CHAPTER III

IDENTITY THROUGH TIME

The identity of a person is a perfect identity; wherever it is real, it admits of no degrees; and it is impossible that a person should be in part the same, and in part different . . . For this cause, I have first considered personal identity, as that which is perfect in its kind, and the natural measure of that which is imperfect.

Thomas Reid [1]

1 The Ship of Theseus

To understand the philosophical problems involved in persistence, in the fact that one and the same thing may endure through a period of time, we will begin with what Reid would have called the 'imperfect' cases and remind ourselves of some ancient philosophical puzzles. One such puzzle is suggested by the familiar dictum of Heraclitus: 'You could not step twice in the same river; for other and yet other waters are ever flowing on.' [2] Another is the problem of the Ship of Theseus. [3]

Updating the latter problem somewhat, let us imagine a ship – the Ship of Theseus – that was made entirely of wood when it came into being. One day a wooden plank is cast off and replaced by an aluminum one. Since the change is only slight, there is no question as to the survival of the Ship of Theseus. We still have the ship we had before; that is to say, the ship that we have now is identical with the ship we had before. On another day, another wooden plank is cast off and also replaced by an aluminum one. Still the same ship, since, as before, the change is only slight. The changes continue, in a similar way, and finally the Ship of Theseus is made entirely of aluminum. The aluminum ship, one may well argue, *is* the wooden ship we started with, for the ship we started with survived each particular change, and identity, after all, is transitive.

But what happened to the discarded wooden planks? Consider this possibility, suggested by Thomas Hobbes: 'If some man

had kept the old planks as they were taken out, and by putting them afterwards together in the same order, had again made a ship of them, this, without doubt, had also been the same numerical ship with that which was at the beginning; and so there would have been two ships numerically the same, which is absurd.' [4] Assuming, as perhaps one has no right to do, that each of the wooden planks survived intact throughout these changes, one might well argue that the reassembled wooden ship *is* the ship we started with. 'After all, it is made up of the very same parts, standing in the very same relations, whereas that ugly aluminum object doesn't have a single part in common with our original ship.'
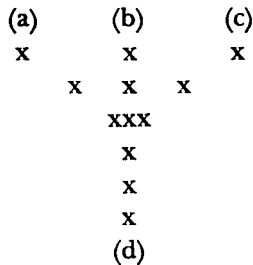
To compound the problem still further, let us suppose that the captain of the original ship had solemnly taken the vow that, if his ship were ever to go down, he would go down with it. What, now, if the two ships collide at sea and he sees them start to sink together? Where does his duty lie – with the aluminum ship or with the reassembled wooden ship?

'The carriage' is another ancient version of the problem. Socrates and Plato change the parts of their carriages piece by piece until, finally, Socrates's original carriage is made up of all the parts of Plato's carriage and Plato's carriage is made up of all the parts of Socrates's original carriage. Have they exchanged their carriages or not, and if so, at what point?

Perhaps the essence of the problem is suggested by an even simpler situation. Consider a child playing with his blocks. He builds a house with ten blocks, uses it as a garrison for his toy soldiers, disassembles it, builds many other things, then builds a house again, with each of the ten blocks occupying the position it had occupied before, and he uses it again as a garrison for his soldiers. Was the house that was destroyed the same as the one that subsequently came into being?

These puzzles about the persistence of objects through periods of time have their analogues for the extension of objects through places in space. Consider the river that is known in New Orleans as 'the Mississippi'. Most of us would say that the source of the river is in northern Minnesota. But what if one were to argue instead that the source is in Montana, where it is known as 'the Missouri'? Or that its source is in Pittsburgh, where it is known as 'the Ohio', or that its source is farther back where it is called 'the Allegheny', or in still another place where it is called 'the Monongahela'?[5]

The accompanying diagram provides us with a schematic illustration.

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(a)        (b)        (c)
 x          x          x
        x   x   x
           xxx
            x
            x
            x
           (d)
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Of the river that has its central point at (d), one might wonder whether it flows south-easterly from (a), or due south from (b), or south-westerly from (c). (For simplicity, we ignore the Allegheny and the Monongahela.) If we are puzzled about the beginning of the Mississippi, we should be equally puzzled about the end of the Rhine. Reading our diagram from bottom to top (and again oversimplifying), we could say that if the Rhine begins at (d), then it ends either with the Maas at (a), or with the Waal at (b), or with the Lek at (c).[6]

Perhaps we can imagine three philosophers looking down at the river(s) that end(s) at (d). One insists that the river flows between (a) and (d), another that it flows between (b) and (d) and the third that it flows between (c) and (d); and each insists that, since the arms (or tributaries) to which the other two philosophers refer are distinct not only from each other but from the river itself, neither of the other two can be right. Their dispute, clearly, would be analogous in significant respects to the problem of the Ship of Theseus.

What are we to say of such puzzles? We might follow the extreme course that Carneades took and simply deny the principle of the transitivity of identity.[7] In other words we might say that things identical with the same thing need not be identical with each other. But if we thus abandon reason and logic at the very outset, we will have no way of deciding at the end what is the most reasonable thing to say about ourselves and *our* persistence through time.

We might be tempted to deny the possibility of alteration. Thus one could say: 'Strictly speaking, nothing alters – nothing is such that at one time it has one set of properties and at another time it has another set of properties. What happens is, rather, that at one time there is a thing having the one set of properties and at the other time there is another thing having the other set of properties.' But this supposition, if we apply it to ourselves, is inconsistent with the data with which we have begun. Each of

us knows with respect to himself that he now has properties he didn't have in the past and that formerly he had properties he doesn't have now. ('But a thing *x* isn't identical with a thing *y* unless they have all their properties in common. And if the present you has one set of properties and the past you another, how can they be the same thing?') The answer is, of course, that there aren't two you's, a present one having one set of properties, and a past one having another. It is rather that you *are* now such that you have these properties and lack those, whereas formerly you *were* such that you had those properties and lacked these. The 'former you' *has* the same properties that the 'present you' now has, and the 'present you' *had* the same properties that the 'former you' then had.[8]

Bishop Butler suggested that it is only in 'a loose and popular sense' that we may speak of the persistence of such familiar things as ships, plants and houses. And he contrasted this 'loose and popular sense' with 'the strict and philosophical sense' in which we may speak of the persistence of *persons*.[9] Let us consider these suggestions.

