DION AND THEON: AN ESSENTIALIST SOLUTION TO AN ANCIENT PUZZLE*

The Stoic philosopher Chrysippus (c. 280 B.C.–c. 206 B.C.) is said to have posed the following puzzle. Yesterday, there was a whole-bodied man called ‘Dion’ who had a proper part called ‘Theon’. Theon was that part of Dion which consisted of all of Dion except his left foot. Today, Dion’s left foot was successfully amputated. So, if Dion and Theon both still exist, they are numerically different objects now occupying just the same place and wholly composed of just the same matter. Presuming this to be impossible, the question is which of the two, Dion or Theon, has ceased to exist.¹

At first thought, of course, it seems that neither has ceased to exist. It would seem absurd to deny that Dion is still with us. Surely, a man can retain his identity despite the loss of a foot. But it also seems undeniable that Theon still exists. Theon, it seems, has emerged from the surgery intact.

Might it be that Dion and Theon, who initially were two, have both survived, but now are one? Assuming the indiscernibility of identicals, a principle invoked even in Hellenistic philosophy, the answer is “no.” For even now there is something true of Dion which is not true of Theon: that he once had two feet.

What did Chrysippus say? Unfortunately, very few of the voluminous writings of Chrysippus have survived. Our only source of information on his handling of Dion and Theon is the following passage, in which his position is both reported and criticized by Philo of Alexandria (c. 30 B.C.–A.D. 45).²

The question arises which one of them [Dion or Theon] has perished, and his [Chrysippus’s] claim is that Theon is the stronger candidate. These are the words of a paradox-monger rather than a speaker of truth. For how can it be that Theon, who has had no part chopped off, has been snatched away, while Dion, whose foot has been amputated, has not perished? ‘Necessarily’, says Chrysippus. ‘For Dion, the one whose foot has been cut off, has collapsed into the defective substance

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¹ Note the assumption that Dion is wholly material, without which there would be no significant problem about Dion’s occupying the same place as Theon. Those who reject the assumption (i.e., dualists) can let ‘Dion’ name a bird, a doll, or a human body.

of Theon. And two peculiarly qualified individuals cannot occupy the same substrate. Therefore it is necessary that Dion remains while Theon has perished (ibid., pp. 171–2).

As will be obvious to those familiar with contemporary identity theory, the puzzle of Dion and Theon is of more than antiquarian interest. The same type of puzzle commands much attention today. (The example discussed most often is that of Tibbles the cat.) Interestingly, none of today’s theorists would agree with Chrysippus that Theon has perished. None of the many solutions currently on offer yields that conclusion. In section I of this paper, I survey those solutions, as they apply to Dion and Theon, and briefly note their drawbacks. In section II, I present a new, essentialist solution, one that affirms the conclusion of Chrysippus, though not the reasoning by which he arrived at it. I offer an answer to Philo’s question—How can it be that Theon has perished?—which is more likely to remove the appearance of paradox than is the cryptic answer that Philo attributes to Chrysippus. My solution employs (and assumes) the recently revived doctrine of Aristotelian essentialism, which provides a hitherto unexploited resource for dealing with the full range of cases in which there is pressure to allow that different objects simultaneously occupy the same place.

I. THE AVAILABLE SOLUTIONS

The purpose of this paper is to present a new solution, not to offer novel objections to existing solutions. But to provide perspective, especially for nonspecialists, I shall survey the solutions with which mine must compete. And while I shall not try to show any of the competing solutions to be unsatisfactory, I shall identify some of the common-sense assumptions they require us to surrender, assumptions my solution permits us to retain. (I shall not discuss efforts to reconcile us to the surrender of those assumptions.)

One terminological preliminary: the English language has common names for many different parts of the body, such as the head, the right hand, and the trunk; unfortunately, English does not supply a name for that part of a bipedal animal which consists of all of the animal except its left foot. I shall use the term ‘torso’ to denote that bodily part. (One of the standard meanings of ‘torso’ is ‘something mutilated or incomplete.’) In my discussion, ‘torso’ will serve as the counterpart of the term ‘puss’, as the latter is employed in discussions of Tibbles the cat. (The puss of a cat is that part of the cat which consists of all of the cat except its tail.)

