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Memory and Personal Identity in Spinoza

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I

Locke is often thought to have introduced the topic of personal identity into philosophy when, in the second edition of the *Essay*, he distinguished the person from both the human being and the soul. Each of these entities differs from the others with respect to their identity conditions, and so they must be ontologically distinct. In particular, Locke claimed, a person cannot survive total memory loss, although a human being or a soul can.

Some twenty years before Locke published the chapter on identity, Spinoza, in his *Ethics*, discussed an example similar in many respects to the amnesia cases that led Locke to distinguish persons from human beings and souls; in fact, many commentators take Spinoza to have here anticipated Locke's continuity of memory criterion of personal identity:¹

But here it should be noted that I understand the Body to die when its parts are so disposed that they acquire a different *ratio* of motion and rest to one another. For I dare not deny that — even though the circulation of the blood is maintained, as well as the other [signs] on account of which the Body is thought to be alive — the human Body can nevertheless be changed into another nature completely different from its own. For no reason forces me to think that the Body does not die unless it is changed into a corpse.

1 Edwin Curley, *Behind the Geometrical Method* (Princeton: Princeton University Press 1988), 86; Wallace Mateson, 'Death and Destruction in Spinoza's *Ethics*,' *Inquiry* 20 (1977), 404-5; Steven Nadler, *Spinoza's Heresy* (Oxford: Oxford University Press 2002), 126

And, indeed, experience seems to urge the opposite conclusion. Sometimes a man undergoes such changes that I should hardly believe that he was the same man. For example, I have heard tell of a Spanish poet who was struck by an illness; though he recovered, he remained so oblivious to his past life that he did not believe the tales and tragedies he had written were his own. He might have been taken for a grown-up infant had he also forgotten his native tongue. (IV39S)

It is notable that although Spinoza seems to have shared some of Locke's basic intuitions about such cases — they both thought that memory loss can indicate a significant discontinuity — Spinoza did not conceptualize the problem in the same way. Of course, Spinoza's substance monism rules out the possibility that persistence of substance determines personal identity. Spinoza, however, did not distinguish the human body and mind, i.e., the human being, from the person in this passage. In fact, the term 'person' (in Latin, '*persona*') never appears in any of Spinoza's works. Spinoza did, on one occasion, mention the related word '*personalitas*' but then only in order to claim that he didn't know what it means.² Moreover, Spinoza's example of the Spanish poet is meant to lend credence the claim that *the human body can die without becoming a corpse* and he concluded from this that the same *human being* did not survive the disease. Thus the Spanish poet example is meant specifically to illuminate the survival conditions of human beings and human bodies.

I shall, nevertheless, proceed on the assumption that Spinoza's topic here is what might fairly be called personal identity. (Later on I shall have more to say in defense of this assumption.) If such an assumption is correct — and thus if Spinoza meant to claim that the person did not survive the disease that destroyed the Spanish poet's memories — then when Spinoza spoke of human beings and human bodies (and, by dint of Spinoza's adherence to the identity theory, human minds),³ he meant to refer to what other philosophers have called persons.

2 *Cogitata Metaphysica*, Part I, Ch. VIII; G I/264. All citations from Spinoza are from *Spinoza Opera*, ed. C. Gebhardt, 4 vols. (Heidelberg: Carl Winter 1925) (G hereafter). Most English translations are from Edwin Curley, ed. and trans., *The Complete Works of Spinoza*, vol. 1 (Princeton: Princeton University Press 1985) with occasional modifications. References to the *Tractatus de Intellectus Emendatione* are abbreviated TdIE. In citations from the *Ethics*, I use the following abbreviations: Roman numerals refer to parts; 'P' means proposition; 'C' means corollary; 'S' means scholium; e.g. 'EIVP37S' means *Ethics*, part IV, proposition 37, scholium.

3 EIIP7S. See also Michael Della Rocca, 'Spinoza's Argument for the Identity Theory,' *Philosophical Review* 102 (DATE??) 183-203.

Given this, the central question becomes, what is the relationship between memory loss and the identity conditions of bodies and minds? One natural reading of IVP39S is that memory loss is the mental counterpart of the physical changes that result in the destruction of the body. For Spinoza, the mind and the body are one and the same thing considered under different attributes.⁴ Thus whenever a human mind loses its memories it and the body parallel to it under the attribute of extension are *ipso facto* destroyed. This would be to say that Spinoza had a continuity of memory criterion of personal identity. Although such a reading is popular among those who have commented on this passage,⁵ I believe that, on the contrary, a closer look at Spinoza's account of the kind of complex individuality characteristic of human bodies and minds and how it relates to his account of memory does not bear out the continuity of memory interpretation. Let us turn now to Spinoza's account of the individuality of complex bodies.

II Spinoza's Theory of Individuals

According to Spinoza, there is only one substance: *Deus sive natura*. One might be tempted to conclude that Spinoza believed that there is only one genuine individual, and all other things typically regarded in the course of every day life as individuals — rocks, people, ships, etc. — are not genuine individuals at all. Such a conclusion, however, would be unwarranted. In fact, Spinoza sharply distinguished between substantiality and individuality and had an account of the individuality of finite singular things.

The excurses on body that follows IIP13S of Spinoza's *Ethics* develops a theory of individuation for complex bodies, i.e., a theory of what makes some collection of bodies parts of a singled unified complex body:

When a number of bodies, whether of the same or different size, are so constrained by other bodies that they lie upon one another, or if they so move, whether with the same degree or different degrees of speed, that they communicate their motions to each other in a certain fixed pattern [*ratione*], we shall say that those bodies are united with one another and that they all together compose one body or Individual, which is distinguished from the others by this union of bodies.⁶

4 EIIP7S

5 See n. 1 above.

6 Definition after IIP13S.

This passage says that a collection of bodies can jointly constitute a complex individual in two ways. First, a collection of bodies constitute a single complex body if they are 'so constrained by other bodies that they lie upon each other.' It is difficult to say exactly what sorts of bodies are intended here (perhaps things like wine held together by a bottle⁷). The more interesting case is the second one. A collection of bodies can jointly constitute a complex individual if they communicate their motions to one another according to a fixed pattern or *ratio*. Individuality, in this case, is a matter of a stable pattern of interaction between parts.

