

## CAN A MUSICAL WORK BE CREATED?

Ben Caplan and Carl Matheson

Can a musical work be created? Some say ‘no’. But, we argue, there is no handbook of universally accepted metaphysical truths that they can use to justify their answer. Others say ‘yes’. They have to find abstract objects that can plausibly be identified with musical works, show that abstract objects of this sort can be created, and show that such abstract objects can persist. But, we argue, none of the standard views about what a musical work is allows musical works both to be created and to persist.

### I. INTRODUCTION

IN ‘WHAT a Musical Work Is’, Jerrold Levinson lays down three criteria that, he argues, any adequate account of what a musical work is must meet.<sup>1</sup> The first of these is what he calls the *creatability* requirement, namely:

(Cre) Musical works must be such that they do *not* exist prior to the composer’s compositional activity, but are *brought into* existence by that activity.<sup>2</sup>

Levinson famously uses the three criteria to argue that a musical work is not a sound structure, but rather a sound-structure-as-indicated-by-composer-X-at-

<sup>1</sup> Jerrold Levinson, ‘What a Musical Work Is’, *Journal of Philosophy*, vol. 77, no. 1 (January 1980), pp. 5–28 (reprinted in Jerrold Levinson, *Music, Art, and Metaphysics: Essays in Philosophical Aesthetics* [Ithaca, NY: Cornell U.P., 1990], pp. 63–88).

<sup>2</sup> *Ibid.*, p. 9 (original emphases). The other criteria are the *fine individuation* requirement, i.e. (Ind) musical works must be such that composers working in different musico-historical contexts who determine identical sound structures invariably compose distinct musical works, and the *inclusion of performance means* requirement, i.e. (Per) musical works must be such that specific means of performance or sound production are integral to them. On (Ind), see Levinson, ‘What a Musical Work Is’, pp. 10–14. See also David Carrier, ‘Art without Its Artists?’, *British Journal of Aesthetics*, vol. 22, no. 3 (Summer 1982), pp. 233–244; Peter Kivy, ‘Platonism in Music: Another Kind of Defense’, *American Philosophical Quarterly*, vol. 24, no. 3 (July 1987), pp. 245–252, at pp. 245–248 (reprinted in Peter Kivy, *The Fine Art of Repetition: Essays in the Philosophy of Music* [Cambridge: Cambridge U.P., 1993], 59–74); Jerrold Levinson, ‘What a Musical Work Is, Again’, in *Music, Art, and Metaphysics*, pp. 215–263, at pp. 221–227; and Harry Deutsch, ‘The Creation Problem’, *Topoi*, vol. 10, no. 2 (September 1991), pp. 209–225, at pp. 213–216. On (Per), see Levinson, ‘What a Musical Work Is’, pp. 14–19. See also Peter Kivy, ‘Orchestrating Platonism’, in Thomas Anderberg, Tore Nilstun, and Ingmar Persson (eds), *Aesthetic Distinction: Essays Presented to Göran Hermerén on His 50th Birthday* (Lund: Lund U.P., 1988), pp. 42–55 (reprinted in Kivy, *The Fine Art of Repetition*, pp. 75–94); and Levinson, ‘What a Musical Work Is, Again’, pp. 231–247. We hope to write a paper on (Ind). We have no hopes of writing a paper on (Per).

time-*t*.<sup>3</sup> Such sound structures he calls *indicated structures*.<sup>4</sup> Like pure sound structures, indicated structures are abstract objects: in particular, they are *types*.<sup>5</sup> But, unlike pure sound structures, indicated structures are created. It is this feature of indicated structures, of course, that allows Levinson's view to meet the creatability requirement.

What motivates the creatability requirement is the intuition that musical works are created. In an oft-quoted phrase, Levinson says that the 'main reason' for accepting the creatability requirement is that 'it is one of the most firmly entrenched of our beliefs concerning art'.<sup>6</sup> Elsewhere, he describes the claim that composers bring musical works into existence as an 'intuitive datum'.<sup>7</sup> Some share this intuition;<sup>8</sup> but others do not.<sup>9</sup> (Indeed, before writing this paper, one of us had the intuition, and one of us did not.)

We have two aims in this paper. The first is to see what, beyond intuition-mongering, can be said for or against the creatability requirement. The second is to connect the debate about the creatability requirement to more general issues in metaphysics. To these ends, we take as our point of departure two recent papers by Julian Dodd: namely, 'Musical Works as Eternal Types' (hereinafter MW) and 'Defending Musical Platonism' (hereinafter DMP).<sup>10</sup> Dodd is of particular interest for our purposes, since (i) although he argues against the creatability requirement, he is prepared—at least for the sake of argument—to grant the intuition behind it (he concedes that it 'may well be that composers are commonly viewed

<sup>3</sup> Levinson, 'What a Musical Work Is', pp. 19–23. Following other recent writers (particularly, Julian Dodd and Robert Howell), we ignore Levinson's treatment of performance means. See note 2. See Julian Dodd, 'Musical Works as Eternal Types', *British Journal of Aesthetics*, vol. 40, no. 4 (October 2000), pp. 424–440, at p. 426, n. 7; and Robert Howell, 'Types, Initiated and Indicated', *British Journal of Aesthetics*, vol. 42, no. 2 (April 2002), pp. 105–127, at p. 106, n. 3.

<sup>4</sup> Levinson, 'What a Musical Work Is', p. 20.

<sup>5</sup> *Ibid.*, esp. pp. 21–22.

<sup>6</sup> *Ibid.*, p. 8.

<sup>7</sup> See Jerryd Levinson's review of Gregory Currie, *An Ontology of Art* (New York, Macmillan, 1989), in *Philosophy and Phenomenological Research*, vol. 52, no. 1 (March 1992), pp. 215–222, at p. 216 (reprinted as 'Art as Action', in Jerryd Levinson, *The Pleasures of Aesthetics* [Ithaca, NY: Cornell U.P., 1996], pp. 138–149). See also Levinson, 'What a Musical Work Is', p. 8 and 'What a Musical Work Is, Again', pp. 218–220.

<sup>8</sup> See, for example, John A. Fisher, 'Discovery, Creation, and Musical Works', *Journal of Aesthetics and Art Criticism*, vol. 49, no. 2 (Spring 1991), pp. 129–136; Stefano Predelli, 'Against Musical Platonism', *British Journal of Aesthetics*, vol. 35, no. 4 (October 1995), pp. 338–350, at pp. 340, 342–343; Stefano Predelli, 'Musical Ontology and the Argument from Creation', *British Journal of Aesthetics*, vol. 41, no. 3 (July 2001), pp. 279–292; and Howell, 'Types, Initiated and Indicated', pp. 108–109.

<sup>9</sup> See, for example, Peter Kivy, 'Platonism in Music: A Kind of Defense', *Grazer philosophische Studien*, vol. 19 (1983), pp. 109–129, at pp. 112–119 (reprinted in Kivy, *The Fine Art of Repetition*, pp. 35–58); Kivy, 'Platonism in Music', pp. 248–251; and Jerryd J. Katz, *Realistic Rationalism* (Cambridge, MA: MIT Press, 1998), pp. 168–169.

<sup>10</sup> J. Dodd, see note 3 above; and 'Defending Musical Platonism', *British Journal of Aesthetics*, vol. 42, no. 4 (October 2002), pp. 380–402.

as literally bringing their compositions into existence', MW, p. 434); and (ii) one of his main reasons for rejecting the creatability requirement has to do with more general issues in metaphysics: he argues, on general metaphysical grounds, that no view on which a musical work is a type or any other sort of abstract object can satisfy the creatability requirement. The view that a musical work is a created abstract object, he says, is 'of dubious coherence' (MW, p. 429); it is 'based on a mistake' (MW, p. 432); and it is 'misconceived' (MW, p. 434). If Dodd is right, then even Levinson's view, on which a musical work is an indicated structure (which is type), cannot satisfy the creatability requirement.

In Section II, we take up the question of whether a view on which a musical work is an abstract object can satisfy the creatability requirement. In Section III, we turn our attention from abstract objects in general to specific sorts of abstract objects, and we take up the question of whether a view on which a musical work is a set, a type, or a property can satisfy the creatability requirement. In Section IV, we take up the question of whether those who think that musical works are created can account for the continued existence of musical works.