2   *Playing Loose with the 'Is' of Identity*

We will not pause to ask what Butler meant in fact. Let us ask what he could have meant. He suggested that there is a kind of looseness involved when we say that such things as the Ship of Theseus persist through time. What kind of looseness is this?

It could hardly be that the Ship of Theseus, in contrast with other things, is only loosely identical with itself. Surely one cannot say that, while some things are only loosely identical with themselves, other things are tightly identical with themselves.[10] The statement 'This thing is more loosely identical with itself than that thing', if it says anything at all, tells us only that the first thing is more susceptible than the second to loss of identity, and this means only that the first is more readily perishable than the second.

We should construe Butler's remark as saying, not that there is a loose kind of identity, but rather that there is a loose sense of 'identity' – a loose (and popular) use of the 'is' of identity.

What would be a *loose* sense of 'A is B', or 'A is identical with B' – a sense of 'A is B' which is consistent with a denial of the *strict* sense of 'A is B'? I suggest this: we use the locution 'A is B', or 'A is identical with B', in a *loose* sense, if we use it in such a way that it is consistent with saying 'A has a certain property that B does not have' or 'Some things are true of A that aren't true of B'.

Do we ever use the locution 'A is B' in this loose way? It would seem, unfortunately, that we do.

I will single out five different types of such misuse.

(1) One may say: 'Route 6 is Point Street in Providence and is Fall River Avenue in Seekonk.' Here we would seem to have the 'is' of identity, since it is followed in each occurrence by a term ('Point Street' and 'Fall River Avenue') and not by a predicate expression. But since Point Street and Fall River Avenue have different properties (one is in Providence and not in Seekonk and the other is in Seekonk and not in Providence), the statement may be said to play loose with 'is'.

As our brief discussion of the rivers may make clear, this use of 'is' is readily avoided. We have only to replace 'is' by 'is part of' and then switch around the terms, as in: 'Point Street in Providence is part of Route 6 and Fall River Avenue in Seekonk is part of Route 6.' Or we could also say, of course: 'Point Street is part of Route 6 in Providence and Fall River Avenue is part of Route 6 in Seekonk.' [11]

(2) One may say 'This train will be two trains after Minneapolis', or, travelling in the other direction, 'Those two trains will be one train after Minneapolis'. In the first case ('fission'), we are not saying that there is one thing which will subsequently be identical with two things. We are saying, rather, that there is one thing which will be divided into two things, neither of them being identical with the original thing, but each of them being a part of the original thing. And in the second case ('fusion'), we are not saying that there are two things which are subsequently to become identical with each other, or with a third thing. We are saying rather that there are two things which will both become parts of a third thing. (Why not cite an amoeba as an instance of 'fission'? There is the off-chance that amoebas are persons, or at least may be thought to be persons, and in such a case, as we shall see, our treatment would have to be somewhat different.)

(3) One may say: 'The President of the United States was Eisenhower in 1955, Johnson in 1965 and Ford in 1975.' [12] Here one may seem to be saying that there is, or was, something – namely, the President of the United States – which was identical with Eisenhower in 1955, with Johnson in 1965 and with Ford in 1975. And so, given that Eisenhower, Johnson and Ford were three different people, one may seem to be saying that there is one thing which has been identical with three different things. But this talk, too, is readily avoided. We have only to reformulate the original sentence in such a way that the temporal expression

('in 1955', 'in 1965' and 'in 1975') may be seen to modify, not the verb 'was', but the term 'the President of the United States'. Thus we could say: 'The President of the United States in 1955 (the person who officially presided over the United States in 1955) was Eisenhower; the President of the United States in 1965 was Johnson; and the President of the United States in 1975 was Ford.' [13]

(4) Pointing to a musical instrument, one man may say to another: 'What you have there is the same instrument that I play, but the one that I play isn't as old as that one.' The first 'is' might be taken to be the 'is' of identity, for it would seem to be followed by a term ('the same instrument that I play'), but the man is saying, of the thing designated by the first term ('what you have there'), that it is older than the thing designated by the second. But of course he didn't need to talk that way. He could have said: 'What you have there is an instrument of the same sort as the one that I play.'

We note a second example of this way of playing loose with 'is' – not because the example introduces any new considerations (for it doesn't), but because it has attracted the attention of philosophers. Consider the following list:

Socrates is mortal.
Socrates is mortal.

How many sentences have been listed? We could say either 'exactly one' or 'exactly two'. That these incompatible answers are both possible indicates that the question is ambiguous. And so it has been suggested that, to avoid the ambiguity, we introduce the terms 'sentence-token' and 'sentence-type' and then say 'There are two sentence-tokens on the list and one sentence-type'. But if we say this, then we can say: 'The first item on the list is the same sentence-type as the second (for they are syntactically just alike and say the same thing), but the two are different sentence-tokens (for they are two, one being in one place and the other in another).' Here, once again, we are playing loose with 'is'.[14] We *needn't* speak this way in order to deal with the ambiguity of 'How many sentences are there?' We could say there *are* two sentence-tokens and they are tokens *of* the same (sentence-) type. The example does not differ in principle, then, from 'The instrument Jones plays is the same as the one Smith plays but is somewhat older'.

It is sometimes said that we should distinguish the two locutions 'A is identical with B and A is a so-and-so' and 'A is the same

so-and-so as B'. It has even been suggested that, for purposes of philosophy, the first of these two locutions should be abandoned in favour of the second.[15] According to this suggestion, we should never say, simply and absolutely, 'A is identical with B'; we should 'relativise the ascription of identity to a sortal' and say something of the form 'A is the same so-and-so as B', where the expression replacing 'so-and-so' is a count-term, or sortal, such as 'man', 'dog', 'horse'. But this suggestion has point only if we can find instances of the following:

> A is the same so-and-so as B, and A is a such-and-such but is not the same such-and-such as B.