The excurses on body next describes four ways in which such bodies can change while still preserving their nature. (1) The simpler bodies which help constitute such a complex body can be replaced by other bodies so long as the *ratio* of motion and rest between its parts (what Spinoza also called the 'form' of the body) remains consistent.⁸ A ship can lose a plank so long as another takes its place, playing the same role in the organization of the boat. The material substance of a human being is completely replaced every few years through the death and generation of individual cells. According to Spinoza's account, a human being retains her individuality despite this change so long as it does not change her *ratio*. (2) Complex bodies of this sort can withstand alterations within their component parts. For example, if one or more parts increase (or decrease) in size, the individual can retain its form if the other constituent parts also increase (or decrease) in size and thus preserve the *ratio* of motion and rest obtaining between parts. Since the ratio remains the same, growth or diminution do not destroy the overall pattern of the individual.⁹ For example, the heart of a human being greatly increases in size from the time of her birth until she reaches full maturity. She remains the same person despite this change so long as her other parts also grow accordingly (her veins and arteries lengthen, the volume of her blood increases) and thus preserve her *ratio*.¹⁰ (3) A complex body can survive being displaced in space if all its parts move together, because such motions do not affect the *ratio* of motion and rest that obtains internally.¹¹ When I drive down the highway in my car, the parts of my body acquire new motions as I accelerate, decelerate, change lanes,

7 See Daniel Garber, 'Descartes and Spinoza on Persistence and Conatus', *Studia Spinozana* 10 [1994].

8 EIII4

9 EIII5

10 I take this example from Alan Donagan, *Spinoza* (Chicago: University of Chicago Press 1988), 124.

and so forth, but the *ratio* of motion and rest obtaining between my parts does not change because they all move together. (4) If one constituent part acquires a new motion, the complex body to which it belongs can maintain its form if it communicates this new motion to the others in a certain fixed *ratio* characteristic of the complex body.¹² That is to say, if one part of a body is bumped, agitated, or otherwise moved, and this motion is communicated to the rest of the body according to its fixed *ratio*, then the complex individual survives.

Spinoza further distinguished between levels of complex individuality. A complex body can be made up out of parts that are themselves simple bodies. Call this a first order complex body. First order complex bodies can in turn be parts of even more complicated bodies. Moreover, these second order complex bodies can themselves be parts of even more complicated bodies. For example, an organism is a highly complex individual that is made up of organs that are themselves highly complex individuals made up out of cells that are themselves highly complex individuals, and so on. Spinoza thought this chain of nested complex individuals extends downward to individuals whose parts are all simple and upward toward a single super-individual whom Spinoza identified as the entire universe.¹³ The main thing, for our purposes, is that at each level of complexity, individuals realize *rationes*, which unify or integrate their parts into a single whole.

According to Spinoza, the human body is just the sort of complex individual that is composed of parts that are themselves complex.¹⁴ Furthermore, the human body can survive replacement of its parts with functional equivalents¹⁵ and it can preserve its nature by communicating the motions that affect one part to the rest of its parts according to its fixed *ratio*.¹⁶ Thus a human body can survive any change that preserves its *ratio*.

11 EIII7

12 EIII6

13 EIII7S. See 'What Counts as an Individual for Spinoza,' in O. Koistinen and J. Biro, eds., *Spinoza: Metaphysical Themes* (New York: Oxford University Press 2002), 89-112 for an interesting discussion of Spinoza's views on levels of individuality with a special emphasis on the question of whether or not the state counts as an individual according to Spinoza's definition.

14 Postulate I after IIP13S.

15 Postulate IV after IIP13S.

16 IVP39.

III What Is A Ratio?

Spinoza's theory of individuation hinges on the notion of a *ratio*. The Latin word '*ratio*' has many meanings. Among its more common meanings in philosophical contexts are 'definition or explanation,' 'the principle of organization of a thing,' and 'the faculty of reason.' Curley usually translates it as 'proportion' and sometimes as 'manner,' which are also common meanings of the word. Which of these diverse meanings did Spinoza intend here? One influential interpretation of what *ratio* means in this context, put forward first by Matheron and taken up more recently by Lachterman, is that an individual is defined by the sum total of all the motions that affect its parts divided by the sum total of quantity of rest affecting the individual.¹⁷ (Spinoza adhered to the Cartesian conception of rest according to which rest is not simply the privation of motion, but is some positive quantity.) On this interpretation, the *ratio* of a complex individual could thus be expressed as a numerical proportion, e.g., 1 part motion to 3 parts rest. Spinoza himself spoke of the relationship between a complex individual's parts in exactly this way in the *Short Treatise*:

So if such a body has and preserves its proportion — say of 1 to 3 — the soul and the body will be like ours are now; they will, of course, be constantly subject to change, but not to such a great change that it goes beyond the limits of from 1 to 3.¹⁸

This would appear to be, however, quite an implausible account of corporeal individuality. Consider local motion of a complex body. Don Garrett has pointed out that this account, in conjunction with the Cartesian principles of motion endorsed by Spinoza, yields highly dubious consequences.¹⁹ According to the Cartesian account of motion, as a body acquires speed it acquires motion, and as it loses speed it acquires rest.²⁰ Hence, if a body goes from velocity V to velocity V_{+tv} , then it acquires greater total motion and less total rest; its ratio of motion to rest would be substantially altered. Thus, acceleration and deceleration

17 Alexandre Matheron, *Individu et communauté chez Spinoza* (Paris: Editions de Minuit 1969), 38-40; David R. Lachterman, 'The physics of Spinoza's *Ethics*,' in *Spinoza: New Perspectives* (Norman: University of Oklahoma Press 1978), 85-6

18 *Short Treatise on God, Man, and His Well Being*, II, Preface, § 12

19 Don Garrett, 'Spinoza's Theory of Metaphysical Individuation,' in *Individuation and Identity in Early Modern Philosophy*, Kenneth F. Barber and Jorge J.E. Garcia, eds. (Albany: State University of New York Press 1994), 82-5

20 PPII, P22 and C1

would seem to have the surprising consequence of destroying any complex body. When a cat, for example, spots a mouse across the room, freezes, coils into a crouch, and springs, it acquires and loses a nature with each change in velocity. A different cat would then be performing each action. Similarly, given that Spinoza, like Descartes and Boyle, understands heat in terms of agitation or motion,²¹ a fever, however mild, would seem to suffice for the destruction of any individual body, as once again total motion increases while total rest decreases. It seems unlikely that Spinoza intends his account of individuation to have these bizarre consequences.

With respect to local motion, one might try to defend the numerical ratio interpretation of *ratio* by claiming that the relevant motions are the motions that the parts of the body have relative to one another and since local motion does not alter these motions, the ratio is unaffected.

With respect to fever, one might respond that the increased agitation is offset by increased immobility in other parts of the body. For example, when afflicted by fever, people are often confined to bed and require more sleep, thus their total rest increases in proportion to the increase in total motion.²²

Unfortunately, the proposed responses to the local motion objection and the fever objection are incompatible with one another. The fever response requires that local motions be relevant to *rationes* and the local motion response requires them to be irrelevant. Moreover, even if one could work out some coherent package of responses to the objections discussed above, the numerical proportion interpretation has other implausible consequences. For example, it implies that I can retain my *ratio*, and consequently that I would survive, even if my blood stopped circulating, provided that other parts of my body increase their motions appropriately. This is clearly false. Were my blood to stop circulating I would die, no matter how much motion affected other parts of my body.

