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Artifact and Essence

Brandon Warmke

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Abstract An *essential property* is a property that an object possesses in every possible world in which that object exists. An *individual essence* is a property (or set of properties) that an object possesses in every world in which that object exists, and that no other object possesses in any possible world. Call the claim that some artifacts possess an individual essence 'artifactual essentialism'. I will argue that artifactual essentialism is true. In doing so, I will be responding to two recent arguments by Penelope Mackie against artifactual essentialism (Mackie (2006), esp. ch. 3.). In "Individual Essence Properties", I will rehearse the qualifications that any property must meet if it is to constitute an individual essence, and in "Artifacts and the Recycling Problem" and "Artifacts and the Tolerance Problem", I will rehearse Mackie's arguments against artifactual essentialism. In "Artifacts and Weak Unshareability?" and "Artifacts and Strong Unshareability?", I will show why both of these arguments fail. In "Mona Lisa's Essence", I will defend the interesting claim that some artifacts possess an individual essence. In the final section I will entertain some objections to my proposal.

Keywords Essentialism · Artifacts · Mackie · Essences · Artworks

Individual Essence Properties

Penelope Mackie has shown that for a property to qualify as an individual essence, it must meet several requirements (Mackie 2006, chs. 2, 3). Let's rehearse them.

B. Warmke (✉)
Department of Philosophy, Florida State University, Tallahassee, FL, USA
e-mail: bwarmke@fsu.edu

First, for any property[1] to be an individual essence property (henceforth: IEP) of an object, it must be both necessary and sufficient for being that object. Suppose that λ is a property and that L is a token object. If property λ comprises L's individual essence, then two things must hold. First, it must be the case that there is no world in which L exists and is not λ. λ then, must be an *essential property* of L; in other words, it is a necessary condition for being L that it possess λ. But secondly, λ must also be *sufficient* for being L. That is, if any object possesses the property λ, that object must be identical to L. IEPs are therefore extremely selfish: objects that possess them do not share them with any other objects. And as Mackie points out, there are two ways in which in IEPs must be 'unshareable' (pp. 55–57).

First, IEPs must be *weakly unshareable*. A property is weakly unshareable just in case that property cannot be possessed by two numerically distinct individuals *within* a world. Second, an IEP must also be *strongly unshareable*. A property is strongly unshareable just in case that property cannot be possessed by two numerically distinct individuals in the same world or in *any other* possible world. For λ to be an IEP of L, therefore, λ must be an essential property of L, and λ must not be shared by any objects other than L, either at that world or in any other possible world.

But consider the property *being identical to John Wilkes Booth*. In the actual world, Booth possesses this property and there is no world in which Booth exists such that Booth lacks that property. Therefore, *being identical to John Wilkes Booth* is an essential property of Booth. But *being identical to John Wilkes Booth* is also sufficient for being Booth, in both the weak and strong senses of unshareabilty, for if any object in either *this* world or *any other* world has the property of *being identical to John Wilkes Booth*, then that object would, in virtue of being identical to Booth, *be* Booth. But Mackie finds *this* sort of IEP uninteresting for it is trivial in the sense that *every* object *O* possesses the property of *being identical to* O, and therefore entails that every object possesses an essence. But if this is the *only* reason objects possess IEPs, Mackie is uninterested. What we want in finding plausible candidates for being IEPs are properties that are *non-trivially* necessary and sufficient. So these sorts of IEPs will not do.[2]

To summarize, then, a property λ is an IEP of L just in case:

(1) *Substantive Requirement*: λ is not a trivial property of L
(2) *Necessity Requirement*: At any world in which L exists, L is λ.
(3) *Weak Unshareability Requirement*: λ cannot be possessed by two distinct objects within a single possible world.
(4) *Strong Unshareability Requirement*: λ cannot be possessed by two distinct objects, either within a single possible world or in different possible worlds.

[1] I will be using the singular 'property' as a shorthand way of talking about property *sets*, noting that a property set may, of course, include more than one property.

[2] Mackie (2006, pp. 19–22) also wants to exclude other sorts of IEP candidates from consideration: Plantingan world-indexed properties (e.g. Rex Stout possesses the property of 'being the author of *Some Buried Caesar* in *this* (the actual) world' in every world in which Rex Stout exists), and ontologically primitive haecceities. For the sake of simplicity, I will categorize these properties as "trivial" essential properties as well.

Mackie believes that these requirements are so demanding that no property qualifies, and that, therefore, there are no such things as IEPs, and that therefore, there are no individual essences. In the next section, we will rehearse her arguments for thinking that artifacts, in particular, cannot possess IEPs.

Artifacts and the Recycling Problem

If an artifact is to possess an IEP it must possess a property that is both weakly and strongly unshareable.[3] As Mackie see things, no artifacts possess weakly unshareable essential properties, let alone strongly unshareable essential ones. Against the claim that artifacts can possess *weakly* unshareable properties Mackie raises what she calls the Recycling Problem (pp. 57–59). Against the claim that artifacts can possess *strongly* unshareable properties she raises what she calls the Tolerance Problem (pp. 59–64). Let's take them in turn.

One could show that all artifacts fail to possess weakly unshareable properties if one could show that for any artifact x, x possesses no plausibly non-trivial essential properties that could not be shared by any distinct artifact y in that world. The most plausible candidate for being an artifactual IEP, Mackie seems to think, is the property of *being originally composed of a certain parcel of matter according to a certain plan* (p. 58).[4] So suppose that some artifact x is manufactured according to some design plan α out of a parcel of matter m. Suppose further that being manufactured according to α and out of m are essential properties of x—that is, there is no world in which x exists and is not manufactured according to α or composed of matter m. If at a world no object distinct from x could possess the properties of having been designed according to α *and* having been originally composed of m, then the conjunction of these properties constitutes a property set that is weakly unshareable for x.

But Mackie believes that this property fails to be weakly unshareable for any object x. Here's why. Imagine a case in which at t^1 an artisan creates an artifact S1 according to a design plan α out of a parcel of matter m. At t^2, m is scattered. At t^3, m is reconstituted according to plan α by a different agent, the result being a numerically distinct artifact, S2 (Fig. 1).

[3] I understand artifacts to be objects whose properties have been intentionally modified by rational agents in order to possess: (a) some practical and/or aesthetic function(s) (i.e. a function of being used in a certain way or artistically appreciated in some way), and (b) a doxastic function (i.e. a function of causing rational agents to come to believe certain things about the object's practical and/or aesthetic function(s)). I understand artworks to be a special subclass of artifacts proper. Cf. Dipert (1993, ch. 9).

[4] Mackie does not explain how she understands the notion of a "plan." Following Mele, I take a "plan" to be an "action-plan," the representational content of an intention. To take a very simple case, the representational content of one's intention to hit the Enter button on one's computer is a prospective representation of one's hitting the Enter button on one's computer. For our purposes, we can think of the plans according to which artifacts are created as mental "blueprints" or "instruction manuals." Because such mental "blueprints" are differentiated by their content, many different artifacts can be created according to the same plan. For more on action-plans see Mele (1992).