## II. CAN ABSTRACT OBJECTS BE CREATED?

### *II.1 Dodd on abstract objects*

Dodd argues that abstract objects cannot be created (MW, pp. 431, 432; DMP, p. 397). Let us call this view *anti-creationism about abstract objects*, or *abstract anti-creationism* for short. Abstract anti-creationism is the denial of the view that abstract objects can be created. Let us call that view *creationism about abstract objects*, or *abstract creationism* for short. Dodd's argument for abstract anti-creationism is straightforward:

- (P<sub>1</sub>) Abstract objects cannot enter into causal relations.
- (P<sub>2</sub>) If abstract objects cannot enter into causal relations, then abstract objects cannot be created.
- (C<sub>1</sub>) So abstract objects cannot be created. [From (P<sub>1</sub>) and (P<sub>2</sub>).]

Although Dodd describes (C<sub>1</sub>) as 'a plausible *prima-facie* maxim' (MW, p. 431),<sup>11</sup> he offers an argument for it: 'the reason why this principle [C<sub>1</sub>] is so intuitive is this: the creation of an abstract object would have to be a kind of causal interaction between a person and an abstract object; and abstracta cannot enter into such interactions' (MW, p. 431). The claim that abstracta cannot enter into such interactions is our (P<sub>1</sub>): abstract objects cannot enter into causal relations. And, if the creation of an abstract object would have to be a kind of causal interaction

<sup>11</sup> Dodd cites Predelli, 'Against Musical Platonism', p. 340. See Dodd, 'Musical Works as Eternal Types', p. 431, n. 12.

between a person and an abstract object, then (P<sub>2</sub>) is true: if abstract objects cannot enter into causal relations, then abstract objects cannot be created.

The argument from (P<sub>1</sub>) and (P<sub>2</sub>) to (C<sub>1</sub>) is valid. And it is a short step from (C<sub>1</sub>) to the conclusion that no view on which a musical work is an abstract object can satisfy the creatability requirement.

(P<sub>3</sub>) If abstract objects cannot be created, then no view on which a musical work is an abstract object can satisfy the creatability requirement.

(C<sub>2</sub>) So no view on which a musical work is an abstract object can satisfy the creatability requirement. [From (C<sub>1</sub>) and (P<sub>3</sub>).]

The argument from (C<sub>1</sub>) and (P<sub>3</sub>) to (C<sub>2</sub>) is valid. And, if the creatability requirement requires that a musical work be created, then (P<sub>3</sub>) is true, in which case the soundness of the argument for (C<sub>2</sub>) comes down to the truth of (C<sub>1</sub>).

(C<sub>1</sub>) is a general conclusion, one that applies equally to all abstract objects. If correct, the conclusion would rule out Levinson's view, on which a musical work is an indicated structure, since an indicated structure is a created abstract object. But it would rule out more than that; it would also rule out any abstract creationist view: for example, other views in the philosophy of music on which musical works are created abstract objects,<sup>12</sup> views in the philosophy of fiction on which fictional characters are created abstract objects,<sup>13</sup> and perhaps even views in the philosophy of mathematics on which numbers are 'free creations of the human mind'.<sup>14</sup>

As we mentioned, the argument from (P<sub>1</sub>) and (P<sub>2</sub>) to (C<sub>1</sub>) is valid. Dodd does not say much to defend (P<sub>2</sub>). But just about everyone assumes that creating an object requires causing it to come into existence;<sup>15</sup> and, given that assumption, (P<sub>2</sub>) is true, in which case the soundness of the argument for (C<sub>1</sub>) comes down to the truth of (P<sub>1</sub>). Dodd describes (P<sub>1</sub>) as an 'intuition' (MW, p. 434) and as a 'plausible principle' (DMP, p. 397). But is it true?

<sup>12</sup> See, for example, Amie L. Thomasson, *Fiction and Metaphysics* (Cambridge: Cambridge U.P., 1999), pp. 41, 131–132; and 'Fictional Characters and Literary Practices', *British Journal of Aesthetics*, vol. 43, no. 2 (April 2003), pp. 138–157, at 140.

<sup>13</sup> See, for example, Peter van Inwagen, 'Creatures of Fiction', *American Philosophical Quarterly*, vol. 14, no. 4 (October 1977), pp. 299–308 (reprinted in Peter van Inwagen, *Ontology, Identity, and Modality: Essays in Metaphysics*, Cambridge Studies in Philosophy [Cambridge: Cambridge U.P., 2001], pp. 37–56); Thomasson, *Fiction and Metaphysics*; and Thomasson, 'Fictional Characters and Literary Practices'.

<sup>14</sup> Richard Dedekind, *Was sind und was sollen die Zahlen?* (Braunschweig: Vieweg, 1888), trans. Wooster Woodruff Beman as 'The Nature and Meaning of Number', in Richard Dedekind, *Essays on the Theory of Numbers* (LaSalle, IL: Open Court, 1901), pp. 31–115, at p. 31.

<sup>15</sup> Just about everyone; but not everyone: see Deutsch, 'The Creation Problem'. And see note 36.

## II.2 Abstract objects and causal relations

Abstract creationists might point to what they take to be a host of counter-examples to (P<sub>1</sub>): for example, natural forces cause the species *hedgehog* to come into existence;<sup>16</sup> the Ford Motor Company causes the type *Ford Thunderbird* to come into existence;<sup>17</sup> Sam causes the type *Sam's signature* to come into existence;<sup>18</sup> and so on. (Although he says that the type comes into existence, Howell does not explicitly say that it is caused to do so. Still, on his view, types exist in virtue of participating in causal chains. See 'Types, Initiated and Indicated', p. 117.) But abstract anti-creationists will not find these alleged counterexamples any more intuitively plausible than the creatability requirement itself. For example, abstract anti-creationists would probably counter that natural forces cause members of the species *hedgehog*, but not the species itself, to come into existence; the Ford Motor Company causes tokens of the type *Ford Thunderbird*, but not the automobile type itself, to come into existence; Sam causes tokens of the type *Sam's signature*, but not the signature type itself, to come into existence; and so on.<sup>19</sup>

Abstract anti-creationists might thus be able easily to dismiss one kind of argument *against* (P<sub>1</sub>). But it would take more for abstract anti-creationists to argue *for* (P<sub>1</sub>). To establish (P<sub>1</sub>), abstract anti-creationists would need to do some serious metaphysical work: among other things, they would need to say something about what abstract objects are and what causation is. Let us start with abstract objects.

There are a couple of ways of cashing out the distinction between abstract and concrete objects. For example, abstract anti-creationists might say that concrete objects are spatiotemporally located and causally related to other objects, whereas abstract objects are not. That is, abstract objects are not located in space; they are not located in time; they do not causally affect anything; and they are not causally affected by anything either. This is what David Lewis calls *the Negative Way*.<sup>20</sup> Dodd might have something like the Negative Way in mind. Perhaps he would concede that abstract objects are located in time. (Although he describes them as existing eternally rather than sempiternally, he says that types exist at all times [MW, pp. 435–436]. And, as we will see in the next section, he says that impure sets exist at some but not all times.) But he says that such abstract objects as types, sets, numbers, and propositions are not located in space (DMP, pp. 384, 390). And he seems to find it inconceivable that abstract objects could enter into causal relations. In particular, he seems to think that anyone who thinks that musical

<sup>16</sup> Levinson, 'What a Musical Work Is', pp. 21–22. Cf. Howell, 'Types, Initiated and Indicated', p. 117.

<sup>17</sup> Levinson, 'What a Musical Work Is', pp. 21–22. Cf. Howell, 'Types, Initiated and Indicated', p. 122.

<sup>18</sup> The signature example comes from Howell, 'Types, Initiated and Indicated', p. 113.

<sup>19</sup> See, for example, Dodd, 'Musical Works as Eternal Types', p. 429 (on the type *chocolate éclair*); and 'Defending Musical Platonism', pp. 391–392 (on a signature type).