In addition to the general implausibility of the account of *ratio* suggested by the passage from the *Short Treatise* quoted earlier, I think that there is some textual evidence to suggest that Spinoza did not adhere to

21 Don Garrett, 'Individuation,' 82-5. For evidence that Spinoza does in fact endorse the Cartesian laws of motion see Letters 6 and 13. Spinoza does, it is true, express reservations about Cartesian physics in Letters 81 and 83, but there it seems his main concern is with whether the essence of matter is Cartesian extension and whether the diversity of material things can be deduced from it and not with specific laws of motion.

22 Matheron gives the following examples. In running, the muscles are stimulated and the brain is dulled. In drunkenness, the opposite holds (*Individu*, 44).

that view in the *Ethics*. The first piece of evidence is negative. At no point in the *Ethics* did Spinoza refer to a numerical proportion of motion of rest (for example, one parts motion to three parts rest) as he does in the *Short Treatise*. More positively, in the *Ethics* he used the term *ratio* synonymously with the words 'form' and 'nature,' neither of which implies, on its own, a relationship of this kind.²³ Perhaps most convincingly, he claimed that complex individuals can preserve their being when one of their parts is moved, so long as these motions are communicated to the rest of its parts according to its fixed *ratio*. It does not make sense to say that the motions are communicated according to an individual's *ratio* if the *ratio* in question is all the motion affecting the individual's parts divided by all the rest affecting its parts. I do not know what communication according to its *ratio* could possibly mean if that is what *ratio* meant. Thus the numerical proportion interpretation of *ratio* is incompatible with Spinoza's use of that term in the *Ethics*.

Fortunately, there is a common sense of *ratio* appropriate to this context. For example, Caesar, in his *de Bello Gallico*, described how in the course of his campaign he set out to build a bridge. He wrote, 'Its design [*ratione*] being well known and conventional,'²⁴ it was quickly completed. Here *ratio* means something like its plan or blueprint. It is the pattern according to which the bridge was constructed. A similar sense of *ratio* was used by Pliny when he described the proper way to plant almond trees. The seeds should be planted in groups of three, placed four inches apart from each other in a '*triangula ratione*,' that is, a triangular pattern or arrangement. Here *ratio* refers to the way things are organized or situated with respect to each other.²⁵ The use of *ratio* in these two passages is not a special or technical usage, but an utterly ordinary and common place one. Caesar, for example, was a propagandist. He did not write *de Bello Galico* for philosophers, but for the general population and their leaders.²⁶

In philosophical contexts, the word *ratio* is the Latin translation of the Greek *logos*. Of course *logos* has diverse meanings as well, but in philosophical usage, one common meaning of the word is an extension of the ordinary meaning as blueprint, design, or arrangement of parts. Aris-

23 Lemma 5, Lemma 6, Lemma 7, Lemma 7S after IIP13S

24 Caesar, *De Bello Gallico*, VI, 9

25 Pliny, *Naturalis Historia*, VII, 63

26 I owe this point to Charles Larmore.

total, for example, frequently used it both to mean the definition of a thing²⁷ and the structural characteristics in terms of which it is defined.²⁸

I think that if we interpret *ratio* in this way, as a thing's dynamic organization — its blueprint, as it were — then Spinoza's account of individuality in terms of *ratio* is much more plausible. He was simply talking about the way in which the parts of a thing are organized with respect to one another. This interpretation also helps us make sense of his claim that complex individuals survive having one of their parts moved if its motions are communicated to the rest according to the individual's *ratio*. The motions must be communicated in accordance with the individual's dynamic organization or, to borrow from the jargon of computer science, in accordance with its *architecture*. '*Ratio*' thus means a coherent, stable, and well-defined relationship, couched in terms of motion and rest, and obtaining between a complex individual's parts. That is, the motion and rest of one part of a complex individual cannot be indifferent to the motion and rest of the other parts. Rather the motion and rest of one part must be 'communicated' to the others in a coherent way, i.e., must be systematically related to them. And this pattern of systematic relations must be 'fixed', i.e., enduring over time (or at least tending to endure over time).²⁹

As we have seen, Spinoza gave us two criteria for a certain kind of complex individuality. Parts must communicate their motions to each other according to a *ratio*. And this *ratio* must be fixed, i.e., it must endure over time. These two features provide plausible criteria for complex individuality.³⁰ We would not generally regard things as parts of a whole

27 E.g. *Topics*, VI, 1, 4.

28 This usage is infrequently remarked upon, but, for example, in *Metaphysics B*, 996b5-10, Aristotle writes: 'For it is possible for all the types of causes to pertain to the same thing. A house, for example, has a source of change (the skill, the builder), a that-for-for-the-sake-of-which (its function), matter (earth and stones), and its form (its *logos*)' (trans. Arthur Madigan SJ [Oxford: Oxford University Press 1999]).

29 In saying that Spinoza's mature view of *ratio* is not that of a numerical proportion between total motion and total rest of an individual, I do not mean to suggest that the structure or architecture of an individual cannot be described mathematically. I suspect that Spinoza thinks that it can be given a mathematical formulation (at least under the attribute of extension). I simply mean that the particular form of the mathematical description (if in fact there is one) cannot be the simplistic ratio that Spinoza describes in the *Short Treatise*.

30 On this point I'm in agreement with Michael Della Rocca, 'Spinoza's Metaphysical Psychology,' in *The Cambridge Companion to Spinoza*, Don Garrett ed. (Cambridge: Cambridge University Press 1995), 206-10.

if their movements did not relate to one another in any systematic way. For example, three pebbles lying on three separate beaches on three different continents do not jointly constitute a single individual because the motions of one are not (in any appreciable way) communicated to the others.³¹ Each pebble is basically indifferent to the motions of the others. In the case of an automobile, on the other hand, the gears shift, the pistons pump, the wheels spin and all of these motions bear systematic relationships to each other. The automobile, consequently, is a single, unified individual. More schematically, if some objects constitute a complex individual, then their motions are systematically related.