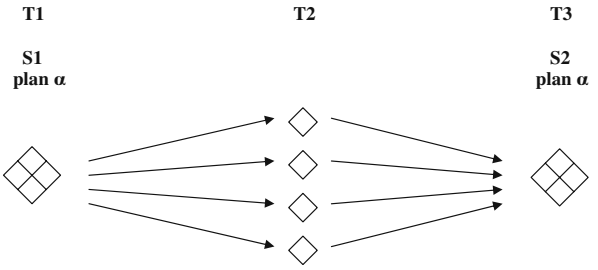

Fig. 1 Recycling problem

What we have, then, are two distinct artifacts, S1 and S2, that are originally composed of the same material, according to the same plan.[5] But this is a violation of the weak unshareability requirement which says that an IEP cannot be shared by two distinct objects. Therefore, the property *being originally composed of a certain parcel of matter according to a certain plan* cannot constitute an individual essence for S1, for that property is also possessed by S2.

Now, the Recycling Problem, all by itself, does not show that artifacts cannot possess weakly unshareable properties. All it shows is that the property *being originally composed of a certain parcel of matter according to a certain plain* is *not* the sort of property set that can be plausibly claimed to constitute an individual essence. And Mackie so much as admits this (pp. 58–59). However, she does think that unless there is some *further* non-trivial essential property that can distinguish two artifacts that come into existence at different times with the same matter according to the same plan, then artifacts do not possess any essential properties that are weakly unshareable. We will return to this challenge shortly. However, even if there was a plausibly non-trivial essential property that could escape the Recycling Problem, this does not mean that that property would be an IEP, for it would still need to be shown that it was not only weakly unshareable but also strongly unshareable.

Artifacts and the Tolerance Problem

Let us then turn to Mackie's argument that attempts to establish a presumption against the claim that some artifacts may possess a strongly unshareable essential property. If you recall, a property λ of object L is strongly unshareable just in case, at

[5] It warrants pointing out that for the Recycling Problem to get off the ground, Mackie is committed to the following two assumptions: first, that S1and S2 are, in fact, numerically distinct objects, and second, that the parcel of matter that composes S1 is, in fact, the same parcel of matter that composes S2. For the sake of argument I will be granting Mackie these two assumptions, but will note that there may be good reason to doubt them. For example, one might have the following worry about the second assumption, supposing we grant the first: even though S1 and S2 possess the same underlying matter, the parcel (or hunk) of matter that composes S2 might be distinct from the parcel of matter that composes S1 because one might think that for the same reason you cannot disassemble and reassemble an artifact, you cannot disassemble and reassemble a parcel or a hunk of matter. Mackie appears to need some kind of explanation for this apparent asymmetry. I am grateful to an anonymous referee for pointing this out to me.

any world in which an object possesses λ, that object is L. Mackie's argument against the possibility of strongly unshareable properties for artifacts rests on two modal principles of artifactual identity (p. 61 ff.).

> *Tolerance Principle*: For any artifact S1 in a world W1, S1 could have been originally composed by at least some different matter in another world.
> *Restriction Principle*: For any artifact S1 in a world W1, there is a limit to how much different matter could have originally composed S1 in another world.

The intuition driving these two principles is this. Take any artifact, for example, my desk. It could have been manufactured with a different drawer handle, or a different shelf and it would still be my desk—*this desk*. However, had it been manufactured out of *all* different material, *that* desk would not be *this* desk. If both the Tolerance and Restriction Principles are correct, they generate a problem for any alleged strongly unshareable artifactual property.

To see the problem, suppose we have an artifact S1 which in the Actual World is originally composed of three parts: A1, B1, and C1. Now suppose that it is true that S1 could have been originally composed of any two of A1, B1, and C1, along with some substituted third part. This is just a particular instance of the Tolerance Principle, one telling us how much of S1's original matter could have been different. Let us further suppose that it is an essential property of S1 that it is *originally composed of at least two-thirds of A1, B1, and C1*. Call this property TT (for "two-thirds"). This is just a particular instance of the Restriction Principle, one telling us how much of S1's original matter is essential to it. Now suppose that in our search for a plausible IEP for S1, we focus on TT, which is (by stipulation) an essential property. Is it also strongly unshareable? (Fig. 2)

Mackie argues that TT, even if it is plausibly essential to S1, cannot be strongly unshareable. Here's why. Consider an artifact S2, in another world W2, which is originally composed of A1, B2, and C2, where B1 ≠ B2 and C1 ≠ C2. Because S2 differs from S1 by more than two-thirds of A1, B1, and C1, it lacks a property that is essential to S1, and therefore S1 ≠ S2. But now consider a third possible world W3, where an object S3 is originally composed of A1, B2, and C1. If possessing TT is necessary and sufficient (i.e. strongly unshareable) for being S1, then S3 = S1 because it possesses two thirds of A1, B1, and C1. But, as Mackie points out, because there is no apparent reason to deny that S3 represents a way that S1 could have been, by parity of reasoning there seems to be no reason to deny that S3 is a way that S2 could have been (p. 61). After all, S2 and S3 share two-thirds of their

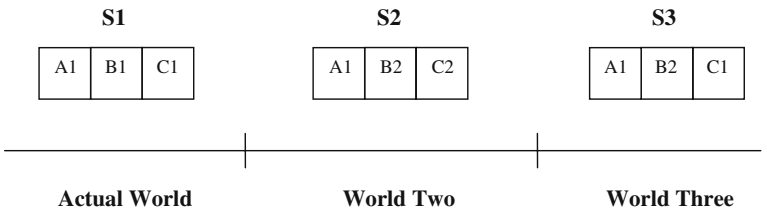

Fig. 2 Tolerance problem

original matter. Therefore S2 = S3. If S3 = S1 and S3 = S2, then by the transitivity of identity, S1 = S2. But S3 cannot be identical to both S1 and S2 because as we already noted, S1 ≠ S2. What this means, then, is that S3 cannot be identical to both S1 and S2, even if it satisfies the alleged sufficient condition for artifactual identity. Therefore, the property *being originally composed of two-thirds of A1, B1, and C1* cannot be both an essential and strongly unshareable property of S1, for as the example above shows, two distinct objects can possess this property. And this problem generalizes—no matter what arbitrarily assigned value of the original matter of an artifact that we stipulate to be essential to it, we could construct a set of possible worlds that shows that two distinct objects could possess that same property, thereby showing that this sort of alleged essential property cannot also be strongly unshareable. Therefore, Mackie appears to have established a presumption against the claim that artifacts may possess a strongly unshareable essential property.[6]

Artifacts and Weak Unshareability?