<sup>20</sup> David Lewis, *On the Plurality of Worlds* (Malden, MA: Blackwell, 1986), p. 83.

works are created—and hence, by (P<sub>2</sub>), can enter into causal relations—*ipso facto* thinks that musical works are *not* abstract. For example, he mentions what he describes as Saam Trivedi's 'prejudice against abstracta' (DMP, p. 384), his 'overtly nominalist sympathies' (DMP, p. 384), and his 'contested nominalist intuitions' (DMP, p. 385). But, in the spirit of Levinson, Trivedi explicitly thinks that musical works are abstract.<sup>21</sup>

(P<sub>1</sub>) is a premise in Dodd's argument for (C<sub>1</sub>), which is abstract anti-creationism; and, in arguing for abstract anti-creationism, abstract anti-creationists are not entitled to simply assume the Negative Way. For abstract creationists will reject the Negative Way. After all, they think that abstract objects can be created and hence—by (P<sub>2</sub>)—can enter into causal relations. Any characterization of the distinction between abstract and concrete objects that immediately entails (P<sub>1</sub>) is too strong for abstract anti-creationists' dialectical purposes.

What abstract anti-creationists need, then, is another way of cashing out the distinction between abstract and concrete objects, one that is acceptable to abstract creationists and abstract anti-creationists alike. Abstract anti-creationists might say that concrete objects are located in space, whereas abstract objects are not. Although the claim that abstract objects are not located in space does not immediately entail (P<sub>1</sub>), it is still a claim that not all abstract creationists accept. Some abstract creationists think that abstract objects are not located in space (and perhaps even that such objects are abstract *in virtue of* not being located in space).<sup>22</sup> But other abstract creationists think that abstract objects—for example, fictional characters, novels, species, or corporations—are located in space.<sup>23</sup>

Instead, abstract anti-creationists might say that concrete objects are things like rocks and tables and chairs, whereas abstract objects are things like sets and numbers and propositions. This is what Lewis calls *the Way of Example*.<sup>24</sup> The Way of Example might be acceptable to abstract creationists and abstract anti-creationists alike. But, if abstract anti-creationists merely enumerate certain

<sup>21</sup> Saam Trivedi, 'Against Musical Works as Eternal Types', *British Journal of Aesthetics*, vol. 42, no. 1 (January 2002), pp. 73–82, at p. 79.

<sup>22</sup> See, for example, Nathan Salmon, 'Mythical Objects' [2000], in Joseph Keim Campbell, Michael O'Rourke, and David Shier (eds), *Meaning and Truth: Investigations in Philosophical Semantics*, Topics in Contemporary Philosophy 1 (New York: Seven Bridges, 2002), pp. 105–123, at p. 112; and 'Puzzles about Intensionality', in Dale Jacquette (ed.), *A Companion to Philosophical Logic*, Blackwell Companions to Philosophy 22 (Malden, MA: Blackwell, 2002), pp. 73–85, at p. 79. See also Thomasson, *Fiction and Metaphysics*, pp. 126–127; and 'Fictional Characters and Literary Practices', pp. 138, 140.

<sup>23</sup> On fictional characters, see Jeffrey Goodman, 'Where Is Sherlock Holmes?', *Southern Journal of Philosophy*, vol. 41 (2003). (See also David Braun, 'Empty Names, Fictional Names, Mythical Names', forthcoming in *Noûs*.) On novels, species, and corporations, see John P. Burgess and Gideon Rosen, *A Subject with No Object: Strategies for Nominalistic Interpretation of Mathematics* (Oxford: Clarendon Press, 1997), pp. 21–22. (But Burgess and Rosen might not be committed to abstract creationism.)

<sup>24</sup> Lewis, *On the Plurality of Worlds*, p. 82.

paradigmatic examples of abstract objects, then it remains mysterious what abstract objects all have in common. And, if abstract anti-creationists do not say what abstract objects all have in common, then it will be hard for them to argue for philosophically interesting generalizations about abstract objects.<sup>25</sup> Of course, (P<sub>1</sub>)—the claim that abstract objects cannot enter into causal relations—is just such a generalization.<sup>26</sup>

Quite apart from the problem of how to cash out the distinction between abstract and concrete objects in a way that is acceptable to abstract creationists and abstract anti-creationists alike and that allows abstract anti-creationists to argue for philosophically interesting generalizations like (P<sub>1</sub>), there is a further reason for thinking that establishing (P<sub>1</sub>) would require abstract anti-creationists to do some serious metaphysical work. Most philosophers take events to be the relata of the causal relation.<sup>27</sup> And some philosophers take events to be objects—namely sets or set-theoretic constructions such as ordered *n*-tuples—that, according to the Way of Example at least, are abstract.<sup>28</sup> For example, David Lewis takes events to be sets of space-time points,<sup>29</sup> and—as Dodd notes (MW, pp. 439–440)—Jaegwon Kim suggests that events might be ordered triples of objects, properties, and times.<sup>30</sup>

Abstract anti-creationists might concede that some abstract objects—namely events—can enter into causal relations but insist that abstract objects other than events cannot enter into such relations. Abstract anti-creationists could then argue that abstract objects other than events cannot be created and hence that no

<sup>25</sup> See Gideon Rosen, 'Abstract Objects', *The Stanford Encyclopedia of Philosophy* (2001), <http://plato.stanford.edu/entries/abstract-objects/>.

<sup>26</sup> Lewis mentions two other ways of cashing out the distinction between abstract and concrete objects—what he calls *the Way of Abstraction* and *the Way of Conflation*—but it is not clear that either would be of help here; and, besides, there are problems with each. See Lewis, *On the Plurality of Worlds*, pp. 81–87; Burgess and Rosen, *A Subject with No Object*, pp. 16–25; and Rosen, 'Abstract Objects'.

<sup>27</sup> See, for example, Donald Davidson, 'Actions, Reasons, and Causes', *Journal of Philosophy*, vol. 60, no. 23 (1963), pp. 685–700 (reprinted in Donald Davidson, *Essays on Actions and Events* [Oxford: Clarendon Press, 1980], pp. 3–19); Donald Davidson, 'Causal Relations', *Journal of Philosophy*, vol. 64, no. 21 (9 November 1967), pp. 691–703 (reprinted in Davidson, *Essays on Actions and Events*, pp. 149–162); David Lewis, 'Causation', *Journal of Philosophy*, vol. 70, no. 17 (11 October 1973), pp. 556–567 (reprinted [with postscripts] in David Lewis, *Philosophical Papers*, vol. 2 [New York: Oxford U.P., 1986], pp. 159–213); David Lewis, 'Causation as Influence', *Journal of Philosophy*, vol. 97, no. 4 (April 2000), pp. 182–197; and Jaegwon Kim, 'Causation, Nomic Subsumption, and the Concept of Event', *Journal of Philosophy*, vol. 70, no. 8 (26 April 1973), pp. 217–236 (reprinted in Jaegwon Kim, *Supervenience and Mind: Selected Philosophical Essays*, Cambridge Studies in Philosophy [New York: Cambridge U.P., 1993], pp. 3–21).

<sup>28</sup> See Lewis, *On the Plurality of Worlds*, pp. 83–84.

<sup>29</sup> David Lewis, 'Events', in Lewis, *Philosophical Papers*, vol. 2, pp. 241–269.

<sup>30</sup> Jaegwon Kim, 'Events as Property Exemplifications', in Myles Brand and Douglas Walton (eds), *Action Theory: Proceedings of the Winnipeg Conference on Human Action*, Synthese Library 97 (Dordrecht: Reidel, 1976), pp. 159–177, at p. 161 (reprinted in Kim, *Supervenience and Mind*, pp. 33–52). Kim suggests that events—even if they are ordered *n*-tuples—are concrete, because they are located in space and they come into existence. See Kim, 'Events as Property Exemplifications', p. 165.

view on which a musical work is an abstract object other than an event can satisfy the creatability requirement.

