On Van Inwagen’s Argument Against the Doctrine of Arbitrary Undetached Parts

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Imagine you are looking at a pen. It has a blue ink cartridge inside, along with a spring and some other mechanics to allow the user to retract the point. The outside is a plastic sheath with a clip. Now imagine that I remove the clip. Is the item still a pen? It certainly still functions like a pen. We are probably inclined to agree it is still a pen. What if I then remove the plastic outside? It doesn’t look like a pen anymore, but it still functions like one. I can use the ink cartridge and the point to write. At this point, people might start to disagree as to whether or not it is still a pen. What is required for an item to be a pen? Does it need to look like the traditional writing tool? Or must it just “behave” like one? Within the area of material constitution, much of the debate is over questions about what defines an object. Here we will focus on a particular aspect of that debate.

Can smaller parts of larger objects be considered independent objects themselves? Does the left half of my computer screen exist as a material object? What about the sleeve of my shirt? Or the middle five stairs in the staircase? We tend to ignore these parts, focusing more on the larger whole. A staircase is certainly an object, but it might not make sense to discuss the middle five stairs in the staircase, for there can be no middle five stairs without the larger whole. On the other hand, it is within our linguistic ability to refer to them. The middle five stairs and the staircase in its entirety are two things that have different shapes and occupy different spaces. Maybe we ought to consider the middle five stairs themselves as part of our ontology. That is, it might be true that there can be no middle five stairs without the whole staircase, but we can perceive the middle five stairs independently. It is a tangible, material part of the whole.
To begin, we must clarify what it means for an object to exist. Here, when I say an object does not exist, I mean that we cannot accept it as an independent part of our ontology of the universe. However, whether or not an object exists in the technical sense makes no functional difference in our everyday discussions of these things. If we agree the five middle stairs in the staircase do not exist, we need not stop referring to them. Rather, it simply means we cannot include them into our ontology. Outside of the realm of metaphysics, it is not a momentous conclusion, but for any concerned philosopher it is vital that we delineate the real aspects of our existence from the linguistically convenient.

While there is clearly debate over the issue of whether or not these undetached parts exist, those who accept the above list as objects endorse a claim known as the Doctrine of Arbitrary Undetached Parts (DAUP). Peter Van Inwagen, one of the leading philosophers in the field of metaphysics, formulates the accepted definition of DAUP as follows:

for every material object $M$, if $R$ is the region of space occupied by $M$ at time $t$, and if sub-$R$ is any occupiable sub-region of $R$ whatever, there exists a material object that occupies the region sub-$R$ at $t$.\(^1\)

Although some may debate the extent to which DAUP can be used to admit objects into our ontology, at the very least it seems to imply that what we normally consider objects (my computer screen, for example) also have arbitrary sub-regions that may be considered independent and unique material objects (such as the left half of my computer screen). The issue might seem confusing because we tend to think that any noun can be an object. We can refer to both a computer and the left half of the computer. It is not so clear, however, that just because we can create a noun to refer to something, we ought to consider that thing a material object. I can talk about my mind, or my thoughts, but these are not actual objects. Similarly, even though the middle five stairs in a staircase may be tangible, it is not immediately clear that they are material objects we should incorporate into our ontology. So to what extent is DAUP true? Van Inwagen maintains that DAUP is simply false: the parts of larger objects—such as the middle five stairs in the staircase—cannot exist as independent objects. I will argue, however, that his proof rests on an approach fraught with inconsistencies.

According to Van Inwagen, DAUP entails a thesis known as Mereological Near-Essentialism (MNE), which claims that “if a part is removed from an object, and no new part is added to the ‘remainder,’ then [the original] object must therewith cease to exist” (124). Van Inwagen attempts to show that if we accept DAUP as true, then we must accept MNE as well. His argument consists in a thought experiment in which we assume that DAUP is true and MNE is false. It is important that “it follows from the falsity of MNE that there is a time…such that there could be objects $O$ and $P$ such that $P$ is a part of $O$ at that time and such that $O$ could survive the subsequent loss of $P$” (124).
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For example, consider a cake (O), which is the sum of a slice (P) and the remainder of the cake minus the slice (O-). If the slice P were to be completely destroyed, only the remainder O- would be left. If we assume MNE to be false, the cake, O, would still exist. Because O- is the only remaining thing around that could potentially be a material object, we must conclude that O is now O-. But because DAUP is true, and O- was a sub-region of O that did not occupy all of O, we must agree that O and O- are different material objects. We have arrived at a contradiction, or as Van Inwagen puts it, “O and O- were once diverse (when P was a part of O) and thus we have arrived at a violation of the principle of transitive identity...” (125) Thus, if we assume DAUP to be true, then MNE must be true as well.