Thus far we have seen that any artifactual IEP must be essential and both weakly and strongly unshareable. We have also looked at Mackie's two arguments for thinking that there is a strong presumption against the claim that artifacts can possess a weakly and strongly unshareable essential property. In this section I will show why the Recycling Problem fails to establish a presumption against the possibility of weakly unshareable essential properties.

Recall that the Recycling Problem is intended to show is that the property *being originally composed of a certain parcel of matter according to a certain plan* (henceforth: MP), even if it is an essential property of an artifact, fails to be an IEP because it is not weakly unshareable. For while at one time I can bring about a chair that is composed of a certain parcel of matter according to a certain design plan, even if the artifact is destroyed, another artisan could come along at a later time and build a numerically distinct chair according to the same plan out of the same parcel of matter. Her chair is not my chair and yet they were created using the same matter and according to the same plan. Therefore we have two artifacts that possess the same essential properties in the same world, a violation of the weak unshareability requirement. I contend that this is mistaken.

To begin, however, I want to make a brief dialectical point. I will be arguing only that Mackie has not shown that MP cannot be both an essential and weakly unshareable property. I will not be arguing that MP is an essential property of some artifacts. Mackie's Recycling Problem proceeds on the assumption that MP is an essential property and attempts to show that MP is not also weakly unshareable. The conclusion of the Recycling Problem is that the "possibility of the recycling of matter shows that *being originally composed of a certain parcel of matter according*

[6] One way to deny this conclusion is to deny that the accessibility relation between possible worlds is transitive. However, because I think that is too-high of a price to pay, my criticism of the Tolerance Problem will not rest on it, as we will see below. However, to pursue that line of thought, one may consult Salmon (2005).

to a certain plan does not, strictly speaking, represent a weakly unshareable property of any particular artefact, even if it is legitimate to regard it as an essential property of that artefact" (2006, p. 58, italics are original). To rebut this argument, then, I need not be committed to the claim that MP is an essential property of some artifacts; I would be committed only to the claim that if MP is an essential property of an artifact, it may also be weakly unshareable.[7]

My purpose in trying to rebut the Recycling Problem, then, is largely dialectical. If the Recycling Problem succeeds, Mackie has at least established some presumption against the possibility of any property being both essential and weakly unshareable by showing that one apparently plausible candidate for IEPhood fails to meet one of the sufficiency conditions. By rebutting the Recycling Problem, I hope to weaken the presumption against the claim that some artifacts have individual essences.

My response to the Recycling Problem begins by drawing our attention to the property that Mackie believes not to be weakly unshareable. Recall:

> MP: being originally composed out of a certain parcel *m* of matter according to a certain plan α

Now consider the fact that the word 'compose' can be used in at least two very different ways. For example, I may use 'compose' in what we can call the "Material Sense" when I assert that *This shirt was originally composed of three square feet of white organic cotton*. Here, I am making a claim about what my shirt was made of: three square feet of white organic cotton.

But I may use 'compose' in another sense, which we can call the "Actional Sense." For example, I may assert that *She composed her essay on Kant by using lecture material from previous courses according to her plan*. Here, 'compose' has the sense of making or forming one thing (an essay on Kant) by putting together or combining other elements (lecture material from previous courses) according to a plan (the prospective representation of what she intends to create).[8]

I believe that Mackie has equivocated between these two senses of 'composed' in MP. We can see this by parsing MP as follows:

> M: being originally composed out of a certain parcel of matter *m*
> P: being originally composed according to a certain plan α

M clearly utilizes the Material Sense of 'compose', for any object that possesses property M would be made of or be constituted of parcel of matter *m*. P, on the other hand, tells us something about how S was brought about—that it was composed according to a certain plan. Here, 'compose' has the sense of making or creating. It

[7] It might also warrant pointing out that even if my objection to Mackie's Recycling Problem fails, this does not mean that Mackie has shown that no artifacts can have weakly unshareable essential properties. For even if her argument goes through, this would only show that one specific property (MP) cannot be both essential and weakly unshareable. This would not entail that *no other* property is both essential and weakly unshareable.

[8] There are other interesting ways in which the Actional and Material Senses of 'compose' differ. For example, "originally composed" in its Material Sense appears to be an "at-a-time," or stative notion. On the other hand, "originally composed" in its Actional Sense appears to be an "over time," or eventive notion. My thanks to an anonymous referee for pointing this out to me.

utilizes the Actional Sense. We might just as easily read P as: being originally created according to a certain plan α.

Once MP is properly understood, we see that in order for Mackie to show that MP is weakly unshareable, she must show that both M and P fail to be weakly unshareable. For if one is unshareable, then the combined property set would also be unshareable. But we have very good reason to think that P is, in indeed, weakly unshareable. Here's why. Suppose that at t^1 Ted acts to compose chair S1 in his garage according to blueprint B out of parcel of wood W. At t^2, the chair is disassembled. At t^3, Sally comes along and composes a numerically distinct chair S2 using blueprint B out of parcel of wood W. S1 and S2 possess the same property P just in case Ted's action at t^1 to compose S1 is identical to Sally's action at t^3 to compose S2. But Ted's action at t^1 of composing S1 cannot be the same as Sally's action at t^3 of composing S2 because all token actions are token events and token events occur at most one time in a world.[9] Therefore the act of composing S1 at t^1 cannot be "recycled" at t^3 to create S2 according to plan α. This entails that P is weakly unshareable, which entails that MP is weakly unshareable. Therefore, Mackie's Recycling Problem fails to show that MP is weakly unshareable.

One might object that I have mistakenly glossed property P as picking out the action-*token* by which the artisan composed the artifact. Mackie may concede that the token action by which an artisan composed the artifact cannot be recycled, but claim we need not read P in this way. Rather, we can read P as picking out the action-type by which the artisan composed the artifact. Because action-types are multiply instantiable they may be "recycled."

This objection fails. No agent has ever brought about an artifact by only an action-type. A world in which artifacts were created by only action-types would be a world in which there were no artifacts. The causal histories of artifacts include act-tokens, not act-types. We make chairs by actually going to the lumber yard, hammering nails, sanding wood and applying varnish. Therefore Mackie cannot take P to pick out an action-type. But if P picks out the artisan's action-token by which the artifact was created, that action-token cannot be recycled, for reasons we have already discussed: act-tokens are event-tokens and event tokens occur at most once in a world.[10]

Another way to push back against my claim that P is weakly unshareable is to suggest that what P picks out is *not* the property of *being the result of the α-governed token action by which the artisan actually composed the artifac*t, but rather, that it picks out the property of *being the result of some (or other) α-governed token action*.[11] Although

[9] See, for example, Kim (1976).

[10] Readers familiar with particular aspects of the philosophy of art literature may notice that my invocation of the act-type/act-token distinction as it relates to the causal history of artifacts recalls a disagreement found in the work of Greg Currie and David Davies about how to understand the ontological status of a piece of art. Whereas Currie has argued that artworks are action-types (1989), Davies has recently criticized this view and has argued that we have much better reason to understand artworks as action-tokens (2004, see esp. chs. 6 and 7). Although I have the same distinction in mind, I am making a different use of it. Whereas Currie and Davies are concerned about how we should understand the kind of *thing* a piece of art is, I am not concerned with the ontological category under which artworks fall. Rather, I am presently concerned with what kinds of historical properties artifacts possess. My claim is that artifacts possess the historical property of having been composed by a certain set of action-tokens, not only a set of action-types.