Now, one way to deal with cases such as that of Dion and Theon is to restrict the principle that different objects cannot occupy the same place at the same time. Some philosophers, following Locke
and David Wiggins,\textsuperscript{3} modify the principle so that it applies only to objects of the same sort: a place may be shared by a statue and a piece of clay, although not by two statues or two pieces of clay, by a tree and an aggregate of molecules, although not by two trees or two aggregates of molecules, and by a cat and a puss, although not by two cats or two pusses. In every such case, these philosophers say, there are two objects simultaneously occupying just the same place. But the two objects differ in identity conditions and, therefore, in sort.

On this view, Dion and Theon \textit{both} survived the surgery. They are numerically different objects that now occupy just the same place and wholly consist of just the same matter. This is possible because they differ in sort: Dion has the identity conditions of a man and so is not a torso, while Theon has the identity conditions of a torso and so is not (predicatively) a man.

Although many philosophers\textsuperscript{4} accept this view, perhaps because they see no congenial alternative, many\textsuperscript{5} find it repugnant. Elsewhere,\textsuperscript{6} I argue that the view is incoherent. Here I aim to show how we can comfortably handle the case of Dion and Theon without restricting the common-sense principle that different objects cannot simultaneously occupy the same place.

A second way to deal with the puzzle is to embrace mereological essentialism, the doctrine that each of the parts of an object is essential to its identity. Impressed by the "growing argument" of Epicharmus, the ancient Academics seriously entertained this radical doctrine,\textsuperscript{7} if they did not actually accept it. One of its virtues, per-

\textsuperscript{3} "On Being in the Same Place at the Same Time," \textit{Philosophical Review}, LXXVII, 1 (January 1968): 90–5.


\textsuperscript{7} See Long and Sedley, pp. 166–7.
haps its principal virtue, is that it does provide a way to preserve the principle of one object to a place. On this doctrine, taken to apply even to persons, the amputation of Dion’s left foot has caused Dion to cease to exist; only Theon remains. Of course, mereological essentialism represents a departure from our usual ways of thinking. And it enjoys little support among contemporary philosophers, few of whom are prepared to say that the loss of a minor part, the loss of even a single molecule, invariably causes an object to cease to exist.

A third possibility is to deny that the concept of a torso is a proper one, to deny that there ever was such a thing as Theon. But even if this line has merit, it can provide only temporary relief. The case can be redescribed so that ‘Theon’ names the head of Dion, and what is successfully amputated is all of Dion except his head. Now, there will be no denying that there was such a thing as Theon, except by the seemingly desperate expedient of Peter van Inwagen (op. cit.): that of denying that there are such things as undetached parts.

A fourth approach is to invoke the doctrine of temporal parts. On this currently popular doctrine, objects, like events, have temporal as well as spatial parts. It is not the whole of an object, but at most a part of it, a temporal part, that is present in any period other than the longest period throughout which the object exists. With regard to Dion and Theon, proponents of the doctrine would say something like this: it is not the wholes of Dion and Theon which are coextensive, but only the postamputation part of Dion and the post-amputation part of Theon. And those entities are numerically identical. The case of Dion and Theon is not problematic, because it is not a case of genuine coincidence; that is, it is not a case in which the whole of one object wholly occupies a place wholly and concurrently occupied by the whole of another. (I use ‘coextension’ and its cognates for the corresponding reflexive relationship.)