Are there really any such As and Bs?

What would be an instance of the above formula? In other words, what would be an instance of an A which is 'the same so-and-so' as something B, but which is not 'the same such-and-such' as B? The only instances which have ever been cited, in defending this doctrine of 'relativised identity', would seem to be instances of one or the other of the four ways of playing loose with 'is' that we have just distinguished. For example: 'Different official personages may be one and the same man' or 'This is the same word as that'. What the suggestion comes to, then, is that we abandon the strict use of 'is' and replace it by one or more of the loose uses just discussed. There may be advantages to this type of permissiveness, but it will not help us with our philosophical problems.[16]

Do these ways of playing loose with 'is' suggest a true interpretation of the thesis we have attributed to Bishop Butler – the thesis according to which it is only in 'a loose and popular sense' that we may speak of the persistence through time of such familiar physical things as ships, plants and houses? Is it only by playing loose with 'is' that we may say, of the Ship of Theseus, that it is one and the same thing from one period of time to another?

We *can*, of course, play loose with 'is' in one or another of these ways when we talk about the Ship of Theseus. Knowing that it is going to be broken up into two ships, we might say: 'It's going to be two ships.' Or knowing that it was made by joining two other ships, we might say: 'Once it had been two ships.' Or knowing that it makes the same ferry run as does the Ship of Callicles, we might say: 'The Ship of Theseus and the Ship of Callicles are the same ferry.' But the Ship of Theseus doesn't have to be talked about in these loose and popular ways any more than anything else does.

(5) It may be that the Ship of Theseus and the carriage and other familiar things involve still another way of playing loose with 'is'. Thus Hume said that it is convenient to 'feign identity' when we speak about things which, though they 'are supposed to continue the same, are such only as consist of succession of parts, connected together by resemblance, contiguity, or causation'.[17] What Hume here has in mind by 'feigning' may have been put more clearly by Thomas Reid. (Though Reid and Hume were far apart with respect to most of the matters that concern us here, they seem to be together with respect to this one.) Reid wrote:

> All bodies, as they consist of innumerable parts that may be disjoined from them by a great variety of causes, are subject to continual changes of their substance, increasing, diminishing, changing insensibly. When such alterations are gradual, because language could not afford a different name for every different state of such a changeable being, it retains the same name, and is considered as the same thing. Thus we say of an old regiment that it did such a thing a century ago, though there now is not a man alive who then belonged to it. We say a tree is the same in the seed-bed and in the forest. A ship of war, which has successively changed her anchors, her tackle, her sails, her masts, her planks, and her timbers, while she keeps the same name is the same.[18]

I believe that Reid is here saying two things. The first is that, whenever there is a change of parts, however insignificant the parts may be, then some old thing ceases to be and some new thing comes into being. This presupposes that, strictly speaking, the parts of a thing are essential to it, and therefore when, as we commonly say, something loses a part, then that thing strictly and philosophically ceases to be.[19]

The second thing I take Reid to be saying is this. If, from the point of view of our practical concerns, the new thing that comes into being upon the addition of parts is sufficiently similar to the old one, then it is much more convenient for us to treat them as if they were one than it is for us to take account of the fact that they are diverse. This point could also be put by saying that such things as the Ship of Theseus and indeed most familiar physical things are really 'fictions', or as we would say today, 'logical constructions'. They are logical constructions upon things which *cannot* survive the loss of their parts.

If Reid is right, then, 'The Ship of Theseus was in Athens

last week and will be in Kerkyra Melaina next week' need not be construed as telling us that there *is* in fact a certain ship that was in Athens last week and will be in Kerkyra Melaina next week. It does not imply that any ship that was in the one place is identical with any ship that will be in the other place. And so if this is true, and if all the same we say 'A ship that was in Athens last week is identical with a ship that will be in Kerkyra Melaina next week', then, once again, we are playing loose with the 'is' of identity.

3 An Interpretation of Bishop Butler's Theses
We have found a way, then, of interpreting Bishop Butler's two theses.

According to the first, familiar physical things such as trees, ships, bodies and houses persist 'only in a loose and popular sense'. This thesis may be construed as presupposing that these things are 'fictions', logical constructions or *entia per alio*. And it tells us that, from the fact that any such physical thing may be said to exist at a certain place P at a certain time *t* and also at a certain place Q at a certain other time *t'*, we may *not* infer that what exists at P at *t* is identical with what exists at Q at *t'*.

According to the second thesis, persons persist 'in a strict and philosophical sense'. This may be construed as telling us that persons are not thus 'fictions', logical constructions or *entia per alio*. And so it implies that, if a person may be said to exist at a certain place P at a certain time *t* and also at a certain place Q at a certain other time *t'*, then we *may* infer that something existing at P at *t* is identical with something existing at Q at *t'*.

We now consider the two theses in turn.

4 Feigning Identity
Could we think of familiar physical things, such as ships and trees and houses, as being logical constructions? Let us consider just one type of physical thing, for what we say about it may be applied, *mutatis mutandis,* to the others.

Mon	AB
Tue	BC
Wed	CD

Consider the history of a very simple table. On Monday it came into being when a certain thing A was joined with a certain other thing B. On Tuesday A was detached from B and C was joined to B, these things occurring in such a way that a table was to be found during every moment of the process. And on Wednesday B was detached from C and D was joined with C, these things, too, occurring in such a way that a table was to be found during every moment of the process. Let us suppose that no other separating or joining occurred.