But Van Inwagen asserts that there are certain material objects that do not follow MNE; specifically, he believes that we—human beings—are capable of surviving the destruction of one of our parts. After all, it seems perfectly rational to say that John lost his arm during the war, but still acknowledge that John exists. Van Inwagen uses Descartes (D) as an example. Given DAUP, there is a sub-region of D that occupies the exact region of Descartes’ left leg (L), and a region D-, which is the remainder of D minus L (or what is left after Descartes’ leg has been removed). Van Inwagen points out that “obviously Descartes and D- were not the same thing (at t0), since at t0, they were differently shaped” (126). D- was only a sub-region of D, but did not occupy the entirety of D. At some time t, we completely destroy Descartes’ left leg. Our intuition tells us that D still exists after t. We merely need to see him and speak with him to arrive at the conclusion that a legless Descartes is still Descartes. But what are we actually left with? With the annihilation of L, all that is left of D is D-. And since we still consider the remainder to be D, then it seems that D is now D-. It is important to note that D- itself has not changed in any way. So with this situation in mind, what conclusions can we draw from the relationship between D and D-?

Van Inwagen clarifies four relationships in order to show why DAUP is false. He notes that

1) D- at t0 is identical to D- at t.

As we noted before, D- has not changed in any way simply because the thing of which it was a sub-region has lost a part completely separate from D-. The left side of my computer screen—a sub-region of the entire computer—does not change just because the battery—another separate sub-region of the computer—is removed from the computer.2 Because we consider the remainder of Descartes after losing the leg to still be Descartes,

2) D- after t equals D after t.

Van Inwagen points to our intuition that “one, after all, can survive the loss of a leg” (126). It is also the case that
3) $D$ after $t$ equals $D$ at $t_0$.

No one would say that Descartes, before losing his leg, did not exist. So it seems to follow that since Descartes after losing his leg still exists, Descartes after losing the leg is the same Descartes as before the loss of the leg. Finally,

4) $D_-$ at $t_0$ does not equal $D$ at $t_0$.

After all, $D_-$ was merely a sub-region of Descartes that did not occupy all of Descartes. $D$ before the destruction of $L$ and $D_-$ before the destruction of $L$ were numerically distinct.

From these four relations, we see that the Doctrine of Arbitrary Undetached Parts ostensibly violates the principle of transitivity of identity and must therefore be false. According to Van Inwagen, before the destruction of $L$, Descartes was not equal to $D_-$. After the destruction of $L$, it seems that Descartes was then equal to $D_-$. Based on the conclusions made, it seems that “if this is correct, then there was once an object that had earlier been two objects, which is a plain violation of the transitivity of identity” (126). When we assume that DAUP is true, we reach the absurd and unacceptable conclusion that identity is not transitive. So how do we reconcile this problem? $D_-$ must never have existed as a distinct material object in the first place, and DAUP is false. Given the falsity of DAUP, Van Inwagen attempts to draw an even more radical conclusion.

Because $D_-$ must never have existed in the first place, Van Inwagen claims that $L$ must never have existed as a distinct material object either. The conclusion that $D_-$ never existed does not seem to go against our everyday intuitions about objects. We have no special name to describe a body missing a leg. On the other hand, a leg seems like it is an object. We can remove it from a body and describe it as a leg; it has a name. But just because we have created some name to describe it does not mean that it is actually an object. Van Inwagen claims that “it would seem wholly arbitrary to accept the existence of $L$ and to deny the existence of $D_-$” (127). Just because people have created some name to describe the difference between $D$ and $D_-$ does not justify the existence of $L$. Such a phenomenon is no less arbitrary than fabricating some name to describe the difference between $D$ and $L$. It is merely a human effort at linguistic convenience—not necessarily a claim that the object to which the name refers exists independently. This, of course, is not to say, as Van Inwagen points out, that Descartes is wrong to say that he scratched his leg (128). Why should there be anything wrong with referring to an arbitrary area of a larger thing? Perhaps Descartes is not claiming that his leg exists as a distinct material object. For the sake of linguistic convenience, he might be giving an arbitrary part of his body a name so that people know to what he is referring. How this might be possible is admittedly difficult to grasp. But Van Inwagen wants to say that Descartes’ left leg does not exist as an independent material object. That is not to say
Descartes does not have a left leg. We can refer to the leg while still maintaining it is not a material object through the apparent falsity of DAUP (which entails MNE). While conceptually confusing, I do not think Van Inwagen is necessarily wrong to claim this. It is like referring to a mind, which does not materially exist yet requires a label for reference.