[11] It should be noted that possessing the property picked out on the former reading entails possessing the property picked out on the latter reading, but not *vice versa*. Piers Rawling brought this to my attention.

the former reading of P does not admit of "recycling" (for the reason rehearsed above), the latter reading does allow for recycling for the simple reason that many different token actions at a world can be governed by a certain plan α.[12] According to this latter reading of P, then, MP is shareable in accordance with Mackie's original conclusion.

I grant this point. We should admit that the property picked out on the former reading of P is weakly unshareable. We should also admit that the property picked out on the latter reading of P is not weakly unshareable. I will not attempt to determine which reading of P Mackie intended.[13] But because her argument rests on this ambiguity, its force is weakened, and, I contend, undercuts the presumption that the Recycling Problem is supposed to establish against weakly unshareable properties.[14]

Artifacts and Strong Unshareability?

As we saw in "Artifacts and the Tolerance Problem", Mackie's Tolerance Problem is an attempt to show that there is a strong presumption against thinking that artifacts can possess strongly unshareable essential properties. Recall that the Tolerance Problem is generated by two modal principles:

Tolerance Principle: For any artifact S1 in a world W1, S1 could have been originally composed by at least some different matter in another world.

Restriction Principle: For any artifact S1 in a world W1, there is a limit to how much different matter could have originally composed S1 in another world.

Mackie's argument succeeds if we grant both of these principles. But is the artifactual essentialist under any burden to accept them? If the essentialist is free to reject either of these principles, then the Tolerance Problem fails to establish a presumption against strongly unshareable essential properties. My goals in this section are twofold. First, I want to show that the artifactual

[12] In other words, many numerically distinct events at a world can fall under the same general causal law.

[13] In the interests of full disclosure, however, I should confess that I find that the former reading of P to be a more intuitive way of picking out token events (i.e. by their unique causes, and not by the general natural laws under which they fall). Others may disagree. But even so, this ambiguity reveals an important problem for Mackie's argument, for I have identified a property that *is* weakly unshareable, namely the possession of a certain token action history. However, one might object that such a property is trivial because the property is being identified by the very thing it leads to and is therefore non-qualitative. But this worry is assuaged if we keep in mind that when we stress the importance of the causal history of artifacts, we are not simply claiming that those historical properties *individuate* artifacts. Rather, (as David Davies points out and as we will see below) we are claiming that the causal histories of artifacts "significantly determine our sense of what the resulting work *is* and what its essential properties are" (2004, p. 118). Because the causal histories of artifacts are important in this respect, we would be remiss to classify their possession as "trivial." I am grateful to an anonymous referee for raising this point.

[14] I am very grateful to an anonymous referee for encouraging me to clarify my argument in this section and offering some very helpful advice in the process.

essentialist is under no burden to accept the Restriction Principle.[15] Second, I will argue that if the artifactual essentialist is under no burden to accept the Restriction Principle, Mackie's Tolerance Problem fails to establish a presumption against strongly unshareable essential properties.

First, consider the fact that the Restriction Principle rests on the assumption that for any artifact S, at least some of the parcel of matter that originally and actually comprises S is essential to S. Although the Restriction Principle doesn't entail the claim that for any artifact, *all* of that artifact's original, actual matter is essential to it, it *does* entail the claim that for any artifact, at least *some* of that artifact's original, actual matter is essential to it. But why should the essentialist think that? The claim that some artifacts have essences does not entail a further claim: that for any artifact that possesses an essence, one of that artifact's IEPs is that of having been originally composed of some parcel of matter. The artifactual essentialist, qua artifactual essentialist, is under no burden to make any claims whatsoever about how much or how little of the original matter out of which an artifact is actually composed is essential to it. But Mackie's Tolerance Problem arises only if we grant the assumption that it is an essential property of every artifact that it possess some (if not all) of its original, actual matter. But the artifactual essentialist is under no obligation to accept this assumption. To simply insist that this is so has led some to make the observation that "anti-essentialism seems obsessed with the original matter" of artifacts (Denkel 1995, p. 322).

However, even if there is nothing about artifactual essentialism *per se* that entails the Restriction Principle, there may be very good reason to accept it. We can bring this into relief by way of *reductio* on the assumption that the Restriction Principle is *false*, working with the alleged strongly unshareable property P (from the previous section). Suppose that in the Actual World, I make a chair S1 out of a certain parcel of matter with parts A1, B1, and C1 according to a certain design plan α. Now suppose in another world W2 I use an entirely disjoint, but qualitatively identical, parcel of matter (A2, B2, and C2) to create a chair (call it S2) according to plan α. Because we are assuming that the Restriction Principle is false, there looks to be no reason to deny that S2 represents a way that S1 could have been. But now add a third world W3, in which there is a chair S3 which is brought about in the same way and out of the same parcel of matter as S1 is in W1, as well as a chair S4 which is brought about in the same way and out of the same parcel of matter as S2 is in W2 (Fig. 3).

[15] Of course, another way to rebut the Tolerance Problem is to reject the Tolerance Principle and endorse a view (call it 'compositional mereological essentialism') that if an object has even a slightly different compositional makeup at its origin in another possible world, it's a different object. I do not endorse this view, but it is not as counter-intuitive as one might initially think. One could argue, for example, that there is no principled difference between claiming that 1% of an artifact's actual, original matter could have been different but that, say, 50% of its actual, original matter could *not* have been different. In either case, the compositional mereological essentialist can claim, you do not have 100% of the actual, original matter, so why should it matter whether you exchange one percent of fifty? I am grateful to Craig Warmke for making this suggestion.