I suggest that in this situation there are the following three wholes among others: AB, that is, the thing made up of A and B; BC, the thing made up of B and C; and CD, the thing made up of C and D. I will say that AB 'constituted' our table on Monday, that BC 'constituted' our table on Tuesday and that CD 'constituted' our table on Wednesday. Although AB, BC and CD are three different things, they all constitute the same table. We thus have an illustration of what Hume called 'a succession of objects'.[20]

One might also say, of each of the three wholes, AB, BC and CD, that it 'stands in for' or 'does duty for' our table on one of the three successive days. Thus if we consider the spatial location of the three wholes, we see that the place of the table was occupied by AB on Monday, by BC on Tuesday, and by CD on Wednesday. Again, the table was red on Monday if and only if AB was red on Monday, and it weighed 10 pounds on Monday if and only if AB weighed 10 pounds on Monday. And analogously for BC on Tuesday and for CD on Wednesday.

The situation may seem to involve two somewhat different types of individual thing. On the one hand, there is what might be called the *ens successivum* – the 'successive table' that is made up of different things at different times.[21] And on the other hand, there are the things that do duty on the different days for the successive table: namely, AB, BC and CD. But any *ens successivum* may be viewed as a logical construction upon the various things that may be said to do duty for it.

Considering, then, just the simple situation I have described, can we express the information we have about the *ens successivum* in statements that refer only to the particular things that stand in or do duty for it? It should be clear that we can, but let us consider the situation in some detail.

Looking back to our diagram, we can see that Monday's table evolved into Tuesday's table and that Tuesday's table evolved into Wednesday's table. We began with AB; then A was separated from B and replaced by C, but in such a way that there was a

table to be found at every moment during the process; then, in a similar way, B was separated from C and replaced by D. We could say, then, that BC was a 'direct table successor' of AB, and that CD was a 'direct table successor' of AB.

Making use of the undefined concept of *part*, or *proper part*, we may define the concept of 'table successor' in the following way:

> D.III.1 x is at t a direct table successor of y at t' =Df (i) t does not begin before t'; (ii) x is a table at t and y is a table at t'; and (iii) there is a z, such that z is a part of x at t and a part of y at t', and at every moment between t' and t, inclusive, z is itself a table.

Thus z is a table which is a proper part of a table. (If we cut off a small part of a table, we may still have a table left. But if the thing that is left is a table, then, since it was there before, it was then a table that was a proper part of a table.) The concept *part*, as it is understood here, will be discussed in detail in Appendix B ('Mereological Essentialism').

We may also say, more generally, that the CD of Wednesday is a 'table successor' of the AB of Monday, even though CD is not a *direct* table successor of AB. The more general concept is this:

> D.III.2 x is at t a table successor of y at t' =Df (i) t does not begin before t'; (ii) x is a table at t and y is a table at t'; and (iii) x has at t every property P such that (a) y has P at t' and (b) all direct table successors of anything having P have P.

The definition assures us that a direct table successor of a direct table successor is a table successor; so, too, for a direct table successor of a direct table successor . . . of a direct table successor.[22]

We may now say that things that are thus related by table succession 'constitute the same successive table'.

> D.III.3 x constitutes at t the same successive table that y constitutes at t' =Df Either (a) x and only x is at t a table successor of y at t', or (b) y and only y is at t' a table successor of x at t.

Each such thing may be said to 'constitute a successive table'.

D.III.4   *x* constitutes at *t* a successive table = Df There are a
y and a *t'* such that *y* is other than *x* and *x* constitutes
at *t* the same table that *y* constitutes at *t'*.

We are on the way, then, to reducing our successive table to
those things that are said to constitute it.

Certain propositions, ostensibly about the successive table, may
be reduced in a straightforward way to propositions about the
things that are said to constitute it. For example:

D.III.5   There is exactly one successive table at place P at
time *t* = Df There is exactly one thing at place P at
time *t* that constitutes a successive table at *t*.

Our definition of 'constituting the same successive table' (D.III.3)
assures us that nothing will constitute more than one successive
table at any given time.

Some of the properties that the table has at any given time
are thus such that the table borrows them from the thing that
constitutes it at that time; but others are not. An example of a
property of the first sort may be that of *being red*; an example
of a property of the second sort may be that of *having once been
blue*. How are we to mark off the former set of properties?

Some properties may be said to be 'rooted outside the times
at which they are had'. Examples are the property of *being a
widow* and the property of *being a future President*. If we know
of anything that it has the former property at any given time,
then we can deduce that the thing existed prior to that time.
And if we know of anything that it has the latter property at
any given time, then we can deduce that the thing continues to
exist after that time. Let us say:

D.III.6   G is rooted outside times at which it is had = Df
Necessarily, for any *x* and for any period of time
t, *x* has the property G throughout *t* only if *x* exists
at some time before or after *t*.

Some properties may – but need not – be rooted outside the
times at which they are had. An example is the property of
being such that it is or was red. Our successive table may derive
this from its present constituent – if its present constituent is
red. But it may derive it from a former constituent – if its present
constituent is not red. The definition of this type of property
is straightforward:

D.III.7   G may be rooted outside times at which it is had
=Df G is equivalent to a disjunction of two properties
one of which is, and the other of which is not, rooted
outside times at which it is had.

Some properties, finally, are *not* such that they may be rooted
outside the times at which they are had.[23] An example is *being
red.*

Of the properties that our successive table has at any given
time, which are the ones that it borrows from the thing that
happens to constitute it at that time? The answer is: those of its
properties which are *not* essential to it, and those of its proper-
ties which are *not* such that they may be rooted outside the times
at which they are had. But the essential properties of the succes-
sive table – e.g. that it *is* a successive table – and those of its
properties which may be rooted outside the times at which they
are had – e.g. that it was blue or that it was or will be blue – are
not such that, for any time, they are borrowed from the thing
that constitutes the successive table at that time.

We may say, more generally, of the *ens successivum* and the
thing that constitutes it at any given time, that they are exactly
alike at that time with respect to all those properties which are
such that they are not essential to either and they may not be
rooted outside the times at which they are had.

Consider now the following definitional schema:

D.III.8   The successive table that is at place P at time *t* is F
at *t* =Df There is exactly one thing at place P at *t*
that constitutes a successive table at *t* and that thing
is F at *t*.