Likewise, we would not regard a collection of things as constituting an individual if the relationship between them had no tendency to persist. In fact, the communication of motion between parts according to a coherent pattern implies persistence through time, for it is difficult to see what could possibly justify calling something a pattern of motion if it did not persist.³² If we drop the requirement that patterns of motion have to persist over time, then any random collection of bodies could be described as instantiating a pattern of motion — a different one at every moment. More schematically, if some objects constitute a complex individual, then the systematic interrelation of their motions has a tendency to persist. Putting these two criteria together, we get what Spinoza takes to be necessary and sufficient conditions for complex individuality: some objects constitute a complex individual just in case their motions are systematically related and that relation tends to persist.³³

Spinoza's account of *ratio* thus need not have the wildly implausible consequences that some commentators have thought it has. We might still wonder if Spinoza's account of *ratio* is sufficiently robust to do the work that Spinoza needed it to do. To say that what makes a thing the same thing over time and through change is sameness of *ratio* is, it might seem, extremely unhelpful. It does not, for instance, tell us what makes

31 Of course there is gravitational attraction, but, for pebbles at such distances, it is negligible. Where do we draw the line between negligible and non-negligible interactions? Clearly the concept of motions being systematically related is a vague one. Consequently, any concept of complex individuality built out of it will inherit its vagueness.

32 Cf. Della Rocca, 201.

33 Despite its *prima facie* plausibility, Spinoza's account is, unfortunately, vulnerable to counterexamples. For example, if two men are joined together with superglue, their motions will become systematically related and that relation will have a tendency to persist. But they will not have joined to constitute a single complex individual.

a shoe different from a ship, or what distinguishes a cabbage from a king. All Spinoza can say is that sameness and difference must be explained in terms of the arrangement of a thing's parts and the interactions between them. This is not an account so much as the placeholder for an account. There is, however, nothing disreputable about theories containing placeholders. We can compare the Spinozistic idea of a *ratio* to the idea of a gene before the discovery of DNA. Just as, prior to that discovery, 'gene' just meant 'whatever chemical structure explains heredity' so too does '*ratio*' mean, in Spinoza's system, whatever pattern or organization of parts explains the essential features of complex individuals.³⁴

Moreover, Spinoza's account of complex individuality in terms of a *ratio* sets limits on what a complete account of complex individuality has to look like. And it clearly says what the nature or definition of a thing cannot be. For example, the nature of an extended thing cannot be an immaterial principle that does not require a material realization. So the scholastic metaphysics of forms and qualities, which supports doctrines such as transubstantiation and the Eucharist is ruled out of bounds. A piece of bread cannot acquire the nature of Christ's body, despite the fact that nothing about the arrangement of its constituent parts changes, on account of the acquisition a new immaterial principle.

Furthermore, Spinoza's account of individuality tells us that the nature or individuality of a thing is not a matter of the kind of stuff out of which it is made. Kings are not made up out off kingly stuff while cabbages are constituted by cabbage-stuff. For Spinoza, the ultimate constituents of all physical things are the same: the simplest bodies that can be distinguished from each other only on the basis of their motions. The only difference between a cabbage and a king lies in the way these constituent bodies are organized.

All this pertains to complex individual *bodies*. What about minds? Our original question was, did Spinoza have a continuity of memory criterion of personal identity? Continuity of memory is a form of psychological continuity. We must therefore inquire into Spinoza's account of the individuality of minds. The theory of complex individual bodies actually tells us much about Spinoza's account of individual minds (and his psychology more generally) because we can extend the account of body to mind by means of the parallelism of thought and extension. The parallelism doctrine holds that the order and connection of bodies is the

34 Cf. William Lycan, 'The Trouble with Possible Worlds,' in *The Possible and the Actual*, Michael J. Loux, ed. (Ithaca: Cornell University Press 1979), 291-2.

same as the order and connection of ideas.³⁵ That is, every body is correlated with an idea, and every relationship between bodies is correlated with a relationship between ideas. For example, if body x causes body y to exist, then there is some idea α (correlated with body x) that causes another idea β (correlated with body y). If extension is the domain of bodies and relationships between bodies and thought is the domain of ideas and relationships between ideas, then we might say there is a bijective structure-preserving mapping from extension to thought (and vice versa). Perhaps, then, the parallelism might be more aptly called the *isomorphism* of thought and extension.

This isomorphism allows us to infer that for every complex individual body, i.e., every collection of bodies that realizes a *ratio* of motion and rest, there is a complex individual idea (i.e., a mind) the parts of which (themselves ideas) relate to one another according to a *ratio* or pattern isomorphic to the one realized by the correlative complex body. Whereas an individual body maintains a *ratio* of motion and rest, an individual mind maintains a psychological *ratio*, perhaps a pattern of inference and association.

Thus for Spinoza, the identity of individuals, human bodies and minds included, depends on the preservation of the *ratio* that constitutes the nature or essence of the individual. How then does memory loss serve to indicate the destruction of the human mind (and, by the parallelism, the human body) as the Spanish poet example suggests it does? Let us turn now to Spinoza's account of memory.

IV Spinoza's Account of Memory

According to Spinoza, the human body has many parts with diverse structural characteristics. Some of these parts are fluid, others hard, and still others soft.³⁶ Sense perception occurs when external causes introduce motions in the organs of sense perception.³⁷ Recall that in order for

35 EIIP7

36 EII, Post. II, GII/102

37 Spinoza is committed to a ban on inter-attribute explanations (IP10). That is, no extension-involving fact can explain a thought-involving fact and vice versa. In what follows, I shall often offer what appear to be inter-attribute explanations (e.g., sense experience occurs when motions are introduced into ... etc.). I do so for ease of exposition. This is, however, harmless because there is a simple recipe for transforming inter-attribute explanations into intra-attribute explanations. In order to transform an inter-attribute explanation into one wholly contained by the attrib-

the body to retain its form it has to communicate these motions to the rest of its parts according to its fixed *ratio*.³⁸ In the course of this communication, the organs of sense perception transmit some motion to certain fluid bodies (probably something like Descartes' animal spirits) that flow throughout the body. This motion drives the fluid bodies against what Spinoza called the 'soft part of the body.' By 'soft part of the body,' Spinoza likely meant the brain, an interpretation that is supported by the way he talks about memory in the *Tractatus de Intellectus Emendatione*: 'What then will memory be? Nothing but a sensation of impressions on the brain. (*Quid ergo erit memoria? Nihil aliud, quam sensatio impressionum cerebri.*)'³⁹ The resulting impact alters the surface of the brain, and in this way external causes can leave lasting impressions on the human body.⁴⁰ Now if, in the course of events, the fluid bodies come back into contact with the place on the surface of the brain that was altered by past experience, they will then rebound from that spot with the same motions that they had at the time of the original experience.⁴¹ Since these motions must be communicated to the rest of the body according to its fixed *ratio*, the body will be affected with the same affection that it had previously.⁴² ('Affection' is a technical term in Spinoza that refers to the specific state of some mode — the mode of a mode, as it were.) By virtue of the parallelism, there is a sequence of *ideas* isomorphic to this physiological process. The resulting affection of the body will have a psychological counterpart in an idea just like the idea that the mind had on the occasion of the original experience. Thus the mind *remembers* the original experience. In other words:

ute of extension, replace every occurrence of a psychological term with an expression formed by prefixing 'the extended counterpart of...' to that term. For example, 'sense experience' becomes 'the extended counterpart of sense experience.' Likewise, inter-attribute explanations can be brought entirely under the attribute of thought by prefixing 'the psychological counterpart of...' to every term referring to an extended thing. From here on out, whenever I appear to offer an inter-attribute explanation, I wish to be understood as instead stating the disjunction of the two intra-attribute explanations that result from the two applications of this recipe.