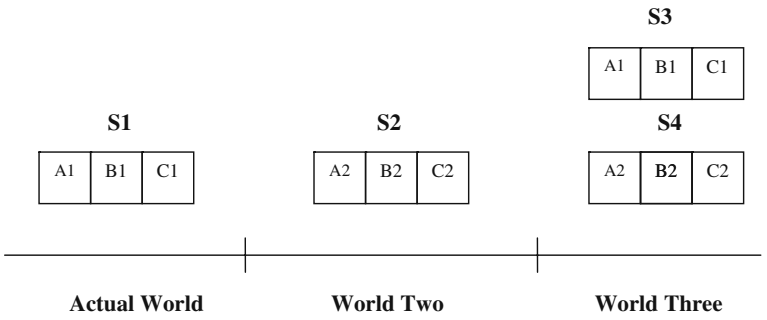

Fig. 3 The compossibility problem

As we have noted, if we reject the Restriction Principle, then we are allowed to say, *ex hypothesi*, S1 = S2. There also looks to be no reason to deny that S3 could be a way that S1 could have been. Nor does there look to be any reason to deny that S4 is a way that S2 could have been. But if S1 = S2, S1 = S3, and S2 = S4, then by the transitivity of identity, S3 = S4. But S3 is *not* identical to S4; they are necessarily distinct. But if S3 and S4 are necessarily distinct, and we run the argument backwards, then S1 and S2 are necessarily distinct, contradicting our original stipulation. A simple way to avoid this contradiction is to endorse the Restriction Principle, which would stop the problem before it started—by denying that S2 is a way that S1 could have been.[16]

Does the Compossibility Problem evince the Restriction Principle? It does not. To see why, notice that the Compossibility Problem demands that the property *being composed according to some plan* α can be possessed at W3 by two distinct objects, S3 and S4. In other words, the Compossibility Problem assumes that property P is not weakly unshareable. I have argued that on at least one reading of P, it *is* weakly unshareable. But if P is weakly unshareable, then S3 and S4 cannot both possess it. But if S3 and S4 cannot both possess P, then at most one of them will share P with S1 and S2. Therefore, either S3 $\neq$ S1 (because S1 possesses P essentially and S3 does not) or S4 $\neq$ S2 (because S2 possesses P essentially and S4 does not). Either way, however, a key premise of the Compossibility Problem (i.e. that S3 and S4 represent possible ways that S1 and S2 could have been, respectively) is false. Therefore, the Compossibility Problem fails to show that a denial of the Restriction Principle results in a contradiction. Therefore the Compossibility Problem does not evince the Restriction Principle.

My argument in the above paragraph assumes that property P is weakly unshareable. But suppose I am wrong about this. Even so, all I would need to do

[16] What I am calling the Compossibility Problem is a modified version of Forbes's 'Four Worlds Paradox' 1985, ch. 7) which has been modified by Mackie (2006, ch. 3) to make this very point: that to deny the Restriction Principle results in the putative contradiction noted above. I am grateful to an anonymous referee for pressing this point, and from whom I have borrowed some language in formulating this problem.

is to find a plausibly essential property set that *is* weakly unshareable. In the following section I will suggest such a property set. If that property set is plausibly essential and weakly unshareable, then the Compossibility Problem cannot be used against it to evince the Restriction Principle.[17] But if the artifactual essentialist is free to reject the Restriction Principle, the Tolerance Problem cannot even get off the ground. (Try getting a contradiction from Fig. 2 without it.)

To review, in this and the previous section I have argued that Mackie has failed to establish a presumption against the claim that some artifacts possess IEPs. We have seen that her Recycling Problem fails to show that one allegedly plausible IEP (MP) is not weakly unshareable. And we have seen that her Tolerance Problem rests on an assumption that the artifactual essentialist is free to reject. But unless the essentialist has a story to tell about what sort of properties are plausible candidates for being artifactual IEPs, we are left with little reason to be artifactual essentialists. In the next section I will briefly sketch such an account.

Mona Lisa's Essence

My goals in this final section are twofold. First, I will suggest a property set that I believe to be a good candidate for an artifactual IEP. Second, I will argue that it is plausible to think that some artifacts possess this property set. The upshot of this argument is that some artifacts possess essences. Because, to my knowledge, few philosophers have offered a sustained treatment of what an individual artifactual essence might look like, much of what I say will be largely exploratory.[18]

Here is the property set I believe to be a good candidate for an artifactual IEP:

(i) Possessing a certain type of physical structure π
(ii) Possessing a certain type of deliberative history δ
(iii) Possessing a certain token action history η

Let's briefly unpack each of these properties. I use the term 'type of physical structure' to refer to the way that the parts of a physical object must be arranged in order to yield to an artifact its practical and/or aesthetic functions. Paperclips, for example, possess a certain physical structure and it is that physical structure that allows them to fulfill their intended function. Hubcaps possess a different kind of physical structure—one that allows them to fulfill their intended function. The physical structure type of any given artifact can be coarse or fine-grained, and whether it is coarse or fine-grained will depend on the intended function of the artifact.[19]

[17] This promissory note will be redeemed in the next section, fn. 25.
[18] Indeed, some philosophers have argued that some artifacts possess essential properties. See, e.g. Davies (2004), Denkel (1995) and Dipert (1993). However, as we have seen, to claim that some artifacts possess an essential property is not to claim that some artifacts possess an individual essence, for a property may be essential to an artifact without it being both weakly and strongly unshareable.
[19] For more on the physical structures of artifacts, see Denkel (1995)

An artifact's 'deliberative history' is constituted by the relevant set of beliefs, desires and intentions the artisan possessed in creating the artifact. [20] When I design something I make choices as to what its proper parts will be, the manner in which its parts will be arranged and how they will be so arranged. This is true when we write books, build cars, or construct skyscrapers. Each of these choices is contingent upon the agent, that is, the choices arise from certain *belief-desire* states on the part of the designer. When I design a piano, my choices about its design arise from certain beliefs about how a piano should be designed and desires to act on the basis of these beliefs. Artifacts are designed to fulfill practical and/or aesthetic functions as well as to be recognized as being objects that were intended to fulfill those functions.[21]

I use the term 'action history' to refer to, very roughly, the relevant set of token mental and overt bodily actions by which the artisan creates an artifact. This set of actions will often include, but is not limited to: my decisions about what kind of object to make, what kind of plan to use, how I want the object to be understood and used or appreciated by others, at what point the artifact's construction is complete, as well as my overt bodily actions to gather the proper material, modify and arrange it, and to ensure that the resulting physical object sufficiently corresponds to my intentions for it.

My foregoing characterization of these notions is admittedly rough and ready and nothing short of a book-length treatment of them could do them justice. Those readers interested in pursuing one of these notions may consult the literature I have cited. My goal, however, is not to provide an extensive treatment of these notions; that would take us far afield from the present task, which is simply to gesture towards a set of properties that may plausibly be seen to constitute an IEP of some artifacts. In order to show that some artifacts possess an IEP, I need not, of course, argue that *all* artifacts possess them. After all, there is nothing incoherent about the claim that some, but not all, artifacts possess individual essences. My strategy, then, is to focus on one specific artifact, argue that it possesses an IEP, and then generalize from that artifact to a larger class of artifacts. The artifact I have in mind (although many others would suit my purposes just as well) is the *Mona Lisa,* the famous early 16th Century oil painting by Leonardo da Vinci. I now turn to motivate two claims:

[20] I am aware that there are important questions having to do with how we should individuate beliefs, desires, and intentions. Such questions usually center on whether these kinds of mental attitudes are individuated by their 'wide' or 'narrow' content. For my purposes, here, I need not take a firm stand on this issue, but I should say that I do conceive of these attitudes, at least with respect to the creation of artifacts, as being general or non-specific. That is, when an artisan sits down to create a artifact, she does not (or, at least typically does not) intend to create some *specific* artifact—the content of her plan to create a chair, for instance, is not so fine-grained as to include in its representational content some *specific* chair. Rather, her intention is (at least typically) a more coarse-grained intention to create some *non-specific* chair. This is true even if her general, non-specific plan to create a chair contains further sub-plans for how to go about building a chair. I therefore understand *types* of beliefs, desires and intentions to be individuated by their coarse-grained content, which is all I think is necessary to make sense of why the deliberative histories of artifacts can be essential to their identity. I therefore set aside the contentious issue of how to individuate *token* intentional attitudes that possess the same *type* of representational content. For more on intentions and their content, see Mele (1992). For more on the deliberative histories of artifacts, and especially their intentional histories, see Dipert (1993, ch, 3), and Davies (2004, ch. 7). I am grateful to an anonymous referee for encouraging me to clarify this point.