This definition is applicable only if the predicates that replace
the schematic letter 'F' are properly restricted. For the properties
designated by such predicates should be those which are not
essential to either and are not such that they may be rooted
outside the times at which they are had. Hence acceptable
replacements for 'F' would be: 'red', '10 feet square', and 'such
that it weighs 10 pounds'.

But not all the properties of the successive table are derivable
in this straightforward way from the properties of things that
constitute it. For example, if AB ceased to be after Monday, we
could say of the successive table on Monday, but not of AB, that
it was going to persist through Wednesday. Or if CD came into
being on Wednesday, we could say of the successive table on

Wednesday, but not of CD, that it is at least two days old. More-over, on Monday, the successive table, but not AB, was such that it would be constituted by CD on Wednesday; while on Wednesday, the successive table, but not CD, was such that it was constituted by AB on Monday.

Nevertheless all such truths about the successive table may be reduced to truths about AB, BC and CD. That this is so should be apparent from these definitions.

> D.III.9   The successive table that is at place P at time t has existed for at least 3 days $=$Df There is exactly one x such that x is at place P at time t and x constitutes a successive table at t; there are a y and a time t' such that x is at t a table-successor of y at t'; and t and t' are separated by a period of three days.

This definition tells us, then, what it is for a successive table to persist through time. And the following definition suggests the way in which, at any time, the successive table may borrow its properties from things that constitute it at *other* times:

> D.III.10   The successive table that is at place P at time t is constituted by x at t' $=$Df There is a y such that y is at place P at time t; y constitutes a successive table at t; and either x is identical with y and t is identical with t', or y constitutes at t the same successive table that x constitutes at t'.

It should now be obvious how to say such things as 'the successive table is red on Monday and green on Wednesday'.

One may object, 'You are committed to saying that AB, BC, CD, and our table are four different things. It may well be, however, that each of the three things AB, BC, CD satisfies the conditions of any acceptable definition of the term 'table'. Indeed your definitions presuppose that each of them *is* a table. Hence you are committed to saying that, in the situation described, there are *four* tables. But this is absurd; for actually you have described only *one* table.'

We will find a reply to this objection, if we distinguish the strict and philosophical sense of such expressions as 'There are four tables' from their ordinary, or loose and popular, sense. To say that there are four tables, in the strict and philosophical sense, is to say that there are four different things, each of them a table. But from the fact that there are four tables, in this strict and philosophical sense, it will not follow that there are four

tables in the ordinary, or loose and popular, sense. If there are to be four tables in the ordinary, or loose and popular, sense, it must be the case that there are four things, not only such that each constitutes a table, but also such that no two of them constitute the same table. In other words, there must be four *entia successiva*, each of them a table.

We may, therefore, explicate the ordinary, or loose and popular, sense of 'There are *n* so-and-so's at *t*' (or 'The number of so-and-so's at *t* is *n*') in the following way:

> D.III.11   There are, in the loose and popular sense, *n* so-and-so's at *t* =Df There are *n* things each of which constitutes a so-and-so at *t*, and no two of which constitute the same so-and-so at *t*.

The term 'so-and-so' in this schematic definition may be replaced by any more specific count-term, e.g. 'table' or 'ship'. And the definiendum could be replaced by 'The number of successive so-and-so's at *t* is *n*'.

Hence the answer to the above objection is this: in saying that there are exactly *three* tables in the situation described one is speaking in the strict and philosophical sense and not in the loose and popular sense. In saying that there is exactly *one* table one is speaking in the loose and popular sense and not in the strict and philosophical sense. But the statement that there are *four* tables – AB, BC, CD and the successive table – is simply the result of confusion. One is trying to speak both ways at once.[24] The sense in which we may say that there *is* the successive table is not the sense in which we may say that there *is* the individual thing AB, or BC, or CD.[25]

The foregoing sketch, then, makes clear one way in which we may feign identity when what we are dealing with is in fact only a 'succession of related objects'. The ways in which we do thus feign identity are considerably more subtle and complex. Playing loose with 'is' and 'same', we may even speak of the sameness of a table when we are dealing with successions of objects which are related, not by what I have called table succession, but in much more tenuous ways. Nevertheless it should be clear that if we are saying something we really know, when we thus speak of the sameness of a table, what we are saying could be re-expressed in such a way that we refer only to the related objects and not to the ostensible entities we think of them as making up. And so, too, for other familiar things – ships and trees and houses – that involve successions of related objects that stand in or do duty for them at different times.

We could say, then, that such things are *entia per alio*. They are ontological parasites that derive all their properties from other things – from the various things that do duty for them. An *ens per alio* never is or has anything on its own. It is what it is in virtue of the nature of something other than itself. At every moment of its history an *ens per alio* has something other than itself as its stand-in.

But if there are *entia per alio*, then there are also *entia per se*.

5   *The Persistence of Persons through Time*

Am I an *ens per alio* or an *ens per se*?

Consider the simplest of Cartesian facts – say, that I now hope for rain. Hoping for rain is one of those properties that are rooted only in the times at which they are had. And so if I am an *ens per alio*, an *ens successivum*, like our simple table or the Ship of Theseus, then I may be said to hope for rain only in virtue of the fact that my present stand-in hopes for rain. I borrow the property, so to speak, from the thing that constitutes me now.

But surely *that* hypothesis is not to be taken seriously. There is no reason whatever for supposing that *I* hope for rain only in virtue of the fact that some *other* thing hopes for rain – some stand-in that, strictly and philosophically, is not identical with me but happens to be doing duty for me at this particular moment.

If there are thus two things that now hope for rain, the one doing it on its own and the other such that its hoping is done for it by the thing that now happens to constitute it, then I am the former thing and not the latter thing. But this is to say that I am *not* an *ens successivum*.[26]

But might I not be a constituent of an *ens successivum*?

