

Historical individuals like *Anas platyrhynchos* and ‘Classical Gas’

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In thinking about art ontology, we can distinguish two diametrical approaches: One — which we might call *revisionist* — abandons any intuitions that we have about art in order to make the account metaphysically respectable. The other — call it *reactionary* — accepts wild and extravagant metaphysics in order to preserve our presumptions about art. If these were the only two options, then there would be no hope of giving an art ontology which respects both art and ontology. What a disaster that would be! In this paper, I consider the idea that musical works are *historical individuals*. Guy Rohrbaugh (2003) has proposed this for artworks in general, and Julian Dodd (2007) objects that the proposal is outré metaphysics, too far beyond the pale to take seriously. Their disagreement could easily be seen a skirmish in the broader war between revisionists and reactionaries. Which of *metaphysics* and *art* should trump the other when there is a conflict? It is a morass of philosophical methodology. Fortunately, the ontology of works as individuals need not devolve into that — or so I argue. My primary strategy is to show, contra Dodd’s accusation, that historical individuals are familiar parts of the world. Although the ontological details are open to debate, it is the standard opinion of biologists is that biological species are historical individuals. So there is no conflict here between fidelity to art and respectable metaphysics. What suits species will fit musical work as well.

In §1, I introduce the opposition between revisionists and reactionaries. In §2, I review Rohrbaugh’s argument and Dodd’s objections. In §3, I consider whether pluralism could dissolve rather than resolve the disagreement. No, I argue, because even for the pluralist a core disagreement remains: just whether the view of musical works as historical individuals is even minimally sensible. In §4, I review the notion of *species as individuals*. Although this general idea is the majority view in biology, there is no consensus about the precise metaphysics of historical individuals. Nevertheless, it gives us a sketch which we can deploy to give Rohrbaugh’s suggestion some ontological sophistication. Once we have done so, it becomes clear that Dodd’s arguments against musical works as individuals simply miss the mark. In §5, I conclude with a discussion of the homeostatic property cluster (HPC) conception of species. An HPC is a regularity in the co-occurrence of properties, maintained by an underlying causal nexus. Although it is often taken to be an alternative to the view that species are individuals, it is better to think of individuals as a variety of HPC. With this in mind, I suggest that we can think of musical works as HPCs.

1. Revision and reaction

Philosophical enquiry into the ontology of art engages at once with the practice and institutions of art (on one side) and the methodology and results of philosophy (on the other). One possible approach is to look to metaphysics for the menu of possible ontologies. The ontology of art is then just a matter of selecting a menu item. If none of them make sense of the way we usually think about art, then our thinking about art has to change. Call this the *revisionist* approach.

A danger of the revisionist approach is that it may end up describing something that would not count as ‘art’ in any usual sense of the word. This difficulty leads Amie Thomasson (2006) to begin from the other direction, privileging art practice. The way we use words like ‘song’ and ‘sculpture’ determine the kinds of things that we are talking about. If those kinds of things do not appear on the metaphysicians’ list of options, then it is the list of options rather than our understanding of art that needs to change. She insists that “traditional ontological bifurcations... are not exhaustive, and properly handling the ontology of... works of art requires accepting a broader system of ontological categories” (p. 247). To strain the *menu* metaphor, art ontology must pack its own lunch. Thomasson’s specific proposal is that repeatable works like books and songs are *abstract artifacts* — a suggestion which traditional metaphysics would treat as a category mistake. Thomasson’s work thus exemplifies a *reactionary* approach.

The labels ‘revisionist’ and ‘reactionary’ distinguish the two approaches with respect to how they treat art practice. From the direction of how they treat traditional metaphysics, Thomasson is the one advocating revolution. So I do not intend the labels as praise for one side or the other. Rather, it would be an unhappy end if we had to pick among these two options.