[21] For more on the deliberative histories of artifacts, see Dipert (1993)

first, that possessing a certain instantiation of property set (i–iii) is sufficient (in both the weak and strong senses of unshareability) for being the *Mona Lisa*, and second, that possessing that same instantiation of property set (i–iii) is necessary for being the *Mona Lisa.* Let's take these in turn.

First, consider weak unshareability. An object has a weakly unshareable property just in case no other object in this world can possesses that property set. The *Mona Lisa* was brought about via a certain token action history. Because token actions occur at most once at a world, no other artifact may be produced via the action history possessed by the *Mona Lisa.* Therefore, in the case of the *Mona Lisa*, no other object may possess the property set (i–iii), for that property set cannot be "recycled" at a world. Therefore, the *Mona Lisa* possesses a property set that is weakly unshareable.[22] Is this property set also strongly unshareable for the *Mona Lisa*? I see no reason to think otherwise. The *Mona Lisa* of this world possesses a certain kind of structure π, a certain kind of deliberative history δ, and a token action history η. Now go to any world in which an object possesses that set of properties. Whatever object you have just picked out, *that* is the *Mona Lisa*.[23] Therefore, with respect to the *Mona Lisa,* property set (i–iii) is also strongly unshareable. Property set (i–iii) therefore appears to meet the test of sufficiency. But is it also necessary? Is the possession of a certain kind of structure π, a certain kind of deliberative history δ, and a token action history η essential to the *Mona Lisa*?

First, consider the claim that the *Mona Lisa* essentially possesses a type of physical structure. As a painting, the *Mona Lisa* enjoys a certain kind of physical structure such that if it were to lose that structure, it would cease to be the *Mona Lisa*. Were it to be committed to the flames, or fed through a paper shredder, or used to create a thousand little spitballs, there would no longer be a painting, let alone the *Mona Lisa*. Had da Vinci, instead of having painted a poplar panel with some oil paints, whittled some wood into the shape of a dinosaur, or scribbled a drawing of a harmonica doing jumping-jacks, he would not have made a painting, let alone the *Mona Lisa.* If da Vinci had painted a dragon, or a wild-eyed, mohawked woman grinning from ear to ear, he would have created a painting, but not the *Mona Lisa*. A painting of a woman with a mohawk would possess a sufficiently different structure at the chemico-physical level that it would ensure that it is not identical to the *Mona Lisa.* What these observations suggest is that at some level of description, the *Mona*

[22] Here, I make good on a promissory note from "Artifacts and Strong Unshareability?". There, I claimed that the Compossibility Problem fails to produce a contradiction (thereby failing to evince the Restriction Principle) if the property in question is weakly unshareable. But property set (i–iii) is weakly unshareable. Therefore, the Compossibility Problem poses no threat to my rejection of the Restriction Principle in the present case. One may object that such a property is not essential to the *Mona Lisa* (I will try to deflect that criticism below), but it is clearly weakly unshareable, which is what is needed (along with my rejection of the Restriction Principle) to insulate my account from both the Recycling and Tolerance

[23] My claim here rests on the assumption that the very events that occur in the actual world also occur in other possible worlds. Some may demur at this claim. Some may claim, for example, that in those other worlds, what we have is a numerically distinct event, very similar to the event in the actual world, and falling under the same natural laws. However, it would take a much longer treatment of the modality of events to address this point, space that I do not have available here. But because there seems to be nothing obviously wrong about such an assumption, I will help myself to it. I return to this point in fn. 36. I appreciate an anonymous referee for pointing out this assumption.

Lisa possesses a physical structure that is essential to it. For if there are changes to the physical structure of the *Mona Lisa* that are *identity*-destroying, it is reasonable to think that the *Mona Lisa* has some essential structural properties.

Notice, however, that it is not essential to the *Mona Lisa* that it is composed of the specific token parcel of matter that it is composed of in this world. Presumably, da Vinci could have used a numerically distinct but qualitatively identical batch of paints and still painted the *Mona Lisa* so long as that painting possessed, at the some level of description, the same type of physical structure that the *Mona Lisa* possesses in the actual world. What determines which level of description is relevant in determining sameness of structure-type? The natural answer to this question is to make reference to the artist's intentions. Presumably, da Vinci did not contemplate the structure of specific collections atoms to be applied to the poplar panel. However, he did presumably contemplate the structure of certain macro-level properties of the painting —its texture, shading, color, etc. From da Vinci's point of view, any token micro-level structure that permits him to fulfill his intentions about the type of macro-level structure he intends to bring about is wholly sufficient. Therefore, the relevant level of description of a structure-type will, at least in this case, fall at the "macro-level." At this level of description, the *Mona Lisa's* physical structure is essential to it.[24]

Turn now to the claim that the *Mona Lisa* possesses the essential property of having a certain type of deliberative history. As da Vinci deliberated prior to and during the creation of the *Mona Lisa*, he held beliefs and desires about what kind of object to make, how to make it, how it should be understood and used, *inter alia*. He also had certain kinds of intentions to create an object according to an action plan. These beliefs, desires and intentions are essential to the *Mona Lisa* in that if these attitudes were to have had a sufficiently different content, the resulting artifact would not be identical to the *Mona Lisa*. Suppose, contrary to fact, that da Vinci believed that his physician needed a doorstop, desired to give him the most awkward, ugly doorstop he could make, and intended to spend the next few years creating such a thing. At the end of those few years the result was a characteristically identical painting to the one in the actual world. However, that object would not be identical to the *Mona Lisa.* Part of what determines *Mona Lisa*'s identity is the fact that da Vinci intended to portray the wife of a wealthy merchant, that he intended to express her purity and virtue by arranging her hands in a special way, that he intended for the landscape to be understood to be imaginary, contrary to standard artistic practice at the time, and so on. A painting that lacked this kind of deliberative history could not be the *Mona Lisa*; it is therefore essential to it.