But establishing even this weaker conclusion would still require serious metaphysical work. We want to say that objects can enter into causal relations: for example, we want to say that this rock broke that window. But, if strictly speaking events are the relata of the causal relation, then this rock and that window can enter into causal relations only derivatively, in virtue of somehow participating in events (for example, the rock's shooting across the courtyard, or the window's breaking) that are themselves causally related. The problem is that we do not have a fully worked-out theory of what it is for an object to participate in an event in a causally relevant way: that is, in a way such that, when that event enters into a causal relation, so does the object. And, in the absence of such a theory, we have no reason to deny that, in virtue of participating in events that enter into causal relations, abstract objects can also enter into causal relations.<sup>31</sup> For example, in the absence of such a theory, we have no reason to deny that, in virtue of participating in an event (Pat's thinking about the Pythagorean theorem, say) that is causally related to another event (Pat's uttering 'I'm thinking about the Pythagorean Theorem', say), the Pythagorean theorem can enter into causal relations.

Depending on what events are, there are various ways in which we might cash out what it is for an object to participate in an event in a causally relevant way. For example, if events are Kim-style ordered triples of objects, properties, and times, then we might say that an object participates in an event in a causally relevant way if and only if it is a member of the ordered triple that is the event. But nothing prevents abstract objects from being members of ordered triples that are events. (Indeed, on Kim's view, every event has at least one abstract object—namely a property—as a member.)

If events are instead Lewis-style sets of spacetime points, then we might say that an object participates in an event in a causally relevant way if and only if the set of points in the spacetime region that it occupies is a subset of the set of spacetime points that is the event. On this proposal, abstract objects could participate in events in a causally relevant way only if they occupy spacetime regions and hence are spatiotemporally located. Abstract anti-creationists might say that abstract objects cannot be spatiotemporally located and hence cannot participate in events in a causally relevant way. But simply insisting that abstract objects cannot be spatiotemporally located comes close to begging the question against abstract creationists, who say that abstract objects can be created and hence can come into existence; so abstract objects are at least temporally located. And, as we mentioned earlier, some abstract creationists think that abstract objects can be spatially located as well. Anyway, even if abstract objects are not spatiotemporally located, we might say that an object participates in an event in a causally relevant

---

<sup>31</sup> See Burgess and Rosen, *A Subject with No Object*, pp. 23–25; and Rosen, 'Abstract Objects'.

way if and only if either (i) the set of points in the spacetime region that it occupies is a subset of the set of spacetime points that is the event, or (ii) it is appropriately related to another object—for example, a token, an instance, or a performance—such that the set of spacetime points in the region that that object occupies is a subset of the set of spacetime points that is the event. On this proposal, since abstract objects can be appropriately related to such objects, they can participate in events in a causally relevant way.<sup>32</sup>

Dodd offers an argument for (P1). He says: ‘That this [namely (P1)] is so is reflected in the fact that statements seemingly reporting causal relations between abstracta can always be paraphrased in such a way as to reveal that the relata of the causal relation are really concrete’ (MW, p. 431).<sup>33</sup> To take Dodd’s example (MW, pp. 431–432), we might go around saying things like

- (1) The bitterness of substance *S* is caused by the shape of *S*’s molecules.

But that we go around saying things like (1) does not commit us to the view that a certain abstract object—namely the *shape* of some molecules—causes another abstract object—namely the *bitterness* of some substance. For (1) can be paraphrased as something like

- (2) The presence of molecules of a certain shape in *S* causes *S* to taste bitter.

Dodd offers only one example in support of what we can call *the paraphraseability claim*, namely his claim that sentences that seemingly report causal relations between abstract objects can *always* be paraphrased as sentences that actually report causal relations between concrete objects. But let’s suppose, for the sake of argument, that the paraphraseability claim is true. Does it entail (P1)?

No. If events are the relata of the causal relation, and if events are abstract, then (P1) is false. The paraphraseability claim might still be true, but it would be a misleading truth about our causal talk, one that would obscure the true nature of the relata of the causal relation. Abstract anti-creationists might counter that the paraphraseability claim entails at least the weaker claim that abstract objects other than events cannot enter into causal relations. But again that is not so. If abstract objects other than events can participate in events in a causally relevant manner by being appropriately related to concrete objects that occupy appropriate space-time regions, for example, then abstract objects other than events can enter into causal relations; and we might always be able to paraphrase causal sentences about the abstract objects as causal sentences about the concrete objects that they are

<sup>32</sup> See Theodore Sider, ‘Sparseness, Immanence, and Naturalness’, *Noûs*, vol. 29, no. 3 (September 1995), pp. 360–377, at pp. 372–374. See also Guy Rohrbaugh, ‘Artworks as Historical Individuals’, *European Journal of Philosophy*, vol. 11, no. 2 (August 2003), pp. 177–205, at p. 200.

<sup>33</sup> Dodd goes on to quote Michael A. E. Dummett, *Frege: Philosophy of Language* (London: Duckworth, 1973), p. 493. See Dodd, ‘Musical Works as Eternal Types’, p. 431, and p. 431, n. 13.

appropriately related to. So the paraphraseability claim might be true. But that would not preclude the abstract objects from entering into causal relations; on the contrary, the paraphraseability claim would simply reflect the way in which abstract objects enter into such relations.

### III. CAN SETS, TYPES, OR PROPERTIES BE CREATED?

#### *III.1. Dodd on sets*

In the previous section, we saw that Dodd's argument for (C<sub>1</sub>)—namely the claim that abstract objects cannot be created—and hence for (C<sub>2</sub>)—namely the claim that no view on which a musical work is an abstract object can satisfy the creatability requirement—fails, because it relies on (P<sub>1</sub>)—namely the claim that abstract objects cannot enter into causal relations—and establishing (P<sub>1</sub>) would require serious metaphysical work. But there is another way for abstract anti-creationists to argue for (C<sub>1</sub>) and hence for (C<sub>2</sub>): abstract anti-creationists could say that abstract objects cannot come into existence and that, if something cannot come into existence, then it cannot be created. But this way of arguing for (C<sub>1</sub>) and (C<sub>2</sub>) is not available to Dodd. For he concedes that some abstract objects—particularly impure sets such as the singleton set whose sole member is the Eiffel Tower—can come into existence (DMP, pp. 392, 397).

But Dodd insists that the singleton set whose sole member is the Eiffel Tower is *not* a counterexample to (P<sub>1</sub>). Although that set comes into existence, he says, it is not *caused* to do so:

The fact that such sets can come in and go out of existence does not violate the principle of the causal inertness of abstracta [namely (P<sub>1</sub>)]: the causal process in this case involved people and bits of metal, the coming to being of the set being an ontological free lunch. (DMP, p. 397)

There are a number of problems with Dodd's claim that the coming into existence of the singleton set whose sole member is the Eiffel Tower is not caused, but is rather merely 'an ontological free lunch' (whatever that means exactly). First, he is committed to denying the principle that anything that comes into existence is caused to do so. On Dodd's view, the singleton set whose sole member is the Eiffel Tower is a counterexample to that principle: it comes into existence, but it is not caused to do so. Perhaps it is metaphysically possible for something to come into existence without being caused to do so; but anyone who rejects the principle had better have pretty good reasons for doing so.

Second, on a counterfactual analysis of causation, for example, the singleton set whose sole member is the Eiffel Tower *is* caused to come into existence, for its coming into existence counterfactually depends on what people do with bits of metal.<sup>34</sup> If it had not been for what people did with bits of metal, then the

---

<sup>34</sup> See, for example, Lewis, 'Causation' and 'Causation as Influence'.

singleton set whose sole member is the Eiffel Tower would not have come into existence. To argue that the singleton set whose sole member is the Eiffel Tower is not caused to come into existence, then, Dodd would need to say more about what causation is to rule out such accounts of causation.