Thus far I think I have sufficiently laid out Van Inwagen’s argument. My aim for the remainder of the paper is to object to his argument against DAUP. First let me acknowledge an alternative objection that many may be inclined to raise, as this other objection appears similar to my own, but in fact they are not the same. At first glance, it may seem that Van Inwagen conflates the idea of a material object with some amorphous notion of personhood. It may be asked: why does Van Inwagen think that Descartes continues to exist as D- after the destruction of L? Some may be inclined to accuse him of tacitly embracing an idea of personhood or other non-material notion. As he puts it, the detractor of his view may respond that “D- was not a part of Descartes but only a part of Descartes’ body” (129). There is a distinction between the material body that Descartes occupies and the thing that persists after the destruction of part of the body. To say that Descartes persists as D- might be to classify Descartes as a Chisholm Object. A Chisholm Object “is a concrete particular that thinks and wills and is the cause of the voluntary movements of a human body and is in practice unobservable, either because it is immaterial (a Cartesian ego) or, if material, tiny or made of subtle matter or remote from the human body it controls” (130). Perhaps Van Inwagen conflates this idea with the material consideration. It certainly seems plausible. After all, if D- after the destruction of L equals D after the destruction of L, doesn’t it make sense to think that Van Inwagen is not limited to discussing the material body that Descartes occupies?

But while it may be appealing to present this objection, Van Inwagen does not find it convincing. There are philosophical and scientific problems with maintaining that people are not material objects. To that end, he does not endorse this non-material way of speaking about human beings. He claims that “anyone who accepts DAUP must either accept the thesis that we are not material things or else accept the thesis that we are material things of a kind very different from any kind that has ever been observed” (130). Why are people ostensibly different than material objects so far? Van Inwagen believes that it is because we can persist through time despite changing. It is clear, therefore, that if one is to object to Van Inwagen’s argument in a way he will deem acceptable, it cannot be on Chisholm’s grounds. Van Inwagen believes that he is not making this type of non-material argument, so any objection must remember that people are material things of a different type than has been observed thus far.

Although I am not sure whether Van Inwagen’s argument can stand up to the Chisholm objection, I will simply concede that it can. I will object to Van Inwagen’s argument on the assumption that Chisholm does not raise any serious concerns that could undermine the argument against DAUP. The problem I see with Van Inwagen’s argument is the following: his insistence that Descartes survives as D- is based on intuition
rather than empirical evidence. But in showing that DAUP entails MNE, Van Inwagen relies on a more empirical account of material objects. It is only because of his inconsistent approach that he is able to come to the conclusion that DAUP is false.

Let us ignore people for a moment and turn to objects that Van Inwagen would agree are like objects we have seen before. Take a birthday cake, for example. Spelled out in icing, the words “Happy Birthday Peter” are written across the top. Call the cake C. Given DAUP, there exists C-, the cake missing one slice, and S, the slice. S plus C- equals C. When we remove (or annihilate, to avoid issues over scattered objects) S, C- has the words “Happy Birthday Pet” now written across the top (the “er” was part of S). There are two ways we can now approach the issue of figuring out how to define C-.

On the one hand, we can take the empirical approach. C- was a sub-region of C that did not occupy the entirety of C prior to the removal of S. In removing S, C ceases to exist. C- after the separation of S does not equal C. We previously noted that S+C- = C, so if we remove S, C- cannot equal C. They are numerically distinct. This is the approach that Van Inwagen seems to take for all objects that are not human beings.

There is another way we can interpret C-. We can accept that prior to the destruction of S, S plus C- equals C. When S is destroyed, we have a cake, C-, that now says “Happy Birthday Pet.” While we recognize that C- is not the same as C, we have a firm intuition that the cake is the same cake. Although we witnessed S’s removal from C-, it still makes sense for Van Inwagen to refer to the cake as his birthday cake. The icing on top adds to that intuition (as a note, Van Inwagen would actually concede that point. He admits that we can refer to legs even if they are not material objects that we should admit into our ontology). It really seems like the cake continues to exist. I think it also makes sense then to refer to C- as C. The firm intuition that the cake is still the same cake, but missing one slice, leads us to refer to it as the same cake, just as we would still call Descartes without a leg the same Descartes.

In attempting to show the falsity of DAUP, Van Inwagen conflates these two different approaches. He first adopts the purely empirical approach to show how DAUP entails MNE. He concludes his discussion of MNE that “O and O- were once diverse (when P was a part of O) and thus we have arrived at a violation of the principle of transitive identity” (125). His approach here is the same as the approach that claims Van Inwagen’s birthday cake ceases to exist when we remove the slice. I am not claiming that there is anything prima facie wrong with this approach. Perhaps it is the correct one. But if we are to take this approach to issue over material constitution, we must use it consistently, which Van Inwagen fails to do.