But what explains these intuitions that the *Mona Lisa's* deliberative history is essential to it? Put very crudely, artworks are (among other things) artistic statements which carry certain artistic meanings. And in typical cases, the meaning of a

[24] There are, of course, very serious and difficult issues having to do with artifactual identity through deterioration and/or restoration. However, these are difficult problems for any view of the metaphysics of physical objects that claims that artifacts can persist through change, and so those problems present no unique problem for my claim that some artifacts possess essentially, at some appropriate level of description, a physical structure.

statement is determined, at least in part, by the intentions one had in making the statement. In order to contemplate and appreciate the *Mona Lisa*, then, we must contemplate the artistic statement made by the work, and to contemplate the artistic statement of the *Mona Lisa*, we must contemplate that artistic statement's meaning. But to contemplate the meaning the *Mona Lisa*, we must contemplate da Vinci's intentions for creating it. Therefore, his intentions (and his beliefs and desires with which his intentions are embedded) in creating the work are essential to the artwork *qua* artwork. This is why we have such a strong intuition that the *Mona Lisa* could not have been intended to be a doorstop or a portrait of a dragon. And this is why it is plausible to think that the *Mona Lisa* possesses its deliberative history essentially.[25]

Finally, I have suggested that the token action history by which Da Vinci composed the *Mona Lisa* is essential to it. But why think that? Consider the fact that one reason why many artworks are seen as being special and unique creations is because we think that the artwork's causal history is essential to it. Suppose in some other world a child sat down with some oil pants and painted a piece of art qualitatively identical to the *Mona Lisa*. Is it the *Mona Lisa?* Or suppose that in some world an amateur artist paints a portrait for her art class with the same kind of deliberative history that Da Vinci used in bringing about the *Mona Lisa*. Suppose that the student's painting is qualitatively identical to the *Mona Lisa.* Can we plausibly hold that *that* thing is identical to the *Mona Lisa*, even given the fact that the student's painting possesses the same type of deliberative history and physical structure as the *Mona Lisa* in the actual world?

I doubt it. We can see why by taking seriously the claim that what makes an object an artwork (or more generally, an artifact) does not consist in any of the present physical qualities of the physical object.[26] Although an object's present physical properties may point to, or suggest, that it is an artwork, they do not *make* it so. Two characteristically identical parcels of limestone may differ in the fact that one is a sculpture, while the other is not (for it was shaped "naturally" at the bottom of a river). A proper understanding of artworks therefore must make reference to the historical aspects of such objects.

Furthermore, a proper understanding of a *specific* artwork must make reference to *its* historical properties, one of which is the artistic "performance" by which the artist brought about the artwork. And it is not simply the *kind* of token actions that da Vinci used to bring about the painting that we contemplate when we appreciate the *Mona Lisa*. Rather, as Davies has pointed out, in appreciating a work like the *Mona Lisa,* we "try to construct a perspicuous representation of the performance" by which the painting was actually created, and "it is relative to that representation that we decide when we have *the same performance* in counterfactual situations" (2004, p. 147, italics are original). "It is these judgments about sameness of performance,"

[25] Although they will disagree on many other important matters, the claim that at least some artifacts possess their deliberative histories essentially is defended by both Dipert (1993, pp.194–195) and Davies (2004, p. 163 ff.)

[26] See Dipert (1993, p. 15). George Dickie has also admitted this much (1971, p. 101).

Davies concludes, "that ground our modal judgments about artworks" (p. 147).[27] In other words, our modal judgments about the *Mona Lisa* are grounded in what da Vinci *actually did,* not just the *kind* of thing he did.[28] If this is correct, we appear to have established that it is at least *plausible* to think that the *Mona Lisa* possesses its token action history essentially, which is all I have set out to show.

Objections and Replies

First, one might worry that an artifact's physical structure and deliberative history may turn out to be far less independent of the artifact's token action history than I have made them seem. In other words, it may be the case that given a certain artifact's token action history, its physical structure and deliberative history come along for the ride, supervening on the action history. Therefore, the token action history would really be doing all the work in establishing a plausible artifactual IEP. If this turned out to be the case, I would welcome it with open arms. Recall that my goal is to provide an account of a property set that can plausibly be taken to qualify as an IEP. If a token action history does the job all by itself, I have no reason to argue—I'm very ecumenical about this sort of thing and welcome all plausible IEPs. However, if it turned out that the token action history fails to qualify as an IEP, we have in my account two other properties that may help to push us closer.[29]

Second, it has been suggested to me that my proposed artifactual IEP encounters problems with representational properties. For example, we can ask: what is the relationship between the *Mona Lisa* and a painting in another possible world, just like the *Mona Lisa* except for the fact that the woman who sat for the portrait was Mona Lisa's indistinguishable twin, Schmona Lisa?[30] Are these two paintings identical? Why or why not?

On my account, whether the *Mona Lisa* is identical to a portrait of Schmona Lisa in another world depends upon first, whether da Vinci desired that some specific person sit in front of him while he painted the portrait. If da Vinci did *not* care about

[27] Although I have co-opted Davies' argument in defense of my claim that the *Mona Lisa*'s token action history is essential to it, it warrants pointing out that ultimately, Davies concludes that the artistic performance *is* the artwork, not just an essential property of it. Although I am sympathetic to this view, I remain agnostic about what sort of thing an artwork like the *Mona Lisa* is. Even so, I find his argument to the conclusion that an artwork's action history is essential to it persuasive and so I happily use it here. For a fuller defense of the claim that an artwork's token action history is essential to it, see his 2004, chs. 4–7.

[28] For arguments against the claim that what is essential to an artwork is its type of action history, see Davies (2004, ch. 6).

[29] Very briefly, here is one reason to suspect that the *Mona Lisa's* deliberative history does not supervene on its token action history. If the *Mona Lisa*'s deliberative history supervened on its action history, da Vinci could not have, in another world, performed the same token mental and physical actions (e.g. decisions and bodily movements) but had beliefs and desires with different content *at some point* in the deliberative history. This seems implausible, at least on the face of things. If so, then an artifact's deliberative history does not always supervene on its action history and would appear to be as independent as I have suggested. However, even if this is wrong, I should stress that I am comfortable with that—my goal is to gesture toward a plausible artifactual IEP. I am happy if some of my gesturing hits the mark.

[30] I am grateful to an anonymous referee for this journal who raised this objection, and who attributed this sort of case to Gregory Currie.

who was actually sitting in front of him when he painted the *Mona Lisa*, then I see no apparent reason to deny that the *Mona Lisa* could not have been a portrait of Schmona. But if he *did* care about who was sitting in front of him, then the following facts are also relevant: second, whom da Vinci *intended* to paint, and third, whom da Vinci *actually* painted.

Now consider the following descriptions of four characteristically identical paintings, any one of which, for all we know, is a true description of the *Mona Lisa*.

(1) Da Vinci intended to paint a portrait of Mona Lisa and painted Mona Lisa.
(2) Da Vinci intended to paint a portrait of Mona Lisa but painted Schmona Lisa.
(3) Da Vinci intended to paint a portrait of Schmona Lisa but painted Mona Lisa.
(4) Da Vinci intended to paint a portrait of Schmona Lisa and painted Schmona Lisa.