The problem for this solution is that there are cases in which instances of different sortals are spatially coextensive throughout their entire careers. Suppose for the moment that Dion’s mother was a user of Thalidomide and that as a result Dion was born without a left foot. There still is pressure to say that Dion, this time the whole of Dion, shares his place with (the whole of) another object. For it seems true that Dion would have been two-footed if his mother had not taken Thalidomide. But it also seems true that there

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is something where Dion is, a torso, which still would not have contained a left foot. To block this argument, to avoid having to allow coincidence in cases of career-long coextension, it is necessary to resort to some such device as the rejection of de re modal properties, the claim that the property denoted by a modal predicate varies with the sense of the subject to which it is attached, the claim that objects have their size and shape essentially, or a doctrine of modal parts.\textsuperscript{10}

The need for such supplementary devices substantially diminishes the appeal of the temporal-parts solution. Furthermore, the doctrine of temporal parts, as even its supporters generally acknowledge, is at odds with our ordinary ways of thinking. (To see firsthand the whole of an event, such as a play, it is indeed necessary to be present for the entire period throughout which the event lasts. But to see the whole of an object, such as a museum, we ordinarily do not think that to be necessary. That is, we ordinarily do not take objects to have temporal parts.) This creates a presumption against the doctrine which could be overcome only by showing that there are problems for whose solution the doctrine is required. My aim is to show that cases such as that of Dion and Theon do not constitute such a problem.

A fifth way to solve the puzzle, the last one I shall mention before presenting my own, is that of relativizing identity, whether to time or to sort. George Myro\textsuperscript{11} and Peter Geach\textsuperscript{12} both would say that the amputation has left just one (man-sized) object, an object that is both a man and a torso. Is that object Dion? Or is it Theon? Myro’s answer would be “both.” He would say that Dion and Theon are (numerically) identical today even though they were diverse yesterday. For Myro, objects have different identities at different times. For Geach, objects have different identities relative to different sorts. Geach would say that the object left by the surgery has no absolute identity. Relative to the sortal ‘man’, it is Dion; but relative to the sortal ‘torso’, it is Theon.

Relativist theories of identity, all of which are inconsistent with Leibniz’s principle of the (complete) indiscernibility of identicals, currently enjoy little support. The doubts about them are (a) whether they really are theories of numerical identity, (b) whether


they can be made internally consistent, and (c) whether they are sufficiently motivated. Part of what motivates Geach’s sortal relativism, and evidently the whole of what motivates Myro’s temporal relativism, is the desire for an agreeable way to avoid coinciding objects. I shall show how we can comfortably dispose of putative cases of coincidence without surrendering the absoluteness of identity.

II. A NEW SOLUTION

Yesterday, the man Dion contained as a proper part the torso Theon. Early today, Dion’s left foot was amputated. Before us now is the one-footed man left by the amputation. In just the same place there is a torso. The questions are these: What is the relationship between the man before us and the torso before us? And what are the relationships of this man and this torso to Dion and Theon? In my judgment, the best account of the case is this: before us there is just one object; it is (predicatively) both a man and a torso; this one object is Dion, who once was two-footed and now is one-footed; Theon has ceased to exist.

The problem with this account is its final element: the claim that Theon has ceased to exist. I am making no objection to the concept of a torso. I am allowing that yesterday there was such a thing as the torso Theon. And I am allowing that there is a torso before us today. (Recall that the case could be redescribed so that ‘Theon’ names Dion’s head.) But in company with Chrysippsus (and no one else, so far as I know), I am denying that today’s torso is numerically the same as yesterday’s. As noted by Philo, this seems paradoxical. After all, today’s torso is qualitatively and spatiotemporally continuous with yesterday’s under the sortal ‘torso’. And it contains just the same parts: the same head, the same trunk, the same arms, and so on. How, then, could these torsos fail to be one and the same?

Perhaps Chrysippus had a more satisfying answer to this question than the cryptic one reported by Philo: that Dion has “collapsed into the defective substance of Theon.” In any case, here is mine: the reason today’s torso differs numerically from yesterday’s is that yesterday’s torso was merely a torso, while today’s is also a person.

I rely on these two assumptions: (1) that the concept of a person is maximal, that is, that proper parts of persons are not themselves persons; and (2) that persons are essentially persons (and thus that nonpersons are essentially nonpersons). Given the first assumption, we can say that Theon was a nonperson. Given the second, we can add that Theon was a nonperson essentially. This means that Theon could not have survived a change that would have made it, if it survived, a person. I now rely on a third assumption: (3) that the separation from Theon of Dion’s left foot was just such a change.
What follows is that Theon did not survive the separation from it of Dion’s left foot. Given the three assumptions, we can see that Theon has ceased to exist. And we can see why Theon has ceased to exist.

