.

²⁶ See Parfit, 1971, 3-27, and Parfit 1984.

²⁷ Nerlich, 1958, 149.

or C – and modal properties do not help choose one instead of the other. Nerlich contends that this arbitrariness should be extended to the simpler case in which the A pearl is identified with the B pearl. The discussion presupposes the acceptance of the uniqueness requirement, perhaps as a consequence of the alleged absurdity discussed in the previous reasoning. According to Nerlich, the difficulty here is that if, in a case of discontinuity, exact similarity is sufficient for identity, then we would not be in a position to maintain that B might be a different thing. This is because, if we accept Martin's description of the case, only dissimilarity is strong enough to ground claims of non-identity.²⁸ Nerlich finds Martin's reasoning problematic because Martin cannot provide a sense to the distinction between sameness and difference without recurring to relations such as "actual sitting side by side" or "dissimilarity". Unfortunately, Nerlich does not further argue why this would be so traumatic.²⁹

6 Robert Coburn's "Bodily Continuity and Personal Identity"

In his 1960 paper, Coburn claims that the reduplication argument has absurd consequences, or at least consequences as absurd as identifying C and R with GF. The example Coburn uses to make his point involves George, a person, and a scenario similar to Martin's disappearing pearls. Suppose George disappears and a moment later a qualitatively equal individual begins to exist (George*). Now, Coburn takes issue with a particular point made by Williams, namely, that identifying C and GF would be vacuous, which would imply that identifying George and George* is equally vacuous. In particular, Coburn argues that this latter identification is far from vacuous. In fact, he claims that it is plausible to imagine that George* would claim to be George and to have done what George did. Coburn also says that we would certainly hold George* responsible for the crimes George had committed. The point Coburn is trying to make here is not that some sort of psychological continuity is a sufficient condition for personal identity but rather that, under certain conditions, sole psychological continuity can be a sufficient

²⁸ Nerlich, 1958, 149.

²⁹ See Black 1952, 153-64 for a possible explanation. Nerlich further discusses issues related to counterfactuals and identity, but I will not deal with them here. See Coburn 1960, 119 f. for discussion. For further discussion see Nerlich 1959, 201-214.

basis for identification, at least in cases involving specific kinds of responsibility (which are, in turn, generally associated with personal identity).

7 Williams' Reply to Coburn: "Bodily Continuity and Personal Identity"

At the beginning of his reply to Coburn, Williams summarises his reduplication argument in a way that varies from my reconstruction.³⁰ In particular, he does not mention his previous considerations of veridical memory but rather stresses that his reasoning is related to some metaphysical and logical features of the notion of identity. Williams immediately clarifies what he meant by "vacuous" in his original argument, namely, groundless. More specifically, in saying that an identification is vacuous, he simply meant that there would be no grounds for justifying the identification of GF with either C or R and not that such an identification, if done, would be without consequences.

Williams notices that Coburn's imagined scenario is devoid of many details. For example, we are not told whether the shortness of the interval between the disappearance of George and the appearance of George* is relevant or not. Williams also correctly notes that Coburn's case is similar to his original reduplication argument involving only C and GF, with the addition of bodily similarity and, possibly, a shorter spatio-temporal discontinuity. Williams then explicitly formulates his one-one (or uniqueness) principle, which he claims is crucial in his original argument. More specifically, this principle says that identity is a one-one relation and that no principle P can be a criterion of identity if P has the logical form of a one-many or many-many relation between things of type K. A criterion of identity that relies only on (non-physically individuated) memory claims does not have the logical form of a one-one relation but rather of a many-one relation, and therefore cannot be an adequate criterion of identity. 31 Williams argues that the criterion of identity implied in Coburn's description of his example does not meet the previous requirement, even though it can be restricted and modified to have the appropriate logical form. One way of restricting the criterion is by including the following conditions to its underlying relation: "[...] being in all respect similar to, and appearing as the first subsequent occupant of the place

³⁰ Nerlich also replies to Coburn. See Nerlich 1960, 22-4.

³¹ As any reader of Philip K. Dick's short story "Impostor" should know.

vacated by the disappearance of, the individual [...]"³² If the application conditions of the expression "the place vacated by" meets two further conditions, then the uniqueness condition can be satisfied by the revised criterion. These two additional conditions are that "1. It is not possible for two persons simultaneously to occupy that place, and 2. It should be sufficiently determinate not to leave it in doubt which of the two or more places, so restricted is the place in question".³³ These conditions would ensure that the revised criterion of identification for appearing-disappearing objects relies on a one-one relation. This criterion would exclude reduplication cases, but this is not what Coburn had in mind. Williams does not discuss here whether the violation of spatio-temporal discontinuity has a bearing on the appropriateness or veridicity of memory claims made by the reduplicated individual. In focusing only on the fact that a criterion of personal identity must have certain logical features, Williams seems to underscore the importance that spatio-temporal continuity had in his original argument and in securing that memory claims are not illusory.³⁴ Emphasising the connection between veridical memories and spatio-temporal continuity (already supported in his 1956/7 paper) could have strengthened Williams' reply. Perhaps Williams thought that the point about the logical form of any criterion of identity was sufficient to defuse Coburn's objection.