If I am a constituent of an *ens successivum*, then there have been other things that once constituted the same person that I do now and presumably there will be still others in the future. But if this is so, then the things I think I know about my past history may all be false (even though they may be true of the person I happen now to constitute) and I may have no grounds for making any prediction at all about my future. *Is* this the sort of thing I am?

Let us recall the data with which we began, the list of things we have a right to believe about ourselves. Among those things, we said, is the fact that we do undergo change and persist through time. Each of us is justified in believing a great variety of things about his past. We are justified in believing these things until

we have found some reason to doubt them. It is reasonable to treat these beliefs as being innocent, epistemically, until we have found some positive reason for thinking them guilty.

What would such a positive reason be?

It is important to remind ourselves that we do *not* find any such positive reason in the writings of those philosophers who have professed to be sceptical about the persistence of persons through time.

Consider, for example, Kant's discussion of what he calls 'the third paralogism of transcendental psychology'. For all I can know, Kant there says, the thing that calls itself 'I' at one time may be other than the thing that calls itself 'I' at another time. There might be a series of different subjects which make up my biography, each of them passing its thoughts and memories on to its successor – each subject would 'retain the thought of the preceding subject and so hand it over to the subsequent subject'.[27] The relation between the successive subjects, he says, could be like that of a set of elastic balls, one of which impinges on another in a straight line and 'communicates to the latter its whole motion, and therefore its whole state (that is, if we take account only of the positions in space)'. Kant goes on to say: 'If, then, in analogy with such bodies, we postulate substances such that the one communicates to the other representations together with the consciousness of them, we can conceive a whole series of substances of which the first transmits its state together with its consciousness to the second, the second its own state with that of the preceding substance to the third, and this in turn the states of all the preceding substances together with its own consciousness and with their consciousness to another. The last substance would then be conscious of all the states of the previously changed substances, as being its own states, because they would have been transferred to it together with the consciousness of them. And yet it would not have been one and the same person in all these states.'[28]

Does *this* give us a reason for wondering whether we have in fact persisted through time? Surely not. What Kant has pointed out to us, in these speculations, is simply that the following is logically possible: instead of there being just one person who makes up my biography, there was a succession of different persons, all but the first of them being deluded with respect to its past. It is also logically possible, as Russell pointed out, that the universe came into being three seconds ago with all its ostensible traces and relics of the past. And it is logically possible that a malicious demon is deceiving each of us with respect to

what we think are the external physical things around us. But the fact that these are logically possible is itself no reason for thinking that they actually occur.

'Given the transitory nature of the ultimate particles that make up the physical universe, isn't it reasonable to suppose that, if I do persist through time, then my consciousness may be transferred, as John Locke seemed to suggest, from one substance or individual thing to another? And if my consciousness is thus transferred, wouldn't I, too, be transferred from one substance to another?'

The supposition, I am certain, is not only untenable but also incoherent. Philosophers have taken it seriously, however, and so we should consider it briefly.

Is it possible to transfer my consciousness from one substance to another with the result that, whereas the former substance but not the latter was I, the latter substance but not the former is now I? In such a case, I could truly say: 'This is other than that, but once I was that and now I'm this.'

Locke said that, 'it being the same consciousness that makes a man be himself to himself, personal identity depends on that only, whether it be annexed solely to one individual substance, or can be continued in a succession of several substances'.[29] The same consciousness, he said, *could* be thus continued in a succession of several substances, if it were 'transferred from one thinking substance to another', and if this does happen then the different 'thinking substances may make but one person'[30] And these different thinking substances will all be 'the same self'.[31] (In fairness to Locke, we should note that he does not quite bring himself to say that I might now be identical with this but not with that and then later identical with that but not with this. Although he suggests that it is possible to transfer my consciousness from one substance to another, he does not explicitly say that, whereas the former substance *was* I, the latter substance is *now* I. It may very well be that he, too, was playing loose with 'is'.)

A *part* of a thing or an *appendage* to a thing may be transferred to another thing, as an organ may be transplanted from one body to another. The *contents* of a thing may be transferred to another thing, as apples may be moved from one bag to another.

Speaking somewhat more metaphorically, we might also say that the *properties* of one thing may be transferred to another thing. If you are infected by my contagious disease and if I then recover, one *could* say that my sickness *including my aches and*

and pains has been transferred from me to you. But the disease or sickness will not be transferred in the literal sense in which, say, its carriers might be transferred.

My personality traits could be said to be transferred to you if you acquire the kind of complexes and dispositions that are characteristic of me. My beliefs could be said to be transferred to you, if you begin to believe the same things I do. And my memories could even be said to be transferred from me to you, if you remember, or think you remember, the same things I do. (But if I remember or think I remember *my* doing the deed, the content of that memory could *not* be transferred to you.) [32] By thus acquiring my properties – or, more accurately, by thus instantiating some of the properties that I do – you may become so much like me that others will have difficulty in telling us apart – in that they are unable to decide, with respect to certain things that have happened, whether they belong to your biography or to mine. Perhaps the courts will have to make a decree. Perhaps it will even be reasonable for them to decide, with respect to some of the things that only I did in the past, that you and not I are responsible for them, and then they might decide, with respect to the name I formerly had, that you should be the one who bears it.

But none of these possibilities, perplexing as they may be, justifies us in saying that there could be *two* different substances which are such that *I* am transferred from one to the other. [33]

There is still another type of transfer which is quite naturally described in the way in which Locke described 'transfer of self'. This is illustrated in the transfer of a shadow ('the shadow of his hand moved from the wall to the table and became larger but more faint in the process'). But a shadow is an *ens per alio*; it borrows its properties from other things (most notably from shadowed objects). The kind of transfer that is involved in the passage of a shadow from one object to another, to the extent that it differs from the types of transfer we distinguished above, is typical of *entia per alio*. But persons, we have seen, are *entia per se*.

What could it mean, after all, to say that I might be 'annexed to' or 'placed in' a thinking thing or individual substance?