Consider the assumptions in reverse order. The third assumption is that, if Theon still exists now that Dion’s left foot is no longer connected to it, then Theon is now a person. Since we are taking persons to be wholly material (see footnote 1), this assumption might seem altogether undeniable. Why would Theon not be a person?

Actually, however, the third assumption must and would be denied by those who accept a certain theory of diachronic identity, one that allows Lockean coincidence. On this attractive theory, developed mainly by Wiggins, the surgery has left two objects, both wholly material, that are composed of the same matter and occupy the same place. There is Dion, who is a person and not a torso. And there is Theon, which is a torso and not a person. (There is also a third object, a human body, that, unlike Theon, is smaller than it was yesterday and, unlike Dion, is likely to persist for a while after Dion’s death.) Of course, Wiggins’s theory is attractive in spite of such consequences, not because of them. Elsewhere (in the work cited in footnote 6) I argue that such consequences are unacceptable. (How could Theon be qualitatively and compositionally identical to the person Dion and not itself be a person? What could make Dion and Theon different in sort? Perhaps a difference in identity conditions? But then what could ground the difference in identity conditions?) Still elsewhere, I offer a modification of Wiggins’s theory. One of the virtues of that modification is that it enables even those who follow Wiggins to accept the commonsensical third assumption.

The second of the three assumptions, that persons are essentially persons, presupposes the now widely, but by no means universally accepted doctrine of sortal essentialism: the doctrine that a thing’s general sort is essential to its identity. I shall not here undertake to defend that doctrine or to discuss how best to formulate it. My purpose in this paper is limited to showing that sortal essentialism provides a simple way of dealing with a vexing puzzle. Still, I shall note that sortal essentialism is arguably implicit in our ordinary ways of thinking. At least it does not represent a radical departure from those ways of thinking, as do other theories by means of which the case of Dion and Theon might be disposed.

Of course, one might accept sortal essentialism without accepting the second assumption. One theorist who does just that is W. R.

Carter,\textsuperscript{15} who holds that human persons are \textit{humans} essentially, but not \textit{persons} essentially. Carter maintains both (1) that personhood requires actual possession of certain psychological capacities and (2) that those humans who are now persons existed before they developed those capacities and will, in many cases, continue to exist for a time after they lose them. In Wiggins’s terminology, Carter deems ‘person’ to be a phase sortal, not a substance sortal.

I deny (1). Carter is using ‘person’ neither in the “moral sense” nor in any stipulative sense. And I think that in the ordinary sense of the term, a person is any organism, whether human or nonhuman, whether natural or artificial, that either has certain psychological capacities or else has, or even once had, the potential for developing those capacities. Happily, the issue need not be joined here. All my argument really requires is what any sortal essentialist will grant: that there is some substance sortal that is applicable to a one-footed human person but not to the torso of a whole-bodied human person. The most likely choices include ‘person’, ‘human’, ‘human body’, ‘animal’, and ‘animal body’. My argument, suitably adjusted, is equally effective whichever term is chosen.

I have just said that any sortal essentialist will grant that there is some substance sortal that is applicable to a one-footed human person but not to the torso of a whole-bodied human person. I must add one proviso. Any sortal essentialist will grant this providing he grants that concepts such as person, human, human body, animal, and animal body are maximal.

This brings us, finally, to the first of the three assumptions. The maximality of the concept of a person (human/human body/animal/animal body), and of many of our other nondissective concepts,\textsuperscript{16} is, I believe, clearly implicit in our ordinary ways of thinking. Although large proper parts of a person are in many ways very much like persons, we ordinarily do not count them as persons. In effect,


\textsuperscript{16} A concept (of a type of macroscopic object) is \textit{nondissective} just in case some macroscopic parts of instances of that concept are not themselves instances of that concept. The nondissectivety of the concept of a person, unlike its maximality, is beyond dispute.