38 Definition following A2, GIII/99-100.

39 TdIE hereafter, §83

40 EIIP17CD

41 Ibid.

42 Ibid.

S remembers an event *e* at time t_1 just in case (i) *S* experienced *e* at some time t_{1-n} ; (ii) *S*'s experience of *e* suitably altered the surface characteristics of *S*'s brain; (iii) *S*'s animal spirits are driven into and rebound from the region of *S*'s brain altered by the experience of *e*; (iv) the rebounding motions of the animal spirits are the same as those that occurred after the original experience.⁴³

On the basis of this account, we can imagine at least two ways in which someone might lose memories, one of which does not entail a loss of personal identity, and the other of which does. First, subsequent experience could supplant previous experience by further altering the surface of the brain, thereby washing away any trace of what went before. Thus when the fluid bodies encounter that spot which once bore the mark of some experience long past, but that now reflects the actions of a more recent experience, their rebounding motions bear no trace of that older time. In this way, the memory of the experience is lost. It would appear that Spinoza was describing processes that can lead to this variety of memory loss when he wrote:

If someone, e.g., has read only one Comedy, he will retain it best so long as he does not read several others of that kind, for then it will flourish in isolation in the imagination. But if there are several of the same kind, we imagine them all together and they are easily confused.⁴⁴

The memory of the comedy is retained best so long as its impression does not have to compete with other impressions for limited space on the surface of the brain. If other impressions do overlay it, then the memory will be become obscure and confused. The motions of the animal spirits rebounding off of the brain will not be the same as those subsequent to the prior experience since the surface characteristics of the brain have been altered in the interval since the original experience. Since this form of memory loss entails no change in *ratio*, it does not involve a loss of personal identity.

Alternatively, the *ratio* of the body might change, while the brain and its surface characteristics remain unaltered. This would likely result in

43 There is a condition missing from this analysis that is, in the judgment of many, a necessary condition for memory: the subject of the memory must be identical to the subject of the original experience. You cannot remember what you never experienced. This condition is never explicitly stated by Spinoza. It is, however, consistent with everything he says about memory. Perhaps he regarded it as so trivial as to hardly require explicit statement. But see note 48 for some reasons not to include such a condition.

44 TdIE, §83

memory loss because, given certain features of Spinoza's physics, condition (iv) is very difficult to satisfy if a change of *ratio* takes place after the original experience. Here is why. Every region of space, according to Spinoza, is wholly occupied by a body.⁴⁵ That is, the material world is, for Spinoza, a plenum. In a plenum, no body can move without causing some other body to move, i.e., without communicating its motion to some other body. If two bodies are parts of a complex individual, then if one communicates its motion to the other without destroying that complex individual, then it communicates it according to the complex individual's *ratio*.⁴⁶ So, if two bodies, *b* and *b**, are parts of a complex individual *i* and *b* communicates its motion to *b** at time t_1 without destroying *i*, then at any time t_{1+n} the motions of both *b* and *b** are both partially a function of *i*'s *ratio*. There is no time, consequently, at which the motions of animal spirits rebounding off of the surface of the brain are not partially determined by the human body's *ratio*. This being so, any change in *ratio* is liable to result in a change in the motions with which animal spirits would rebound off of a region of the brain.⁴⁷ Thus, any change in *ratio* is very likely to result in a loss of memory.

We might imagine, for instance, that Spinoza's Spanish poet suffers no alteration on the surface of his brain, and yet the destructive repercussions of his disease so disfigure his body's architecture that we have to say that he has acquired an entirely new nature. Accordingly, when fluid bodies rebound from some spot on his brain that was shaped by an experience predating his illness, his body will not be affected with an affection that recalls that earlier event because the rebounding motions of the animal spirits will be different. The rebounding motions will be different because the new *ratio* is different. Similarly, by virtue of the

45 IEP15S and DPP I/188

46 Definition after IIP13S

47 It is likely, but not necessary. Two complex bodies could have two distinct *rationes* that are nevertheless indistinguishable with respect to some non-empty set of interactions of their parts. If we were to add as a necessary condition for memory that the rememberer and the experiencer must be the same person (as was considered in note 43), then sameness of *ratio* would indeed be necessary condition for memory because it is a necessary condition for sameness of complex individual. However, if we were to add such a condition to our analysis of memory, we would be forced to admit that memory is not the proper topic of Spinoza's Spanish poet example, which is concerned with an individual who has no experience as of writing the poems composed by the Spanish poet. So the person is the Spanish poet case not only doesn't have memories in the factive sense, but he doesn't even have *apparent* memories of writing the poems.

parallelism, the mind will be in a new state that does not represent the original experience, i.e., the mind will not *remember* the original experience. Indeed, since IV39S suggests that the Spanish poet's amnesia indicates a loss of identity, we must conclude that his amnesia resulted from change of *ratio*.⁴⁸

V Bodies, Minds, and Persons

I should now like to say something further in defense of the assumption that Spinoza's topic in IVP39S is personal identity. That text explicitly discusses the survival conditions of *human beings* and *human bodies*. To adequately defend the assumption, it would be necessary to show that, in Spinoza's usage, 'human being' and 'human body' (and, by dint of Spinoza's commitment to the identity theory, 'human mind') mean what other philosophers have meant by 'person.' This task would be made considerably easier if there were one definition of 'person' that all authors who have addressed the problem of personal identity have agreed upon. Although there is no such thing, perhaps it would not be too controversial to claim that there is a region of broad overlap in meaning according to which 'person' picks out, perhaps among other things, the object of our most humane self-concern,⁴⁹ and that thing about which one cares when one cares about survival. To see how Spinoza's discussion of the Spanish poet bears upon that subject, it is instructive to contrast Spinoza's position on survival to that of Hobbes.