Whatever it might mean, either I am identical with the thinking substance in which I am thus placed or I am not identical with it.

If I am identical with the thinking substance in which I am thus placed, then I cannot be transferred *from* that substance to another thinking substance.

But if I am placed in a certain thinking substance and am not identical with that thinking substance, then there are *two* different things – the thinking substance and I. But if there are two things, which of us does the thinking? There are exactly four possibilities.

(1) Neither of us does the thinking – that is to say, neither of us thinks. But this we know is false.

(2) I think but the thinking substance does not think. Why call the latter a 'thinking' substance, then? (It would be like calling an elevator a thinking substance because it contains someone who thinks.) And what relation do I bear to this thinking substance? I'm not a *property* of it, since properties do not think. Am I a proper *part*, then, of the thinking substance? But proper parts of substances are themselves substances. And so if I am myself a thinking substance, what is the point of saying there is *another* thinking substance in which I am 'placed' or to which I am 'annexed'?

(3) The thinking substance thinks but I do not. But isn't this absurd? 'It's not really I who think; it is some *other* thing that thinks in me – some other thing that does what I mistakenly take to be my thinking.' (Or should the latter clause have been: 'some other thing that does what *it* mistakenly takes to be my thinking'?)

(4) Both the thinking substance and I think. Isn't this multiplying thinkers beyond necessity? If I want my dinner, does it follow that two of us want my dinner? Or does the thinking substance want its dinner and not mine?

I think we may reasonably conclude that there is no significant sense in which we may speak of the transfer of a self from one substance or individual thing to another.

6 'Will I Be He?': Truth-Conditions and Criteria

Suppose that there is a person x who happens to know, with respect to a certain set of properties, that there is or will be a certain person y who will have those properties at some future time, and x asks himself: 'Will I be he?' Either x is identical with y, or x is diverse from y.

We cannot find the *answer* to the question, 'Is x identical with y?', merely by deciding what would be practically convenient. To be sure, if we lack sufficient evidence for making a decision, it may yet be necessary for the courts to *rule* that x is the same person as y, or that he is not. Perhaps the ruling will have to be based upon practical considerations and conceivably such considerations may lead the court later to 'defeat' its ruling.

But one may always ask of any such ruling 'But is it *correct*, or *true*?' For a ruling to the effect that x is the same person as y will be correct, or true, only if x is identical with y.

We should remind ourselves, however, that the expression 'x is the same person as y' also has a use which is not this strict and philosophical one. Thus there are circumstances in which one might say: 'Mr Jones is not at all the same person he used to be. You will be disappointed. He is not the person that you remember.' We would not say this sort of thing if Mr Jones had changed only slightly. We would say it only if he had undergone changes that were quite basic and thorough-going – the kind of changes that might be produced by psychoanalysis, or by a lobotomy, or by a series of personal tragedies. But just how basic and thorough-going must these changes be if we are to say of Mr Jones that he is a different person? The proper answer would seem to be: 'As basic and thorough-going as you would like. It's just a matter of convention. It all depends upon how widely it is convenient for you to construe the expression "He's the same person he used to be". In so far as the rules of language are in your own hands, you may have it any way you would like.' [34] (Compare 'Jones is not himself today' or 'Jones was not himself when he said that'.)

This, however, is only playing loose with 'same' – or, more accurately, it is playing loose with 'not the same'. When we say, in the above sense, 'Jones is no longer the person he used to be', we do not mean that there is, or was, a certain entity such that Jones was formerly identical with that entity and is no longer so. What we are saying does not imply that there are (or have been) certain entities, x and y, such that at one time x is, or was, identical with y, and at another time x is not identical with y. For this is incoherent, but 'Jones is no longer the person he used to be' is not.

Nor do we mean, when we say 'Jones is no longer the person he used to be', that there *was* a certain entity, the old Jones, which no longer exists, and that there is a certain *different* entity, the new Jones, which somehow has taken his place. We are not describing the kind of change that takes place when one President succeeds another. In the latter case, there is a clear answer to the question 'What happened to the old one?' But when we decide to call Jones a new person, we are not confronted with such questions as: 'What happened, then, to the old Jones? Did he die, or was he annihilated, or disassembled, or did he retire to some other place?'

The old Jones did not die; he was not annihilated or dis-

assembled; and he did not retire to any other place. He *became* the new Jones. And to say that he 'became' the new Jones is *not* to say that he 'became identical' with something he hadn't been identical with before. For it is only when a thing comes into being that it may be said to become identical with something it hadn't been identical with before. To say that our man 'became the new Jones' is to say that he, Jones, *altered* in a significant way, taking on certain interesting properties he had not had before. (Hence we should contrast the 'became' of 'Jones then became a married man', said when Jones ceased to be a bachelor, with that of 'The President then became a Republican', said when President Johnson retired.) When we say of a thing that *it* has properties that *it* did not have before, we are saying that there is an x such that x formerly had such-and-such properties and x presently has such-and-such other properties.

It will be instructive, I think, to consider two somewhat different examples.

The first is suggested by C. S. Peirce.[35] Elaborating upon his suggestion, let us assume that you are about to undergo an operation and that you still have a decision to make. The utilities involved are, first, financial – you wish to avoid any needless expense – and, secondly, the avoidance of pain, the avoidance, however, just of *your* pain, for pain that is other than yours, let us assume, if of no concern whatever to you. The doctor proposes two operating procedures – one a very expensive procedure in which you will be subjected to total anaesthesia and no pain will be felt at all, and the other of a rather different sort. The second operation will be very inexpensive indeed; there will be no anaesthesia at all and therefore there will be excruciating pain. But the doctor will give you two drugs: first, a drug just before the operation which will induce complete amnesia, so that while you are on the table you will have no memory whatever of your present life; and, secondly, just after the agony is over, a drug that will make you completely forget everything that happened on the table. The question is: given the utilities involved, namely, the avoidance of needless expense and the avoidance of pain that *you* will feel, other pains not mattering, is it reasonable for you to opt for the less expensive operation?