Another interesting point made by Williams is that questions of identity through time, when answered by holding a criterion of spatio-temporal continuity as a necessary condition, engage us in a historical enquiry on the different stages of the entity at issue. An episode of fission such as the amoeba case can be described and discovered as such because of the application of a spatio-temporal criterion. This criterion would enable us to find an answer to whether the relation of identity holds once the notion of spatio-temporal continuity is sufficiently specified. Williams suggests that a verification procedure is discoverable when the criterion involves spatio-temporal continuity. In principle, the spatio-temporal history of an individual would provide us with a procedure to individuate the entity in question as being the same or not through time. This is what a criterion is supposed to do.

³² Williams, 1960/73, 21.

³³ Williams, 1960/73, 21.

³⁴ Considerations related to these issues will notoriously occupy Shoemaker repetitiously. See for example his 1959, 1963 and 1970 papers.

8 J. M. Shorter's "More about Bodily Continuity and Personal Identity"

Martin's idea that criteria of personal identity involve an element of contingency is further developed by Shorter in a 1962 paper. In addition, he also argues that a certain element of conventionality in the concept of personal identity may even prove that bodily continuity is not a necessary condition of personal identity.³⁵ Shorter attempts to emphasise this element of conventionality in the determination of the boundaries of the concepts at issue – personal identity and its criteria – by describing another imaginary situation involving an interesting mixture of Twin-Earths and counterparts.³⁶ His imaginary case involves a planet, Juno, related to Earth in a peculiar way: there is a one-one correspondence between living Junonians and people who died in the last hundred years on Earth.³⁷ Individuals so coupled are called counterparts (or opposite numbers).³⁸ Junonians' bodies grow similarly to their counterparts on Earth and then 'come to life' when the Earthlings die. Junonians have memories similar to those of their counterparts up to the moment in which the latter died on Earth. They describe 'their' previous lives accurately and their appearance and character are in all respects like those of their opposite numbers or counterparts. When they awaken, Junonians retain the attitudes their counterparts had in relation to each other. Shorter describes this process as identification. On Juno, Junonians re-identify, say, what they take to be past relatives in their copied memories with those whom they take to be the correct counterparts of people on Earth. Although Junonians do not use "seeming memories" to describe their memories of what happened to their counterparts, we may say that their memories are not genuine, at least according to our standards. However, Junonians believe that they had previous existences and that their memories are genuine, apart from certain counterparts of metaphysicians and philosophers of mind who lived on Earth (among whom are Martin's and Deutscher's counterparts). This description clearly resembles a description of a resurrection scenario involving only spatial discontinuity. After the previous

³⁵ Shorter 1962, 81.

³⁶ Other philosophers will subsequently employ these two notions in interestingly different but related ways. See Putnam 1975 and Lewis 1968. Whilst Putnam's Twin-Earth is similar to Juno, Lewis' use of "counterpart" involves spatio-temporally disconnected individuals, at least in his 1968 formulation.

³⁷ Shorter 1962, 82.

³⁸ "Opposite number" was used by Prior who, in turn, took it from a short story of the same title by John Wyndham, an English sci-fi writer.

description, Shorter asks what we should say in case Juno were discovered. Are Iunonians the same people as their opposite numbers or counterparts? On Iuno. the concept of personal identity seems to have different criteria of application if only because Junonians identify themselves with their counterparts. Shorter claims that the application conditions of concepts such as those involved in the specification of criteria of personal identity may have to be extended or revised in light of the previous scenario. Shorter's point seems to be that the imposition of formal conditions on a criterion of identity, for example that it be a one-one relation, should be an empirical question rather than a logical one, contrary to what Williams suggested. Bodily continuity may be empirically necessary but not logically so.

Although Shorter claims that on Juno the distinction between identity and similarity is preserved, I doubt that this would satisfy Williams. Again, the problem seems to be that the same concept of genuine memory involves a spatio-temporal or at least causal connection between the content of the copied memory and the episode of recalling. In reply, Shorter may argue that this is the result of the fact that the concept of a genuine memory is related to the limited circumstances taken into consideration and that we may have to revise it in light of different cases. However, one might question the rationality of such a continuous extension of the ordinary language expressions or concepts at issue. After all, we are interested in our concept of personal identity. Moreover, if we regard questions of personal identity as involving invariant metaphysical principles, those principles are supposed to hold, if not necessarily, at least in the same universe. If Juno is in our universe, as it is supposed to be, then metaphysical truths should hold there as well.

9 Conclusions

I hope that my sequential reconstruction of the previous exchange on the nature of personal identity shows the tight interaction of the variety of different arguments and thought experiments employed to shed light on such a central topic. Although recent debates on personal identity in the analytic tradition have paid more attention to certain key figures, it is worth remembering that, contrary to Merlin's pearls, many of their ideas did not pop out of thin air.

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