Finally, even if the singleton set whose sole member is the Eiffel Tower is not *caused*, in the strict and philosophical sense, to come into existence, it is nonetheless *brought* into existence, in a loose and popular sense. After all, people did some things with bits of metal, and afterwards the set came into existence. So, even if Dodd could insist that sets are not *caused* to come into existence, he should concede that they can nonetheless be *brought* into existence. And perhaps being brought into existence, rather than being caused to come into existence, is enough for the purposes of satisfying the creatability requirement. As Levinson states it, for example, the requirement is not that a musical work be such that a composer can *cause* it to come into existence; rather, it is that a musical work be such that it can be *brought* into existence by a composer's compositional activity.<sup>35</sup> And recall that the creatability requirement is supposed to be motivated by untutored intuitions. Insofar as there is a distinction to be made between *causing* something to come into existence (in the strict and philosophical sense) and *bringing* it into existence (in the loose and popular sense), people do not have intuitions about what can, or cannot, be *caused* to come into existence; rather, they have intuitions about what can, or cannot, be *brought* into existence.<sup>36</sup>

Dodd argues for (C<sub>2</sub>), namely the claim that no view on which a musical work is an abstract object can satisfy the creatability requirement. In the previous section, we saw that his argument for (C<sub>2</sub>) fails. In this subsection, we have seen that Dodd should concede that (C<sub>2</sub>) is false. For Dodd should concede that sets can be brought into existence; and being brought into existence is what matters for the purposes of satisfying the creatability requirement; so he should concede that some views on which a musical work is an abstract object—namely views on which a musical work is a set—can satisfy the creatability requirement.

Dodd should thus concede that views on which a musical work is a certain sort of abstract object—namely a set—can satisfy the creatability requirement. But Dodd is arguing primarily against Levinson, who takes a musical work to be a type rather than a set; and at this point it is an open question whether a view on which a musical work is a type rather than a set can satisfy the creatability requirement. It is to this question that we now turn.

<sup>35</sup> Levinson, 'What a Musical Work Is', p. 9.

<sup>36</sup> If there really is such a distinction, then we can ask: does being created require (i) being *caused* to come into existence, or merely (ii) being *brought* into existence? If the former, then (P<sub>3</sub>) is false. (In that case, the creatability requirement would be misnamed, since it wouldn't require being created; rather, it would require merely being *brought* into existence.) If the latter, then (P<sub>2</sub>) is false. In either case, the argument for (C<sub>2</sub>) is unsound.

### III.2 Wollheim and Trivedi on types

Richard Wollheim distinguishes *types* and *universals*, and he takes artworks—including musical works—to be types rather than universals.<sup>37</sup> One feature that distinguishes types and universals, on Wollheim's view, is that we postulate types in ways in which we do not postulate universals. As Wollheim puts it, a 'very important set of circumstances in which we postulate types . . . is where we can correlate a class of particulars with a piece of human invention: these particulars may then be regarded as tokens of a certain type'.<sup>38</sup> But this is not the case with universals.

Another feature that distinguishes types and universals, on Wollheim's view, is that tokens of a type transmit their properties to the type in a way that particulars that instantiate a universal do not transmit their properties to the universal. Wollheim says that, whereas the universal *Redness* is not itself red, the type *Union Jack* 'is coloured and rectangular, properties which all of its tokens have necessarily'.<sup>39</sup> To say that all of the tokens of a type have a property necessarily is not to say that they could not have failed to have that property; rather, it is to say that they have that property in virtue of being tokens of that type. On Wollheim's view, if all of the tokens of a type have a property in virtue of being tokens of that type, then the type also has that property. He says: 'all and only those properties that a token of a certain type . . . has in virtue of being a token of that type . . . will be transmitted to the type'.<sup>40</sup> This is why the type *Union Jack*, on Wollheim's view, is itself colored and rectangular: every token of the type *Union Jack* is colored and rectangular in virtue of being a token of that type.<sup>41</sup>

One problem with Wollheim's theory of type is, as Dodd notes, that it is not clear how the type *Union Jack* can literally have a shape or colour if it is abstract (DMP, p. 390). The other feature of types that Wollheim mentions—namely that they are postulated when we can correlate particulars with a piece of human invention—does nothing to explain how abstract objects can have shapes or colours.

What we are interested in, however, is not the viability of Wollheim's theory of types, but rather its bearing (if any) on the question of whether a view on which a musical work is a type can satisfy the creatability requirement. Trivedi takes it to be a consequence of Wollheim's theory that types are created.<sup>42</sup> Trivedi says:

<sup>37</sup> Richard Wollheim, *Art and Its Objects: With Six Supplementary Essays* [1968], 2nd edn (Cambridge: Cambridge U.P., 1980).

<sup>38</sup> *Ibid.*, p. 78.

<sup>39</sup> *Ibid.*, p. 77.

<sup>40</sup> *Ibid.*, p. 77.

<sup>41</sup> It seems more natural to us to say instead that a particular Union Jack flag is a token of the type *Union Jack* in virtue of being colored and rectangular. But this does not affect Wollheim's point about the transmission of properties from tokens to types: he could say that a type has certain properties if it is in virtue of having those properties that a token is a token of that type.

<sup>42</sup> Trivedi, 'Against Musical Works as Eternal Types', pp. 73–74.

[T]ypes, as Wollheim points out, are postulated where we can correlate human inventions with a class of elements, whereas this need not be true of universals. Types, in other words, are *creatable*, abstract particulars, while universals, though abstract, are neither creatable nor particulars.<sup>43</sup>

Trivedi thus thinks that types can be created and hence that a view on which a musical work is a type can satisfy the creatability requirement.

But Trivedi's 'in other words' masks a *non sequitur*. It is true that, on Wollheim's theory, types are postulated where we can correlate particulars with a piece of human invention. But, *pace* Trevedi, this claim does not entail the claim that types are created. Consider a particular Union Jack flag. Call it *Jack*. *Jack*—a coloured, rectangular bit of cloth—is a piece of human invention. We can correlate other particulars—namely other particular flags—with *Jack*. Because we can correlate other particular flags with *Jack*, we postulate a type, namely the type *Union Jack*. But postulating a type need not require creating it. Perhaps the type *Union Jack* always existed, and it is not until we correlate particular flags with *Jack* that we are led to recognize the existence of the type *Union Jack*. The claim that postulating a type requires creating it would need to be argued for independently. So, contrary to what Trivedi assumes, Wollheim's theory of types does not entail that types are created. Insisting that a musical work is a type, in Wollheim's sense, rather than a universal thus does nothing to settle the question of whether types can be created and hence does nothing to settle the question of whether a view on which a musical work is a type can satisfy the creatability requirement.

### *III.3. Dodd on types, and Dodd and Armstrong on properties*

Dodd argues that types cannot come into existence (MW, pp. 435–436, DMP, pp. 389–390). His argument is straightforward:

- (P4) For any type *K* and any time *t*, *K* exists at *t* if and only if a corresponding property, *being a k*, exists at *t*.
- (P5) Any property exists at all times (if it exists at all).
- (C3) So, for any type *K*, *K* exists at all times (if it exists at all). [From (P4) and (P5).]
- (P6) If, for any type *K*, *K* exists at all times (if it exists at all), then no type *K* can come into existence.
- (C4) So no type *K* can come into existence. [(From (C3) and (P6).]

The argument from (C3) and (P6) to (C4) is valid. And, given that something cannot come into existence at a time *t* unless it did not exist at some time prior to *t*, (P6) is true. So the soundness of the argument for (C4) comes down to the truth of (C3). The argument from (P4) and (P5) to (C3) is also valid. And, as Dodd points out (MW, p. 436, n. 17), (P4) follows from Nicholas Wolterstorff's

---

<sup>43</sup> *Ibid.*, p. 74 (original emphasis).

theory of types.<sup>44</sup> We will not question (P4) here.<sup>45</sup> So, as far as we are concerned, the soundness of the argument for (C<sub>3</sub>)—and hence for (C<sub>4</sub>)—comes down to the truth of (P<sub>5</sub>). We will return to (P<sub>5</sub>) below.

It is a short step from (C<sub>4</sub>) to the conclusion that no view on which a musical work is a type can satisfy the creatability requirement.

- (P<sub>7</sub>) If no type *K* can come into existence, then no view on which a musical work is a type can satisfy the creatability requirement.
- (C<sub>5</sub>) So no view on which a musical work is a type can satisfy the creatability requirement. [From (C<sub>4</sub>) and (P<sub>7</sub>).]