Like Spinoza, Hobbes believed that a desire for self-preservation is a pervasive motivating force in human life. In his English translation of *De Cive*, he wrote, 'every man as much as in him lies endeavour [sic] to protect his life and members.'⁵⁰ This endeavor takes place 'by a certain impulsion of nature, no less than that whereby a stone moves downward.'⁵¹ Moreover, the *Leviathan* describes this endeavor as aiming at the

48 Here I agree with Frederick Ablondi and Steven Barbone, 'Individual Identity in Descartes and Spinoza,' *Studia Spinozana* 10, 84-6.

49 This formulation comes from Harry Frankfurt, 'Freedom of the Will and the Concept of the Person,' *The Journal of Philosophy* 68 (1971) 5-20.

50 Thomas Hobbes, *De Cive*, I.7. All citations of from Hobbes are from *The English Works of Thomas Hobbes of Malmesbury*, and *Opera Latina*, Sir William Molesworth, ed. (Darmstadt: Scientia Lerlag Aalen 1966).

51 *Ibid.*

preservation of a certain dynamic arrangement of the parts of the body. According to the *Leviathan*, certain physiological processes constitute what he calls 'vital motion,' which includes 'the course of the blood, the pulse, the breathing, and the concoction, nutrition, excretion, etc.'⁵² When we interact with our environment in such a way that this vital motion is helped we experience pleasure, and when our vital motion is hindered, we feel pain. Because our appetites are for pleasure and our aversions are for pain, all of our behavior aims ultimately at self-preservation, or toward maintenance of our vital motion.⁵³

This account of the desire for self-preservation, although obviously similar to Spinoza's, is at odds with the specifics of the Spanish poet example. Recall that in his discussion of the poet, Spinoza wrote:

I dare not deny that — even though the circulation of the blood is maintained, as well as the other [signs] on account of which the Body is thought to be alive — the human Body can nevertheless be changed into another nature completely different from its own. For no reason forces me to think that the Body does not die unless it is changed into a corpse.

Alexandre Matheron points out that here Spinoza can be understood as taking a stand against the Hobbesian account of survival by distinguishing vital motion as Hobbes understands it (i.e., the circulation of the blood, and other vital signs) from the *ratio* of motion and rest maintained by the conatus.⁵⁴ Spinoza intended the *ratio* preserved by the conatus to include a much richer and more complex variety of motions and behaviors than mere Hobbesian vital motion. For example, the conatus of a human being (under the attribute of extension) is not merely a striving to maintain the proper functioning of those physiological processes characteristic of the living human body, e.g., the beating of the heart, the circulation of the blood, and the proper functioning of the liver, lungs, etc. Rather, the conatus seeks to preserve the kind of life that is proper to the human being in question. This includes all the various ways of responding to the external world natural to a particular human being — a way of life or lifestyle as it were. It is this feature of Spinoza's account of survival that lends credence to the view that, for Spinoza, the survival of the human body amounts to survival of the person. Because the

52 Thomas Hobbes, *Leviathan*, Edwin Curley, ed. (Indianapolis: Hackett 1994), 27

53 *Leviathan*, 27-9

54 Matheron, 86-8

identity conditions of the body include this rich array of factors — factors that seem to go right to the heart of those things that constitute our personhood — I think that it is permissible to interpret Spinoza's account of the identity of human beings (i.e., human bodies and minds) as an account of the identity of persons.

For example, suppose that Bessie Smith (considered under the attribute of extension) by her very nature responds to those things that afflict her with the physical correlate of sadness (i.e., decreases her body's power of action) by singing the blues. If external forces altered the character or disposition of Bessie Smith's body so that it no longer responded to (physical) sadness by singing the blues, this would involve an alteration of the *ratio* of motion and rest obtaining between the parts of her body — even though her pulse, breathing, excretion, exoneration, etc. might all remain unaffected — and for this reason such a transformation would be resisted by her conatus. Even if a person's vital functions continue uninterrupted, she may still be destroyed if external forces prevent her from living the kind of life proper to her nature. This is the meaning of Spinoza's claim that the body need not become a corpse before a person may be pronounced dead. A Bessie Smith who no longer sang the blues would no longer be Bessie Smith, any more than a poet who is no longer a poet, is still the same person. Such a transformation would be a kind of death, even if biological life were to persist. But if bodily death can result from such changes as these, then the body is very plausibly understood as the *person* considered under the attribute of extension. Likewise if the mental counterpart of such changes resulted in the destruction of the human mind, then we would be justified in regarding the mind as the *person* considered under the attribute of thought.

VI Advantages of Spinoza's Account

According to Spinoza, then, memory loss can both indicate destruction of the human being (a change in *ratio*), and also result from changes that do not result in the destruction of the human being (e.g., changes in the brain's surface characteristics that do not amount to changes in *ratio*). I believe this account of the relationship between identity and memory has a number of advantages over the continuity of memory criterion of personal identity.

It is tempting to think that what constitutes my personal identity is the unity of my conscious experience and that this unity can be extended through time by means of memory. That is, my personal identity seems constituted by consciousness of my acts and experiences. Similarly, my

past and present life are united by my present consciousness of my past acts and experiences, i.e., by my memory of them.

While it is undoubtedly true that there is some intimate connection between persistence through time and the memories that span that time, this view is vulnerable to a number of objections. First of all, a person typically does not remember a significant portion of what she does or experiences. For example, I do not remember putting on my shirt this morning, and yet it seems extravagant to deny that I put it on.

Second, identity is a transitive relationship. If $x = y$ and $y = z$, then $x = z$. Taking an objection from Thomas Reid (who originally lodged it against Locke), if a general remembers being a young soldier who took one of the enemy's standards, and the young soldier remembers being a child who was flogged at school, then according to the continuity of memory criterion, the general is the same person as the young soldier who took the standard, and the young soldier is the same person as the child who was flogged at school. We should then be able to infer from the transitivity of identity that the general is the same person as the child. Supposing, however, that the general does not remember being the child who was flogged at school, then, according to the continuity of memory criterion, the general is *not* the same person as the child. But this conclusion violates the transitivity of identity.⁵⁵

Spinoza's account of identity sidesteps both of these objections. I am the same person who put on my shirt this morning so long as the *ratio* realized by the parts of my body and mind is the same now as it was then. Similarly, the general, the young soldier, and the child are the same person just in case they all share the same *ratio*. At the same time, Spinoza's account acknowledges the important link between continuity of memory and personal identity. It is difficult, for Spinoza, to have continuity of memory without continuity of *ratio* since the rebounding motions of the animal spirits that are the extended counterpart of memory are partially determined by the individual's *ratio*. Nevertheless, *discontinuity* of memory, e.g., memory loss, does not imply change of *ratio*. That is, not every instance of memory loss follows from a change of *ratio*. Hence, although Spinoza's account acknowledges an important connection between memory and personal identity, the connection is weaker than the continuity of memory theorist would have it.