Consider the pairs of portraits, (1)/(3) and (2)/(4). Each member of each pair is qualitatively identical to, but (on my account) distinct from, the other member of the pair because they differ in their deliberative histories. Now consider the pairs of portraits (1)/(4) and (2)/(3). Each member of each pair is qualitatively identical to, but (on my account) distinct from, the other member of the pair because they differ in their action histories. (This is because actions are events, and events essentially involve their objects. So if you have a different object, you have a different event.)

Now suppose, for example, that (1) is a true description of the *Mona Lisa*. If so, then at another world in which da Vinci intended to paint a portrait of Schmona, that painting would *not* be a way that the *Mona Lisa* could have been because such a portrait would have a sufficiently different deliberative history. Moreover, at a world in which da Vinci intended to paint a portrait of Mona, but actually painted Schmona, that painting would also not be a way that the *Mona Lisa* could have been, because such a portrait would have a different token action history.[31] Similar remarks apply to whichever of the four descriptions is actually true of the *Mona Lisa*.

In asking whether a qualitatively identical portrait of Schmoma in another world is identical to the *Mona Lisa*, we can answer this question on my account only if we have the following information: first, we must know whether da Vinci cared whether some specific person sat for the portrait, and second, we must know what the actual deliberative and action histories of the *Mona Lisa* are so that we can determine whether they are shared by the portrait of Schmona in the counterfactual situation. One may disagree with this solution, but even so, it appears that my account at least has the resources to address our original worry about representational properties.[32]

[31] One might wonder why in this case I have said that a different action history gives us a distinct painting but in the case where da Vinci does not care who is sitting for the portrait, I have implied that a different action history (i.e. his painting of Schmona instead of Mona) does *not* necessarily give us a distinct painting. The answer has to do with da Vinci's artistic intentions. Not all of his actions in creating the *Mona Lisa* are essential to it. Suppose for example, da Vinci quietly tapped his big toe for 3 s one day while finished the nose. Certainly we do not want to say that this action is essential to the *Mona Lisa*. The reason is simply because (we can suppose) such an action was irrelevant to da Vinci's artistic intentions. In the first case above, we have stipulated that da Vinci doesn't care who is sitting for the portrait as long as whoever is sitting there is indistinguishable from Mona, so in a counterfactual situation in which he paints Schmona, we can treat this like the tapping of the foot. This explains the difference.

[32] My thanks to Craig Warmke for helping me to formulate this reply.

Third, there is a serious worry lurking behind my claim that the *Mona Lisa*'s token action history is essential to it. To bring this problem into relief, we can suppose that da Vinci had brought about the *Mona Lisa* by engaging in three basic actions, A1, A2, and A3, which occur at three different times, t^1, t^2, and t^3, respectively. I have claimed that it is an essential property of the *Mona Lisa* that it was created as a result of A1-A3. I have also claimed (in "Artifacts and the Recycling Problem") that token actions are token events, and that if any events A and B differ in the time at which they occur, then A and B are different events. But this looks to entail that it is an essential property of the *Mona Lisa* that it was created by a series of actions that took place at exactly t^1, t^2, and t^3. Therefore, it looks as if we get the very counterintuitive result that the exact time at which da Vinci acted to bring about the *Mona Lisa* is essential to it. But this seems patently false. Surely, da Vinci could have paused an extra second before he did A1, or could have taken an extra long lunch, increasing the time between A2 and A3 by 5 min, and so on.

I concede that this is a problem for the claim that an artifact's token action history is essential to it. I do not, however, think that this problem is as serious as it might first appear. To see why, consider what David Davies has written about this very problem:

> [The actual time of occurrence] enters into the individuation of event-tokens *not* because a particular time of occurrence is part of our sense of what it is to be *this* event-token, but because we are individuating event-*tokens*, and it is a condition for something to be a *token* event that it should have a unique temporal location in the world. Thus if, in individuating event-tokens in a world, we know that e1 and e2 occur at different times, we know that they must be distinct event-tokens, however many other properties they have in common. It is a condition for e's being an event-*token* that e occur at most once in a world, but it is not, in general, part of our sense of e's being *this* even-token that it occur at a particular time, nor, a fortiori that, in any possible world in which it occurs, it should occur in that world at that particular time that it occurs in the actual world. (2004, p. 170–171)[33]

This seems to me to be exactly right: and if so, then we can avoid the very undesirable consequence of having to claim that the time at which the *Mona Lisa* was created is an essential property of it. Granted, many more questions will need to be addressed in order to flesh out fully the way in which an artifact's action history can be essential to it. We would want to know, for instance, how many of the actions that result in the production of an artifact are essential historical properties of the object. We would also want an explanation of how to account for sameness of event-tokens across worlds if we concede that the time at which an event occurs is not

[33] To briefly return to a point I made above in fn. 26 about the trans-world identity of events: in this passage, Davies appears to think of the very same events that occur in the actual world as occurring in other possible worlds when he rigidly designates event 'e' and makes reference to "any possible world in which it [e] occurs." This appears to imply that e occurs in this world as well as in other words, and that the event in question at another world is not just some numerically distinct event, very much like e, falling under the same natural laws.

typically essential to them. These are interesting and difficult questions, but ones that could only be handled in a book-length treatment of them.[34]

If what I have said is roughly correct, however, we seem to have found a property set of the *Mona Lisa* that is plausibly essential and weakly and strongly unshareable. Therefore it is plausible that at least one artifact has an essence. And many other artifacts will presumably possess essences as well—at the very least, those that possess property set (i–iii) essentially. One avenue of further research into artifacts and essences is to explore the question of whether all artifacts possess essences, and if they do not, where the line of demarcation is, and what explains why some, but not all artifacts possess them.

Conclusion

My goal in this paper has been to show that the claim that some artifacts have an essence is more plausible than some philosophers think. I have tried to show that two recent arguments attempting to establish a presumption against individual artifactual essences both fail: the Recycling Problem rests on an ambiguity, and the Tolerance Problem rests on an assumption that the artifactual essentialist is free to reject. I have also suggested a property set that I believe to be a plausible candidate for an IEP and argued that at least one artifact, the *Mona Lisa*, possesses it.[35]

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[34] One promising strategy for approaching these issues is found in Davies (2004). His strategy is to make a distinction between what he calls "doings" and "token-actions *strictu sensu*" (p. 171–173). To put things roughly, "doings" are action-tokens whose individuating conditions have been relaxed so as not to include the specific time at which the action occurs as essential to its identity. By understanding the action-history of the *Mona Lisa* as a "doing" we can retain the claim that the token-actions by which it was brought about are essential without having to be committed to the dubious claim that the exact time at which it was created is essential. Notice, however, that even if we construe an artifact's action history as a "doing," the property of possessing that doing would still be weakly unshareable, for every doing occurs at most once *at a* world.

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