Andrew Kania (2008) offers a way to reconcile the two: If the reactionary ontology fits what we say and do, then that is our picture of art. A practice-first analysis would thus be in the business of unpacking our assumptions, not of showing that they are tenable or true. It would be descriptive metaphysics, in the fashion of Strawson (1959). The revisionist explications would, in contrast, describe what there actually is in the world. This broaches fictionalism, according to which ‘art’ talk is merely *as if* there were art works. Although fictionalism is one way out of the staring contest between revisionists and reactionaries, it should not be our first resort for resolving the dispute. We should only think that ‘art’ is a fiction of practice if it really is impossible to resolve the tension between art and sensible metaphysics. If there is some way to make sense of art which both respects practice and could possibly be true, then fictionalism would be otiose.

In this paper, I will just be considering musical works. If works of art have a common ontology, then my conclusions will generalize. If they do not, then my conclusions might still apply to other repeatable works like books and movies. Regardless, such extensions are beyond the scope of this paper. The philosophical debate about the ontology of music is often framed as being about *pure* music, also called *abstract* or *absolute* music. A work of pure music does not include semantic content (e.g., lyrics) or performative elements (e.g., gesticulation). This restriction comports with one standard view about music:

sonicism, according to which a musical work simply is a sound structure. Because refusing the restriction to pure music would beg the question against sonicism, I accept the restriction for the sake of argument.

2. Is a song forever?

Works of art (Guy Rohrbaugh argues) are modally flexible, temporally flexible, and temporal. Moreover, these features are best captured by understanding art works to be historical individuals.

First, to say that art works are *modally flexible* means that a particular work of art could have had different properties than it actually did. Take the example of Mason Williams' 'Classical Gas'. This 1968 piece for solo guitar won two Grammy Awards for Williams (best instrumental theme and best instrumental performance) and one for Mike Post (best instrumental arrangement). Williams' hand-written lead sheet for the piece simply had 'Thing for Guitar' written at the top. He writes, "I didn't really have any big plans for it, other than maybe to have a piece to play at parties when they passed the guitar around. I envisioned it as simply repertoire or 'fuel' for the classical guitar, so I called it Classical Gasoline."¹ Williams was later signed and decided to record the song for his first album. In a recording session, the copyist wrote 'Gasoline' simply as 'Gas'. That is the title that stuck. Given a slightly different course of events, the piece could have had a different title. Since we are treating it as a work of pure music, however, the title does not enter into it. Yet, just as the title change resulted from a copyist's error, we can imagine a similar small difference in Mike Post's arrangement. It is natural to say that a single note higher or lower, shorter or longer, would have made 'Classical Gas' somewhat different than it actually is, rather than to say that it would have made for an utterly different work than the one that has been played so many times in the actual world. In jargon, the intuition is that 'Classical Gas' is modally flexible.

Second, art works are *temporally flexible*, meaning that they can change over time. Rohrbaugh focusses his attention on literary works and musical scores which have appeared in multiple editions. It would be wrong, he argues, to treat the editions as utterly separate works. It would also be wrong to treat one of the editions as canonical, treating copies of the other editions as deficient instances of the canonical type. As he notes, the intuition that a song might change over time is even stronger for "folk music... passed down through an oral tradition, where there is no written ur-text on which to fixate" (2003, p. 188). Indeed, for music, fixation on the *score* is a red herring. If the musical work is an abstract type of sound-structure, then the same musical work would exist even if the score for it had never been written down.

Consider 'Classical Gas' again. There is an on-line video of Sungha Jung playing an arrangement by Ulli Bögershausen. One commenter on *YouTube* says of the Jung video that they do not really like this arrangement. Another describes Jung's performance as a really nice rendition. The thing to note is that both commenters take it to be an arrangement and a rendition of 'Classical Gas', not some separate work. With multiple editions by a single composer, one might imagine that the composer's authorial power connects revised scores to earlier ones. The historical separation here is a step further, because Bögershausen rather than Williams' did the arranging. And even the original recording of the work was itself arranged by

¹ The Story of Classical Gas, <http://www.classicalgas.com/gasstory.html>. Accessed 31 May 2011.

someone other than the composer. Nevertheless, it is natural to say that Williams playing Post's arrangement was a performance of the same 'Classical Gas' that was performed when Jung played Bögerhausen's arrangement. This means that Bögerhausen's arrangement extends the range of things that can count as performances of 'Classical Gas'. In jargon, the work is temporally flexible.