The obvious objections to the continuity of memory criterion have led many philosophers, otherwise sympathetic to Locke's approach, to offer

55 See Thomas Reid, *Essays on the Intellectual Powers of Man*, iii.6, vol. 1 of *The Works of Thomas Reid*, Sir William Hamilton, ed. (Edinburgh, 1872), 7th edition, 351.

a modified version of Locke's criterion for personal identity. Locke, according to these philosophers, is wrong to have thought that memory was the sole psychological feature the continuity of which is constitutive of personal identity, but he was on the right track in suggesting that some form of psychological continuity is. Successive psychological states belong to one and the same person, on some versions of this view, just in case the transitions between them are gradual, and connected by bonds of similarity and causality.⁵⁶

Spinoza's way of avoiding the standard objections to the continuity of memory criterion differs from this neo-Lockean approach just as it does from Locke's own. Continuity and connectedness are, for him, not enough. Even if change in *ratio* takes place gradually, and each successive *ratio* is connected by relations of similarity and causality to its predecessor, the individual in question would not, by Spinoza's lights, survive. Only persistence of the same *ratio* suffices for survival. The plausibility of Spinoza's view requires that a person's *ratio* be construed broadly enough that it can be realized by a diversity of states, and so survive the changes that a person typically undergoes in the normal course of things. It is, nevertheless, a matter of strict identity of *ratio*, and not merely continuity and connectedness.

VII Individual Difference

Spinoza's account, despite its advantages over the continuity of memory account, has the following problematic feature. It gives us no account of individual difference for individuals of the same kind. Spinoza's theory of individuation is a theory about what makes a collection of parts *one* thing, an integrated whole. A collection of parts is unified by the communication of motion between parts according to a certain fixed *ratio*. This tells us when some putative part belongs or does not belong to a whole. The answer to the question 'Is *x* a part of *y*?' is answered by determining whether or not *x* communicates its motions to the other parts of *y* according to *y*'s fixed *ratio* and vice versa.

When it comes to individual *numerical difference*, it can only give us very crude determinations. Individuals *x* and *y* are not identical if they

56 See, for instance, Derek Parfit, 'Personal Identity,' *Philosophical Review* 80 (1971) 3-27; David Lewis, 'Survival and Identity,' in *The Identity of Persons*, Amélie Oksenberg Rorty, ed. (Berkeley: University of California Press 1976), 17-40; and Shoemaker, 89-91.

do not share a *ratio*. Spinoza's philosophy, however, explicitly identifies the *ratio* of a thing with its nature, and it also seems to say, at various points, that distinct individuals can share a nature. For example, a great deal of the ethical theory developed in part IV of the *Ethics* depends on the putative fact that human beings agree in nature.⁵⁷ This means that they agree in *ratio*. What, then, distinguishes one human being from another?

It sometimes appears that, according to Spinoza, numerical diversity within a kind can be understood in terms of the causal histories of the individual instances. The scholium to P8 of Part I of the *Ethics* reads:

... no definition involves or expresses any certain number of individuals, since it expresses nothing other than the nature of the thing. E.g. the definition of the triangle expresses nothing but the simple nature of the triangle, but not any certain number of triangles...

From these propositions it follows that if, in Nature, a certain number of individuals exist, there is necessarily a cause why those individuals exist, and why neither more nor fewer exist.

For example, if, in nature, twenty human beings exist ... it will not suffice (i.e. to give a reason why twenty men exist) to show the cause of human nature in general... For there must necessarily be a cause for the existence of each [particular human being].

In this text, Spinoza's main objective was not to explain numerical diversity within in a kind, but rather to explain why only one substance of a given attribute can exist. Nevertheless, I do not think it is too great a stretch to read this passage as saying that individual instances of a single kind must be understood in terms of differing causal histories. On this reading, what makes two human beings two different individuals, despite their sharing a *ratio*, is that they have different causal histories. I'm descended from some particular zygote and you're descended from some other zygote. I am different from you because there is an unbroken causal chain linking me to some particular zygote or conception or whatever, and you belong to some other unbroken causal chain. Two individuals who share an essence or nature are different individuals just in case they have different causal histories.

It might appear that this account of individual difference contradicts principles that Spinoza lays down while discussing the individuation of substances. Consider the following texts:

57 E.g., EIVP31, 32, 33, 35, and 37S1.

EIP4: Two or more distinct things are distinguished from one another, either by a difference in the attributes of the substance or by a difference in their affections.

EIP5: In nature there cannot be two or more substances of the same nature or attribute.

Dem.: If there were two or more distinct substances, they would have to be distinguished from one another by a difference in their attributes, or by a difference in their affections (by P4). If only by a difference in their attributes, then it will be conceded that there is only one of the same attribute. But if by a difference in their affections, then since a substance is prior in nature to its affections (by P1), if the affections are put to one side and [the substance] is considered in itself, i.e. (by D3 and A6), considered truly, one cannot be conceived to be distinguished from another, i.e., (by P4), there cannot be many, but only one [of the same nature or attribute], q.e.d.

We can extract two principles from these texts. (1) There cannot be two substances with the same attribute, essence, or nature. (2) Substances cannot be differentiated by their accidents. Two substances that share an essence or nature cannot be distinguished from one another on the basis of that nature. If substance x is essentially F and substance y is essentially F , then if they are not identical it must be due to something other than their shared F -ness. It cannot, however, be a matter of accidental differences, i.e., a difference in modes. If so, no substance that acquired or lost properties could be self-identical over time. For example, if individuals were individuated by reference to their accidents, then Descartes' piece of wax, which is at one moment hard, cool, redolent of honey, etc. and at another moment liquid, hot, and odorless, would not be the same individual at both moments.⁵⁸ Causal histories are, on Spinoza's account, accidental properties, and thus if individuals are individuated by their causal histories, then they are individuated by their accidents, which seems inconsistent with IP5. Why did Spinoza think that causal histories are accidental and not essential? Many contemporary philosophers would be inclined to count them as essential for certain kinds of individuals. But remember that for Spinoza, the essence of a thing is its *ratio tout court*, and a *ratio* never determines, in and of itself, the coming to be of a thing.⁵⁹ Thus the causal history of any individual will necessarily make reference to some nonessential external cause.

One might defend the causal histories approach to individuation by arguing that the principles governing the individuation of modes need not be the same as those governing the individuation of substances. The

58 C.f. Curley, 17-18.

59 See IP8S quoted above.

reason why substances cannot be individuated by their modes is that substances are conceived through themselves. If they were individuated by their modes, their individuality would have to be conceived through their modes, i.e., through another. Modes, on the other hand, are conceived through something other than themselves by definition. There is, therefore, no analogous reason why they shouldn't be individuated by their affections.