Some of our nondissective concepts do seem to be nonmaximal. It seems, for example, that some tables are proper parts of larger tables. (Think of tables to which optional, factory-designed extensions are attached.) But such cases do not provide the makings for Dion/Theon-type puzzles. Suppose that all of a certain table has been destroyed, except for the smaller table it once contained. Providing we indeed are content to say that there were two tables to begin with, one a proper part of the other, we shall feel no inclination to say that the larger table continues to exist. We shall be entirely content to say that just the smaller one remains. Dion/Theon-type puzzles arise only when the whole and the proper part do not initially fall under the same ‘sortal concept.'
we ordinarily treat possession of the property of not being a proper part of a person as a necessary condition of being a person. This creates a presumption in favor of the first assumption.

I know of only one sort of argument against the assumption, one employed by Geach, who denies the maximality of cat. Geach reasons thus: if a sufficiently large part of a cat were separated from the rest of the cat, that part would continue to exist (without continuing to be a part) and would then, at least, clearly be a cat; but the separation surely would not generate a cat; so the part must already be a cat. Of course, this argument is essentially the reverse of my argument concerning Theon. Geach and I agree on two points: (a) that the part in question satisfies the sortal in question after the separation, provided the part exists after the separation; and (b) that the part does not satisfy the sortal after the separation if it does not do so before the separation. But while I premise the maximality of person and infer that the separation causes the part to cease to exist, Geach premises that the separated part continues to exist and infers the nonmaximality of cat. Each argument begins with premises that are initially congenial and reaches a conclusion that is initially uncongenial.

Here is a reason for preferring my argument: the premises of my argument, if true, explain the conclusion they entail. They enable us to see why Theon ceases to exist. (It is because Theon, a nonperson, and essentially so, undergoes a relational change in virtue of which it would qualify, if it continued to exist, as a person.) Accordingly, the premises of my argument can—I think they do—transmit their own congeniality to the conclusion. By contrast, Geach’s argument might seem to prove that certain parts of a cat qualify as cats, but his premises do not explain why this is so. (That certain parts of a cat would be cats if they were separated from the rest of the cat, but would not be cats then unless they were cats now, entails that they qualify now, but does not tell us why they qualify now.) The proposition that every whole-bodied cat contains numerous smaller cats would remain decidedly uncongenial even if Geach’s argument should make it seem undeniable. Happily, to avert paradox, to

18 If the reader is not persuaded of this, I shall not argue the point. (The object of this paper is to present and defend a novel position, so I shall be content to show that my own conclusion can be made congenial.) But I want to note that such multiplications cannot be allowed by those who propose to deal with Dion and Theon in the manner of Wiggins. (See the first of the solutions surveyed in section I.) If Theon is a person before the surgery, then there will be no denying that Theon is a person after the surgery. And any coinciding of Dion and Theon would be the coinciding of two persons, not merely the coinciding of a person and a torso.
avoid a colossal multiplication of cats, we can simply stand Geach’s argument on its head.\textsuperscript{19}

But does not my argument, too, lead to paradox? Is it not paradoxical that a change in Theon’s relational properties, a “Cambridge change,” should drive Theon out of existence? No. Because of the maximality of person, the relational change undergone by Theon results in a sortal change; and because of the essentiality of sort, the sortal change results in Theon’s ceasing to exist. (For sortal essentialists, that is what sortal changes do.) Question: How could a change in the “merely relational” properties of an object result in the destruction of that object? Answer: by resulting in a sortal change.\textsuperscript{20}

Of course, this explanation employs my three assumptions, including the one I am now engaged in defending. But the point is that given those assumptions, each of which is plausible indepen-

\textsuperscript{19} Actually, Geach believes that his theory of the relativity of identity enables him to deny the maximality of cat \textit{without} multiplying cats. Geach does hold that each whole-bodied cat contains numerous parts that are themselves cats. But he proposes to say that each such part is the same cat, even though not the same lump of cat stuff, as the whole-bodied cat of which it is a part. I doubt that this line is coherent. If a cat and one of its proper parts are one and the same cat, what is the mass of that one cat? In any case, if the maximality of cat is denied, then a multiplication of cats is avoidable, if at all, only on a theory of identity that few identity theorists accept.