The argument from (C<sub>4</sub>) and (P<sub>7</sub>) to (C<sub>5</sub>) is valid. And, given that a view can satisfy the creatability requirement only if it allows a musical work to come into existence, (P<sub>7</sub>) is true. So the soundness of the argument for (C<sub>5</sub>) comes down to the truth of (C<sub>4</sub>); and, as we have seen, the soundness of the argument for (C<sub>4</sub>) comes down to the truth of (P<sub>5</sub>). But is (P<sub>5</sub>) true?

To underwrite (P<sub>5</sub>), Dodd appeals to what he describes as an ‘intuitive’ claim about the existence of properties: namely, a property exists at all times if and only if it is, was, or will be instantiated; otherwise, it does not exist at any time (MW, p. 436). As Dodd points out (MW, p. 436, n. 18), this claim is one that D. M. Armstrong makes.<sup>46</sup> Following Armstrong, let us call it *The Principle of Instantiation*.<sup>47</sup>

#### *The Principle of Instantiation*

A property *F* exists at a time *t* if and only if there is a time *t\** such that *t\** is either before, after, or identical to *t* and *F* is instantiated at *t\**.

But should we accept The Principle of Instantiation?

One consequence of The Principle of Instantiation is that there are no properties that are always actually uninstantiated: that is, properties that (whether as a matter of some kind of necessity or as a matter of contingent fact) are not, never were, and never will be instantiated. For example, the Principle of Instantiation precludes the existence of the properties *being a round square*, *having 1,000 spatial dimensions*, and *being an elephant that has swallowed nine gerbils that were previously sung to by an alchemist*.<sup>48</sup>

<sup>44</sup> Nicholas Wolterstorff, *Works and Worlds of Art*, Clarendon Library of Logic and Philosophy (Oxford: Clarendon Press, 1980), p. 51.

<sup>45</sup> But see Howell, ‘Types, Initiated and Indicated’, pp. 115–126. For a reply, see Dodd, ‘Defending Musical Platonism’, pp. 398–402.

<sup>46</sup> D. M. Armstrong, *Universals: An Opinionated Introduction* (Boulder, CO: Westview, 1989), pp. 75–82.

<sup>47</sup> *Ibid.*, pp. 75–76. See also D. M. Armstrong, *Universals and Scientific Realism*, vol. 2: *A Theory of Universals* (Cambridge: Cambridge U.P., 1978), pp. 9–10.

<sup>48</sup> The last example comes from Howell, ‘Types, Initiated and Indicated’, p. 114.

But, even if one is willing to forego properties whose existence the Principle of Instantiation precludes, there are further problems with the principle. Consider a property  $F$  that, as a matter of contingent fact, has not been instantiated yet but will be instantiated 100 million years from now. Given the Principle of Instantiation, what makes it the case that  $F$  exists now is that  $F$  will be instantiated 100 million years from now. But this sort of metaphysical dependence—between the present existence of a property and its instantiation in the distant future—seems odd.

And where does  $F$  exist now, if  $F$  is not instantiated now? Some philosophers think that properties are *transcendent*, that is, they are not to be ‘found in the ordinary world of space and time’.<sup>49</sup> Such philosophers would be happy to dismiss the question of where  $F$  exists now. But other philosophers think that properties are *immanent*, that is, they are to be found in the ordinary world of space and time. And these philosophers cannot dismiss the question of where  $F$  exists now. Normally, philosophers who think that properties are immanent say that properties are located where their instances are. But  $F$  is not instantiated now, so it has no instances now. Philosophers who think that properties are immanent should thus deny that  $F$  can exist now, even though it is not instantiated now.<sup>50</sup>

And, following Armstrong, Dodd thinks that properties are immanent. Armstrong rejects properties that are always actually uninstantiated on the grounds that they would be transcendent.<sup>51</sup> For the same reason, Dodd rejects properties that are always actually uninstantiated (MW, p. 436). Armstrong argues that, if all properties were transcendent, then the relation between concrete particulars—which are found in the ordinary world of space and time—and the properties they instantiate would be a mysterious relation that ‘crosses realms’.<sup>52</sup> In a similar vein, Dodd argues that, if all properties were transcendent, then properties would not be ‘intrinsically of particulars at all’ and it would be ‘hard to conceive of how a particular could come to have a property’ (MW, p. 436; original emphasis).

Philosophers like Armstrong and Dodd who think that properties are immanent should thus reject the Principle of Instantiation in favour of the following principle:

---

<sup>49</sup> Armstrong, *Universals*, p. 76. But Armstrong does not think that properties are transcendent. See below in the text.

<sup>50</sup> We owe this point to Bob Bright. Trivedi makes a related point when he repeatedly asks where types are located before they have any tokens. See Trivedi, ‘Against Musical Works as Eternal Types’, pp. 74, n. 4, 75, 76, 76–77, 79, 80.

<sup>51</sup> Armstrong, *Universals*, pp. 75–82. Levinson suggests that properties that are always actually uninstantiated are nonetheless part of the ‘fabric’ of the ordinary world of space and time, just as instantiated relations are on Armstrong’s view. See Jerrold Levinson’s review of *Universals* in *Philosophical Review*, vol. 101, no. 3 (July 1992), pp. 654–660, at p. 659.

<sup>52</sup> Armstrong, *Universals*, p. 76.

*The Strengthened Principle of Instantiation*

A property  $F$  exists at  $t$  if and only if  $F$  is instantiated at  $t$ .

And, on the Strengthened Principle of Instantiation, properties can come into existence. For example, a property  $F$  would come into existence at  $t$  if it were first instantiated at  $t$ . Given that a type exists when and only when a corresponding property exists, it follows that types can come into existence, too; so Dodd is left without a reason for claiming that types cannot be created or that no view on which a musical work is a type can satisfy the creatability requirement.

## IV. A PROBLEM ABOUT PERSISTENCE

*IV.1 The persistence requirement*

In the previous section, we saw that philosophers who think that properties are immanent should accept the claim that properties—for example, the property *having sound structure S and also being produced in a way that is properly connected to Beethoven's 1804–1808 acts of indication*—can come into existence. Given that types exist when and only when corresponding properties exist, these philosophers should also accept the claim that types—for example, the type *sound structure S as indicated by Beethoven in 1804–1808*—can come into existence. It seems, then, that a view on which a musical work is a type can satisfy the creatability requirement.

But those who think that a musical work is a type should not rest just yet. For the reason that philosophers who think that properties are immanent should accept the claim that properties can come into existence is that they should accept the Strengthened Principle of Instantiation; and that principle entails that a property—for example, the property *having sound structure S and also being produced in a way that is properly connected to Beethoven's 1804–1808 acts of indication*—goes out of existence when it is no longer instantiated. Given that a type exists when and only when a corresponding property exists, these philosophers should also accept the claim that types—for example, the type *sound structure S as indicated by Beethoven in 1804–1808*—can go out of existence. And it seems to us that any adequate account of what a musical work is must meet the following criterion:

*The Persistence Requirement*

Musical works must be such that they can exist uninterruptedly for a good stretch of time *after* the composer's compositional activity.<sup>53</sup>

Satisfying the creatability requirement is a matter of getting a musical work to come into existence; satisfying the persistence requirement is a matter of getting a musical work to stay there. Satisfying one requirement should not come at the

---

<sup>53</sup> We would call this requirement '(Per)', but that name has already been taken.

cost of satisfying the other. What we want, then, is a view that satisfies both requirements. But is there such a view?