This strategy, however, is incompatible with Spinoza's Spanish poet example. Presumably, there is an unbroken causal chain linking the pre-disease Spanish poet to the post-disease Spanish poet. And if we are going to say that all human beings have the same *ratio*, but have different causal histories, then we are not going to be able to countenance Spinoza's claim that the pre and post-disease poet are different people. They belong to the same unbroken causal chain and have the same *ratio*, so they would be the same person.

The only way to make sense of Spinoza's claim about the Spanish poet is to assume that the pre- and post-disease poet have different *rationes*. But how can that be, since Spinoza claimed that all human beings agree in nature or *ratio*? That suggests that *rationes* are universals such that more than one individual can have the same *ratio*.

Perhaps there is a way of construing Spinozistic *rationes* so that they can both be universals and individual natures. Each individual then would have its own unique *ratio* which would serve both to unify its parts and to distinguish it from all other individuals, even individuals of its own kind. But how could this be consistent with all the texts that say that human beings agree in nature?⁶⁰ I can think of two ways in which this might be possible. First of all, for Spinoza, agreement in nature can be a matter of degrees. For example, in the Corollary to P31 of part IV of the *Ethics*, Spinoza writes:

... the more a thing agrees with our nature, the more useful, or better, it is for us, and conversely, the more a thing is useful to us, the more it agrees with our nature.

Then it would be consistent with the claim that human beings agree in nature to say that every individual human being's *ratio* differs slightly from every other's. The biological kind *human being* would thus encompass a diversity of *rationes* that all bear some kind of family resemblance to one another. This would be somewhat similar to our own modern Darwinian conception of a biological species according to which the

60 IVP35, IVP35D, IVP35C1, IVP25C2, IVP35C2S

concept of a species has vague boundary conditions and supports a continuous range of variation among its members.

Another way in which individual humans could vary in *ratio* while still agreeing in nature is to allow that individuals realize multiple *rationes*. Each human being would then share a *ratio* with every other human being but would also instantiate an additional *ratio* unique to that individual. To see how this would work, consider a lump of gold that is in the shape of a bowl. The lump of matter has its parts organized in the way characteristic of gold, it realizes the *ratio* of gold. But is also organized in the shape of a bowl; it realizes the *ratio* of a bowl. So it realizes two different *rationes* simultaneously. Individual human beings could similarly realize both the *ratio* of human beings in general and some further *ratio* that serves to distinguish each of them from the others. So our humanity would be to gold what our individual nature is to the bowl shape.

Both solutions are applicable to the case of the Spanish poet. On the interpretation according to which human nature represents a cluster of individual natures that strongly resemble one another while at the same time differing slightly, the Spanish poet acquires a new *ratio* as a result of his illness, but the new *ratio* is still squarely in the range encompassed by human nature. On the interpretation that holds that we can realize multiple *rationes* simultaneously, the Spanish poet acquires a new individual *ratio* while retaining his human *ratio*. In this way, the Spanish poet could lose his personal nature and thus die (qua individual) although his erstwhile body and mind could continue to live (qua human being). His personal nature is destroyed although his human nature survives. He loses his individual *ratio* but his human *ratio* continues on.

Unfortunately, the idea of an individual *ratio*, i.e., an essence so specific that it is capable of uniquely picking out one individual, is untenable. Whether or not the kind *human being* has a nature or essence is controversial enough. I think many philosophers today would be inclined to say no on Darwinian grounds. But the question is even murkier when it is an issue of individual natures. At every moment of my life, does my body instantiate some pattern or organization or some functional program that is unique to me? Surely it is metaphysically possible that I might have a perfect duplicate. But, Spinoza's account of individual difference has as a consequence that either perfect duplicates are a metaphysical impossibility,⁶¹ or that a single individual is a potentially repeatable entity capable of existing at more than one place at once.

61 Steven Nadler lodges a similar criticism of Spinoza's account of personal immortality in his *Spinoza's Heresy*, 129-30.

Neither option is intuitively plausible, and Spinoza adduces no additional considerations that would make them more so.⁶² We must, unfortunately, conclude that Spinoza can give us no satisfactory account of individual difference.

VIII Conclusion

Can anything be said in favor of Spinoza's account of personal identity despite its defects? It has obvious attractions when attention is focused on the issue of identity, because it allows us to make sense of the claim that personal survival involves strict identity. But Spinoza's claim that what matters in survival is the preservation of our *ratio* or essence is problematic. As discussed above, the term *ratio* is nothing more than a placeholder for a more detailed account of the psychological and physical patterns that constitute human nature. When I am concerned about my survival, how can I be concerned about the persistence of my *ratio*, since I don't even know what the referent of that term is?

I do, nevertheless, think the idea of individual natures or *rationes* does capture an important intuition about persons and their survival. I want to survive. But I do not simply want it to be the case that there is some person in the future who remembers my past and present experiences from the inside as it were. I *do* want that, but not *just* that. I also want that person, the one whose memories are continuous with those of my present self, to be a certain kind of person — to have a certain character, or personality — to have certain capacities and abilities — to care about the projects and people that I care about. When I imagine some future person whose memory is continuous with mine but who lacks these things, I regard him as alien — as not quite me. I feel as if, in some very real way, I would have failed to survive as that person.

I think that Spinoza's conception of a *ratio* is meant to capture this richer conception of what it is to be a particular person. *Ratio* both explains continuity of memory and also the behavioral dispositions of a

62 Spinoza adheres to a version of the Principle of the Identity of Indiscernibles (or PII) according to which, if there are two things then there must be some difference between them. Versions of the PII differ over what kinds of features are eligible to distinguish distinct individuals. For example, it is common to insist that the distinguishing features must be qualitative, and sometimes it is said that they must be intrinsic. One possible response Spinoza could make to this objection is to say that the only features that are eligible to play the role of distinguishing individuals are those that determine an individual's *ratio*. But such a strong version of the PII is hardly plausible and seems quite ad hoc.

thing — how it responds to certain stimuli, what kinds of responses it is capable of, what kinds of experiences it is capable of having. A person, on the Lockean view, is a retrospective thing. It remembers a certain past from a certain point of view. A person, on Spinoza's view, has a subjunctive dimension as well. One of the things that makes a person who she is, is that she *would* behave in certain ways under certain circumstances. Her personality includes behavioral dispositions, talents, character traits, as well as memories. A poet who is no longer a poet, might be a different person. In this respect, I think that Spinoza's richer conception of a person comes closer to what we care about in survival than the mere continuity of memory described by Locke.⁶³

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