My own conviction is that it would *not* be reasonable, even if you could be completely certain that both amnesia injections would be successful. *You* are the one who would undergo that pain, even though you, Jones, would not know at the time that it is Jones who is undergoing it, and even though you would

never remember it. Consider after all, the hypothesis that it would *not* be you. What would be your status, in such a case, during the time of the operation? Would you have passed away? That is to say, would you have *ceased to be,* but with the guarantee that you – you, yourself – would come into being once again when the agony was over?[36] And what about the person who *would* be feeling the pain? Who would he be?

It may well be that these things would not be obvious to you if in fact you had to make such a decision. But there is one point, I think, that ought to be obvious.

Suppose that others come to you – friends, relatives, judges, clergymen – and they offer the following advice and assurance. 'Have no fear', they will say. 'Take the cheaper operation and we will take care of everything. We will lay down the convention that the man on the table is not you, Jones, but is Smith.' What *ought* to be obvious to you, it seems to me, is that the laying down of this convention should have no effect at all upon your decision. For you may still ask, 'But won't that person be I?' and, it seems to me, the question has an answer.

I now turn to the second example. Suppose you know that your body, like that of an amoeba, would one day undergo fission and that you would go off, so to speak, in two different directions. Suppose you also know, somehow, that the one who went off to the left would experience the most wretched of lives and that the one who went off to the right would experience a life of great happiness and value. If I am right in saying that one's question 'Will that person be I?' or 'Will I be he?' always has a definite answer, then, I think, we may draw these conclusions. There is no possibility whatever that *you* would be *both* the the person on the right and the person on the left. Moreover, there *is* a possibility that you would be *one or the other* of those two persons. And, finally, *you* could be one of those persons and yet have no memory at all of your present existence. In this case, there may well be no *criterion* by means of which you or anyone else could decide which of the two halves was in fact yourself. Yet it would be reasonable of you, if you were concerned with *your* future pleasures and pains, to hope that you would be the one on the right and not the one on the left. It would also be reasonable of you, given such self-concern, to have this hope even if you knew that the one on the right would have no memory of your present existence. Indeed it would be reasonable of you to have it even if you know that the one on the *left* thought he remembered the facts of your present existence. And it seems to me to be absolutely certain that no fears that you might have, about

being the half on the left, could reasonably be allayed by the adoption of a convention, even if our procedure were endorsed by the highest authorities.[37]

In trying to *decide* which one of the two persons, if either, you will be, you will, of course, make use of such *criteria* that you have and are able to apply. As we all know, there are intriguing philosophical questions about the criteria of the identity of persons through time. ('How are we to make sure, or make a reasonable guess, that that person at that time is the same as that person at the other time?')[38] What are we to do, for example, when bodily criteria and psychological criteria conflict? Suppose we know that the person on the left will have certain *bodily* characteristics that we have always taken to be typical only of you – and that the person on the right will have certain *psychological* characteristics that we have always taken to be typical only of you. In such a case there may be no sufficient reason at all for deciding that you are or that you are not one or the other of the two different persons. But from this it does not follow that you *will* not in fact be one or the other of the two persons.

We should remind ourselves of a very simple and obvious point. When you ask yourself, 'Will I be the person on the right?' your question is *not* 'Will the person on the right satisfy such criteria as I have, or such criteria as someone or other has, for deciding whether or not a given person is I?' To be sure, the best you can do, by way of answering the first question, is to try to answer the second. But the answers to the two questions are logically independent of each other.

What is a *criterion* of personal identity? It is a statement telling what constitutes evidence of personal identity – what constitutes a good reason for saying of a person x that he is, or that he is not, identical with a person y. Now there is, after all, a fundamental distinction between the *truth-conditions* of a proposition and the *evidence* we can have for deciding whether or not the proposition is true. The *truth-conditions* for the proposition that Caesar crossed the Rubicon consist of the fact, if it is a fact, that Caesar did cross the Rubicon. The only *evidence* you and I can have of this fact will consist of certain *other* propositions – propositions about records, memories and traces. It is only in the case of what is self-presenting (that I hope for rain or that I seem to me to have a headache) that the evidence for a proposition coincides with its truth-conditions. In all other cases, the two are logically independent; the one could be true while the other is false.[39]

The question 'Was it Caesar?' is not the same as the question:

'Do we have good evidence for thinking it was Caesar?' (or 'Have the criteria for saying that it was Caesar been fulfilled?'). This is true despite the fact that the most reasonable way of trying to find the answer to the first question is to try to answer the second.

And analogously for 'Will I be he?'

What I have said may recall this observation made by Leibniz: 'Suppose that some individual could suddenly become King of China on condition, however, of forgetting what he had been, as though being born again, would it not amount to the same practically, or as far as the effects could be perceived, as if the individual were annihilated, and a King of China were at the same instant created in his place? The individual would have no reason to desire this.' [40]

If I am being asked to consider the possibility that there is an *ens successivum* of which I happen to be the present constituent and which will subsequently be constituted by someone who will then be a King of China, then the fate of the later constituent may well be no special concern of mine. But what if Leibniz were not thus playing loose with 'is'?

In such a case, the proper reply to his question is suggested by the following observation in Bayle's *Dictionary*: 'The same atoms which compose water are in ice, in vapours, in clouds, in hail and snow; those which compose wheat are in the meal, in the bread, the blood, the flesh, the bones etc. Were they unhappy under the figure or form of water, and under that of ice, it would be the same numerical substance that would be unhappy in these two conditions; and consequently all the calamities which are to be dreaded, under the form of meal, concern the atoms which form corn; and nothing ought to concern itself so much about the state or lot of the meal, as the atoms which form the wheat, though they are not to suffer these calamities, under the form of wheat.' Bayle concludes that 'there are but two methods a man can employ to calm, in a rational manner, the fears of another life. One is, to promise himself the felicities of Paradise; the other, to be firmly persuaded that he shall be deprived of sensations of every kind.' [41]