#### *IV.2 Levinson on types*

Levinson takes a musical work to be a type: an indicated structure, or a sound-structure-as-indicated-by-composer-X-at-time-*t*. Levinson says that a musical work is connected in a special way to composers and times: he describes an indicated structure as something ‘in which a particular person and time figure ineliminably’ and as being ‘inherently tied’ to a person.<sup>54</sup> Adapting some terminology from Howell, let us say that the indicated type *sound-structure-S-as-indicated-by-composer-X-at-time-t* ‘essentially involves’ *X* and *t* (and *S* as well).<sup>55</sup>

Those who find essential involvement vague and mysterious might prefer to take a musical work to be an ordered triple of a sound structure, a composer, and a time. On this view, what it would be for a musical work *W* to essentially involve a sound structure *S*, a composer *X*, or a time *t* is for *S*, or *X*, or *t* to be a member of *W*. Although this proposal has the virtue of clarifying what it is for a musical work to essentially involve a sound structure, a composer, or a time, Levinson might resist it on other grounds. Elsewhere, he argues that musical works must be *directly perceptible*.<sup>56</sup> And, if sets or such set-theoretic objects as ordered *n*-tuples are not directly perceptible, then on Levinson’s view they cannot be musical works. Perhaps in part because of such considerations, Levinson cautions against identifying musical works in a ‘Procrustean fashion’ with elements from a ‘readymade ontology’.<sup>57</sup> This caution might extend to identifying musical works with sets or set-theoretic objects. For these reasons, we will continue speaking of types; but what we say below applies to any view on which a musical work essentially involves a sound structure, a composer, and a time.

In response to Dodd, Howell argues that ‘properties exist when any entities they essentially involve themselves exist’.<sup>58</sup> The corresponding claim about types is that types exist ‘when any entities they essentially involve themselves exist’. Consider the type *sound-structure-S-as-indicated-by-Beethoven-in-1804–1808*. Clearly, if types exist ‘when any entities they essentially involve themselves exist’, the type *sound-structure-S-as-indicated-by-Beethoven-in-1804–1808* exists when the sound structure *S*, Beethoven, and the time 1804–1808 all exist. But what if some but not all of those entities exist? Two obvious principles suggest themselves:

<sup>54</sup> Levinson, ‘What a Musical Work Is’, p. 23.

<sup>55</sup> See, for example, Howell, ‘Types, Initiated and Indicated’, p. 114.

<sup>56</sup> See Levinson’s review of Currie’s *An Ontology of Art*, pp. 216–217.

<sup>57</sup> *Ibid.*, p. 219.

<sup>58</sup> Howell, ‘Types, Initiated and Indicated’, p. 114.

*The Existential Principle*

For any type  $K$  that essentially involves entities  $x_1, \dots, x_n$ ,  $K$  exists at  $t$  if and only if *some*  $x_i$  (where  $1 \leq i \leq n$ ) exists at  $t$ .

and

*The Universal Principle*

For any type  $K$  that essentially involves entities  $x_1, \dots, x_n$ ,  $K$  exists at  $t$  if and only if *every*  $x_i$  (where  $1 \leq i \leq n$ ) exists at  $t$ .

According to The Existential Principle, the type *sound-structure-S-as-indicated-by-Beethoven-in-1804–1808* exists when some but not all of the sound structure  $S$ , Beethoven, and the time 1804–1808 exist. According to the Universal Principle, by contrast, the type does not exist when some but not all of those entities exist.

Unfortunately, neither the Existential Principle nor the Universal Principle allows Levinson's view to satisfy both the creatability requirement and the persistent requirement. The type *sound-structure-S-as-indicated-by-Beethoven-in-1804–1808* essentially involves (i) the sound structure  $S$ , (ii) Beethoven, and (iii) the time 1804–1808. The sound structure  $S$  exists at all times. So, by the Existential Principle, the type exists at all times and hence Levinson's view cannot satisfy the creatability requirement. And Beethoven no longer exists. So, by the Universal Principle, the type no longer exists and hence Levinson's view cannot satisfy the persistence requirement.

What Levinson needs is thus something more complicated than either the Existential Principle or the Universal Principle, something that entails (i) that the type *sound-structure-S-as-indicated-by-Beethoven-in-1804–1808* does not exist before Beethoven's compositional activity, and (ii) that it exists after Beethoven's death. In a footnote, Howell seems to suggest something like the following principle (although for properties rather than types):

*The Complicated Principle*

For any type  $K$  that essentially involves entities  $x_1, \dots, x_n$ ,  $K$  exists at  $t$  if and only if *every*  $x_i$  (where  $1 \leq i \leq n$ ) is such that either

- (i)  $x_i$  exists at  $t$ ; or
- (ii)  $x_i$  exists at some time  $t^*$  and there is a causal chain linking  $x_i$  at  $t^*$  to some entity  $y$  that exists at  $t$ .<sup>59</sup>

By the Complicated Principle, the type *sound-structure-S-as-indicated-by-Beethoven-in-1804–1808* exists in 1804–1808, because all of the entities that it essentially involves—namely the sound structure  $S$ , Beethoven, and the time 1804–1808—

<sup>59</sup> *Ibid.*, p. 113, n. 13.

exist in 1804–1808. The sound structure *S* exists now, but neither Beethoven nor the time 1804–1808 does. So why does the type exist now? Although Beethoven does not exist now, there are causal chains linking him to things that exist now. Likewise for the time 1804–1808. So, by the Complicated Principle, the type exists now, because all of the entities that it essentially involves either exist now (which is the case for the sound structure *S*) or are linked by causal chains to things that exist now (which is the case for Beethoven and the time 1804–1808).

One question one might want to ask is why the existence of a cross-temporal causal chain between Beethoven and us allows types that essentially involve Beethoven to exist now. But, quite apart from the larger question of whether anything like the Complicated Principle is justified on general metaphysical grounds, there is still a problem with the principle. Are there causal chains linking things that exist in 1800, say, to the time 1804–1808? If so, then the Complicated Principle would entail that the type *sound-structure-S-as-indicated-by-Beethoven-in-1804–1808* exists in 1800, before Beethoven's compositional activity. But, in that case, Levinson's view could not satisfy the creatability requirement.

Friends of the Complicated Principle must thus deny that there are causal chains linking things that exist in 1800 to the time 1804–1808. They might do that by arguing that there are no such causal chains, because the universe is indeterministic. Had the universe been deterministic, there would have been such chains and hence the type *sound-structure-S-as-indicated-by-Beethoven-in-1804–1808* would have existed in 1800; but the universe is indeterministic, so that type didn't exist then.<sup>60</sup>

The problem with this response is that it makes the non-existence of the type *sound-structure-S-as-indicated-by-Beethoven-in-1804–1808* in 1800 hostage to a fact about the universe that, although nomologically necessary if true, is nonetheless metaphysically contingent, namely that the universe is indeterministic. Had the universe been deterministic, the type would have existed in 1800 and hence could not have been created in 1804–1808. Consider a deterministic Twin Earth. In 1804–1808, Twin Beethoven and Beethoven indicate the same sound structure (or duplicate sound structures) in duplicate musico-historical contexts. On the

---

<sup>60</sup> Howell (*ibid.*, p. 113, n. 13) argues for a parallel claim about the property *being a son of Lincoln* and a time *m* before Lincoln's birth. Howell seems to assume that indeterminism precludes causal chains of the sort that figure in the corresponding principle for properties: the universe is indeterministic; so there are no causal chains from *m* (when Lincoln's existence is determined) to 1809 (when Lincoln exists); so, by the corresponding principle, the property *being a son of Lincoln* does not exist at *m*. But, later, when he talks about causal chains extending from 1865, say, to the present, he says that such chains 'need be only probabilistic'. (See *ibid.*, p. 113, n. 13.) And, if causal chains need be only probabilistic, it is not clear why, even in an indeterministic universe, there could not be such chains from *m* to 1809. If there were such chains even in an indeterministic universe, then—contrary to what Howell says—even in an indeterministic universe the property *being a son of Lincoln* would exist at *m*.

response under consideration, Beethoven creates a musical work, but Twin Beethoven does not. This seems wrong. People who have the intuition that Beethoven created a musical work also have the intuition that Twin Beethoven created a musical work. Strictly speaking, the creatability requirement requires only that a musical work be created in this world, which might happen to be indeterministic; it does not require that a musical work be created in other worlds, which might happen to be deterministic. But allowing a musical work to be created in this indeterministic world only at the cost of precluding a musical work from being created in another, deterministic world does not seem like a wholehearted victory for those who want to satisfy the creatability requirement.<sup>61</sup>

#### *IV.3 Metaphysical musings*

Are there views that satisfy both the creatability requirement and the persistence requirement? Yes. Here is one: a musical work is a *g-fusion* of a sound structure *S*, Beethoven, and the time 1804–1808, where a *g-fusion* (short for *gerrymandered fusion*) *x* exists at a time *t* if and only if every part of *x* exists *simpliciter* (in Lewis's sense)<sup>62</sup> at *t*: that is, if and only every part of *x* is part of reality at *t*. And let us assume that, as past-and-presentists suppose, the past and present are real, but the future is not.<sup>63</sup> On this view, reality is dynamic; what is part of reality changes, as the future becomes present (and then past). The g-fusion comes into existence when the time 1804–1808 does, and it stays there, because after something comes into existence it remains a part of reality. This view presupposes the truth of past-and-presentism and the existence of g-fusions. It also has the consequence that a musical work is indestructible.<sup>64</sup> For all these reasons, this view remains seriously undermotivated.