He later uses the intuitional approach to maintain that people are unique since they can apparently survive the loss of parts. We are inclined to say that Van Inwagen’s birthday cake exists because we have a strong intuition that it persists despite losing a slice. Similarly, we have a strong intuition that Descartes continues to exist despite losing a leg. That is, we have an intuition that Descartes after the loss of the leg equals D- after the loss of the leg. If we used the empirical approach that Van Inwagen used in proving
that DAUP entails MNE, we might be forced to conclude that, in a very material way, Descartes does cease to exist. If we violate the principle of transitive identity by claiming that O is now O-, then we must also violate it when we say that D is now D-. Van Inwagen, in maintaining that Descartes does not cease to exist, uses a different approach than he uses in his first proof with DAUP and MNE.

I have aimed to show that Van Inwagen is inconsistent in his approach. If this is true, then his argument against DAUP is not sound. It rests on a flawed approach, for he conflates what I distinguish as the "empirical" and "intuitional" approaches. But I have not yet said which the proper approach is. In order to do that, let us look at the conclusions each approach would yield. On the one hand, we can take the empirical approach; we can bite the bullet and accept that if a cake cannot persist losing a slice, then we literally cannot survive the hundreds of changes that take place throughout the human body every second. This approach would not result in the falsity of DAUP. If we agree that DAUP entails MNE, then objects cannot survive the loss of parts. To that end, we maintain that human beings cannot survive the loss of parts. There are no contradictions here. We may not like the conclusion that people do not persist, but it is a conclusion that is consistent with the approach. A problem arises, however, because human bodies are constantly changing through, for example, constant loss of cells. Is it reasonable to say that we do not continue to exist from one moment to the next? A consistent approach would force us to accept it. But we are not bound to this jarring conclusion.

The intuitional approach presents a more plausible view of normal everyday objects and people. If we take a consistent intuitional approach, Van Inwagen's argument against DAUP still does not succeed. His proof for how DAUP entails MNE succeeds because Van Inwagen maintains that DAUP cannot be true while MNE is false. Yet the intuition approach would accept that we do violate the principle of transitive identity in assigning existence to arbitrary parts of material objects, but our violation does not matter. Just as we have a strong intuition that Descartes continues to exist as D-, a normal object continues to exist even if a piece is removed. I believe that this intuition approach is a more plausible foundation for questions about material constitution. It may be the case that people are constantly changing, but it might simply be an unacceptable conclusion that we are material objects that cannot survive the loss of parts. Concluding that items and people cannot persist over time would drastically alter the way that we interact with our environment. We grow attached to objects and people. A child does not forget its toy just because a wheel breaks off. Similarly, a wife does not forget her husband simply because he loses a leg. It is a natural sentiment that enables us to form these attachments. A theory of material constitution that held that the things with which we associate do not persist through time would be impossible for most to accept. It seems reasonable to take the intuitional approach, as it sits well with our everyday perceptions of the material existence of a person and does not lead to the jarring conclusions of the empirical approach.

Van Inwagen's argument against DAUP fails because he does not use a consistent
approach. Analyzed closely, neither approach seems to falsify DAUP. While I have attempted here to avoid the non-material considerations that Van Inwagen rejects, it might be impossible to do so. We have a natural intuition that Descartes continues to exist despite losing his leg. Van Inwagen agrees with this intuition and tries to incorporate it into his account. But is it possible to entirely discount the non-material considerations? We might wonder where the intuition comes from in the first place. Let’s say that a man doesn’t lose a leg, but rather, a head. Would we still consider the man to exist? It is the burden of the proponent of the intuitional approach to either somehow explain why he does continue to exist, or rather, to give a reason for why he does not without relying on non-material considerations. To be fair, I am not sure how either argument could proceed. The individual has only lost a small part of the body, but it seems to be an important piece in giving rise to the intuition that a man can survive the loss of a part at all. If even Van Inwagen is unable to explain such a situation, then he might be wrong to maintain that a man or women can survive the loss of a part without non-material considerations in his argument.

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NOTES

2. Let me raise an idea here that I will return to later in the paper. Materially speaking, the left half of the computer screen is still composed of the same parts. It is true that it has not changed in any way. But when we remove the battery, something about the screen does change. It cannot function without the battery, for example. So something probably does change, but not in any material sense. Van Inwagen, then, it seems is talking purely about empirical matter.