\textsuperscript{20} Is there any other type of case in which a relational change results in a sortal change? Perhaps there is. On intentionalist or institutional theories of art, it would be plausible to say that a work of art would cease to be such, despite undergoing no change in its intrinsic properties, if there should be certain changes in the intentions of the artist or the attitude of the “artworld.” (Indeed, it would be plausible to view renunciation by the artist as a necessary condition of artwork, at least for modest artworks, even on aesthetic theories of art.) But ‘work of art’ is commonly regarded as a substance sortal (or a substance categorical), at least by metaphysicians (see, for example, Wiggins, “Reply to Wollheim,” \textit{Ratio}, xx, 1 [June 1978]: 52–68, p. 62), and is thus regarded by at least one metaphysically-minded aesthetician who propounds an intentionalist theory of art—and who does indeed allow for work of art to gain instances, and perhaps to lose them, solely as a result of an artist’s acquiring or losing certain intentions. See Jerrold Levinson, “Zemach on Paintings,” \textit{British Journal of Aesthetics}, xxvii, 3 (Summer 1987): 278–83, pp. 278–80; and “Defining Art Historically,” in \textit{Music, Art, and Metaphysics: Essays in Philosophical Aesthetics} (Ithaca: Cornell, 1990): 3–25, pp. 8–9 and 12–3, including fn. 6.

Three clarifications: (1) by ‘results in’ I mean ‘logically necessitates’, not ‘causes’ (strictly speaking, then, what results in the sortal change is the relational change plus the absence of intrinsic change); (2) I say that Theon undergoes a “sortal change” (a change in sort) because the change it undergoes is one that would result in its beginning to satisfy, if it continued to exist, the substance sortal ‘person’; (3) in saying that the relational change results in a sortal change, I am relying on my third assumption, that Theon is a person after the surgery, if it exists after the surgery, as well as on my first assumption, the maximality of person, which provides the basis for denying that Theon is a person before the surgery.
dently of its (heretofore unnoticed) contribution to dealing with puzzles like that of Dion and Theon, the surprising conclusion that Theon ceases to exist does admit of a satisfying explanation.

Furthermore, the initial uncongeniality of that conclusion can be explained away. It does initially seem paradoxical, as Philo noted, to say that Theon was destroyed by the separation from it of Dion’s left foot. In our earlier idiom, it does at first seem obvious that today’s torso is the same one as yesterday’s. The explanation is that we fail to attend to the torsos’ difference in sort and to the correlative difference in the behaviors that can be attributed to them. These are differences that we would almost surely acknowledge if they were suggested to us (and if we were innocent of identity theory), but we overlook them because we quickly focus on what the torsos have in common: their matter and their qualities. (It is easy to forget that qualitatively identical objects can differ in sort, as do real banknotes and perfect counterfeits.) Once we think of the differences, once we note that yesterday’s torso was merely a torso, while today’s is also a person, and once we reflect that today’s torso sleeps, eats, swims, loves, and thinks, while yesterday’s did not, we feel much less inclination to identify them. Chrysippus is vindicated.

Now, the essentialist solution here presented does require an accommodating account of the relations among objects, sorts, sortals, and identity conditions, an account that permits the coinstantiation of sortal concepts associated with different identity conditions. Elsewhere (in the work cited in footnote 14) I offer just such an account. Importantly, my account provides a basis for deciding which of the (families of) sortal concepts instantiated by an object determines its identity conditions. Situated within such an account, Aristotelian essentialism enables us to dispose of the full range of putative counterexamples to the principle of one object to a place. And it enables us to do so without resorting to temporal parts, mereological essentialism, relativizations of identity, a denial of the existence of undetached parts, or other theories that conflict with our ordinary ways of thinking about the world.

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21 Like our concept of a person, our concepts of a sleeper, an eater, a swimmer, a lover, and a thinker are maximal.

22 As would be expected, indeed demanded, the account enables us to rule that objects cosatisfying ‘person’ and ‘torso’ have the identity conditions associated with ‘person’.