Here is another: a musical work is a set whose members are Beethoven's 1804–1808 compositional activity, performances of the work, and other things:

<sup>61</sup> In correspondence, Levinson has suggested something like the following principle.

*The Desired Principle*: For any type *K* that essentially involves entities  $x_1, \dots, x_n$ , *K* exists at *t* if and only if there is a prior time  $t^*$  such that  $x_1, \dots, x_n$  all exist at  $t^*$ .

The Desired Principle would allow Levinson's view to satisfy both the creatability requirement and the persistence requirement. But the question is whether the Desired Principle is independently motivated. The Desired Principle is equivalent to the following principle.

*The Unmasked Principle*: For any type *K* that essentially involves entities  $x_1, \dots, x_n$ , *K* exists at *t* if and only if there is a prior time  $t^*$  such that, according to The Universal Principle, *K* exists at  $t^*$ . And one might wonder why being such that one existed according to the Universal Principle suffices for present—as opposed to merely past—existence.

<sup>62</sup> Lewis, *On the Plurality of Worlds*, p. 3.

<sup>63</sup> See C. D. Broad, *Scientific Thought*, International Library of Psychology, Philosophy, and Scientific Method (New York: Harcourt, 1923); and Michael Tooley, *Time, Tense, and Causation* (Oxford: Clarendon Press, 1997).

<sup>64</sup> Some who have the intuition that musical works are created are sympathetic to the idea that they cannot be destroyed. (See, for example, Levinson, 'What a Musical Work Is, Again', pp. 261–263.) But others think that they can be destroyed, too. (See, for example, Trivedi, 'Against Musical Works as Eternal Types', p. 77.)

copies of the score and recordings, say. Provided that a set exists when and only when at least one of its members does, and provided that such things as copies of the score and recordings persist, this view will satisfy both the creatability requirement and the persistence requirement. Here is a third: a musical work is a fusion of Beethoven's 1804–1808 compositional activity, performances of the work, and such things as copies of the score and recordings. Provided that a fusion exists when and only when at least one of its parts does,<sup>65</sup> the third view will also satisfy both the creatability requirement and the persistence requirement.

The second and third views both face a familiar modal objection: a set could not have had different, or more, or fewer members, and a fusion could not have had different, or more, or fewer parts; but a musical work could have had different, or more, or fewer performances (MW, pp. 424–425).<sup>66</sup> But these claims do not entail that a musical work is not a set or a fusion—provided that we adopt a counterpart-theoretic analysis of *de re* modality.<sup>67</sup> On the second and third views, a sound structure is not a member or a part of a musical work (this is what allows the views to satisfy the creatability requirement). As a result, both views are serious departures from Levinson's and Dodd's views.

#### V. CONCLUSION

Can a musical work be created? Some say 'no'. But there is no handbook of universally accepted metaphysical truths that they can use to justify their answer. Absent convincing arguments to the contrary, we should accept that some sets come into existence: namely, those sets whose members come into existence. (Indeed, Dodd concedes as much.) And, at least on some views about types and properties, types can also come into existence. So views on which a musical work is a set or type might satisfy the creatability requirement. As a result, those who deny that a musical work can be created must establish one of the following claims: (i) a musical work is not a set whose members come into existence; (ii)

<sup>65</sup> If a fusion is an *aggregate* rather than a *compound* (in Kit Fine's sense), or a *some-fusion* rather than an *all-fusion* (in Judith Jarvis Thomson's sense), then it will exist when and only when at least one of its parts does. See Kit Fine, 'Compounds and Aggregates', *Noûs*, vol. 28, no. 2 (June 1994), pp. 137–158, at pp. 137, 139, 141; and Judith Jarvis Thomson, 'The Statue and the Clay', *Noûs*, vol. 32, no. 2 (June 1998), pp. 149–173, at pp. 158, 166–167.

<sup>66</sup> See also Rohrbaugh, 'Artworks as Historical Individuals'. On members' being essential to sets, Dodd cites David Wiggins, *Sameness and Substance* (Cambridge, MA: Harvard U.P., 1980), p. 113. (See Dodd, 'Musical Works as Eternal Types', p. 425, n. 4.) See also James van Cleve, 'Why a Set Contains its Members Essentially', *Noûs*, vol. 19, no. 4 (December 1985), pp. 585–602. On parts' being essential to fusions, see Ben Caplan and Bob Bright, 'Fusions and Ordinary Physical Objects' (forthcoming in *Philosophical Studies*).

<sup>67</sup> See David Lewis, 'Counterpart Theory and Quantified Modal Logic', *Journal of Philosophy*, vol. 65, no. 5 (7 March 1968), pp. 113–126 (reprinted [with postscripts] in David Lewis, *Philosophical Papers*, vol. 1 [New York: Oxford U.P., 1983], pp. 26–46); 'Counterparts of Persons and Their Bodies', *Journal of Philosophy*, vol. 68, no. 7 (8 April 1971), pp. 203–211 (reprinted in Lewis, *Philosophical Papers*, vol. 1, pp. 47–54); and *On the Plurality of Worlds*, pp. 248–263.

types (or at least those types that are musical works) can't come into existence; or (iii) a musical work is an abstract object that is neither set-like nor type-like and that can't come into existence. (Dodd argues for (ii); but, as we have seen, his argument fails.)

Some say 'yes'; a musical work can be created. But they face different problems. To begin with, they have to find abstract objects that can plausibly be identified with musical works. Then they have to show that a view according to which a musical work is an abstract object of this sort can satisfy the creatability requirement. And, finally, they have to show that such a view can satisfy the persistence requirement. (In addition, those who think that a musical work can go out of existence have to show that the abstract object that they identify a musical work with goes out of existence at the right time.) None of the standard views about what a musical work is satisfies both the creatability requirement and the persistence requirement. We proposed some non-standard views that satisfy both requirements; but these views have problems of their own: either they rely on controversial metaphysical claims or it is not clear that the objects that they identify musical works with really are the sorts of thing that could be musical works.

In closing, we would like to suggest that the question of whether a musical work can be created, although important in its own right, has less bearing than one might expect on other questions in the philosophy of art. For example, it might seem that the question of whether a musical work can be created is intimately connected to the question of how a musical work should be individuated. In particular, Levinson argues that any view that satisfies the creatability requirement also satisfies the fine individuation requirement, according to which a musical work must be individuated in part by the musico-historical context in which it is composed.<sup>68</sup> But the converse implication does not hold: a view that satisfies the fine individuation requirement need not satisfy the creatability requirement. Gregory Currie's view (on which an artwork is an action type) is a case in point.<sup>69</sup> In the end, those who care most about how a musical work should be individuated and other questions in the philosophy of art need not settle the question of whether a musical work can be created.<sup>70</sup>

Ben Caplan, Department of Philosophy, University of Manitoba, Winnipeg, MB, Canada R3T 2N2. Email: ben\_caplan@umanitoba.ca

Carl Matheson, Department of Philosophy, University of Manitoba, Winnipeg, MB, Canada R3T 2N2. Email: matheso@cc.umanitoba.ca

<sup>68</sup> Levinson, 'What a Musical Work Is', p. 10, n. 12. See also note 2.

<sup>69</sup> See Currie, *An Ontology of Art*.

<sup>70</sup> For comments and discussion, thanks to Bob Bright, Jerrold Levinson, and Rhonda Martens.