Third, works are *temporal*, meaning that they come into existence when composed and could go out of existence. There was no 'Classical Gas' in the Jurassic period, in the Renaissance, or during World War II. It simply did not exist until Mason Williams invented it. If Williams were annihilated along with all of the recordings, sheet music, guitars, and guitarists, then there would be no more 'Classical Gas' — it would be gone. Note that the claim of temporality is *not* that the musical work only exists when actually being played or performed. 'Classical Gas' does not snuff out of existence when guitarists go to sleep and return to existence when the first note is strummed again.² Rather, it continues to exist because it is part of the available guitar repertoire. It is maintained by guitarists, recordings, and all the rest.

These features are incompatible with the view that musical works are abstract sound structures. Instead, Rohrbaugh suggests that we should think of musical works as *historical individuals*. 'Classical Gas' is embodied in recordings, sheet music, guitars, musicians, and performances. Some but not all of these embodiments count as occurrences of the work; the work occurs when and where it is performed, but does not occur when and where the sheet music just sits in a drawer. (Note that 'embodiment' and 'occurrence' take on a somewhat technical meaning here.)

Julian Dodd objects to Rohrbaugh's account, insisting that musical works are neither modally nor temporally flexible. I think, given appropriate rhetoric, it is possible to summon up intuitions for both sides. With some concentration, I can summon up an attitude from which it seems OK to say that Post's arrangement of 'Classical Gas' and Bögerhausen's are two distinct musical works, similar in many respects and derivative of William's original theme. As Dodd acknowledges, however, his Platonist type/token theory forces him to say that even the slightest difference makes for a different musical work. It is an affront to intuitions — even to Dodd's — to say that one note higher or lower, shorter or longer, makes for a different musical work. He insists, however, that this is a price we must pay in order to have a coherent ontology. He writes, "[W]hat is a relatively minor conflict between the type/token theory and our ordinary thought and talk about works is a small price to pay for avoiding the problems that Rohrbaugh faces..." (2007, p. 90).

Although Dodd tries to finesse the point by calling it a "minor" affront and a "small price", this is still biting a bullet. He accepts Rohrbaugh's insistence that *if* musical works were modally and temporally flexible, *then* the metaphysical view that musical works are types would have to be jettisoned. Dodd insists that it should be saved because (he says) Rohrbaugh's alternative metaphysical view is a disaster. Dodd complains that musical works as historical individuals would be "cross-categorical entities" that violate the usual metaphysical sensibilities, that they would be "ontologically novel" and "highly

² 'Classical Gas' has been played on radio and television literally millions of times, perhaps more than any other musical work. So it is possible that it has been continuously occurring *somewhere* for most of its history. This, of course, is beside the point.

revisionary” (2007, pp. 145-6). Rohrbaugh himself describes his approach as “innovation at the level of metaphysics, the identification of a new ontological category.” He cautions that this would be “overkill and bad methodology to boot” unless the novel category can be made to do systematic philosophical work (2003, p. 197). Even if novel ontological machinery could make sense of *art*, however, it might still seem like overkill and bad methodology. It would be odd, after all, if art had a *sui generis* ontology. Call this the *argument from bizarre ontology*.

Dodd’s also objects that he cannot make sense of how a musical work *qua* historical individual could be repeatable.³ Since an individual does not have instances, the separate performances cannot instantiate the piece. As an historical individual, the musical work has *embodiments* — the things in the world which either constitute it or upon which it ontologically depends. Yet, Dodd asks, how can embodiments count as *occurrences* of the work? As he notes, there are many kinds of ontological dependence which do not amount to occurrence. For example, the impure set {Mason Williams} ontologically depends on Mason Williams. Although Williams meets the conditions for being the embodiment of the set, he is certainly not an occurrence of the set. Call this the *argument from repeatability*.

Dodd offers some further objections which only apply to specific developments of Rohrbaugh’s proposal. For example, historical individuals may be understood as four-dimensional objects extended through time. On this view, the individual is identical to an historical process. Dodd objects to this in two ways.

First, it is natural to say that someone who listens to the three minutes and six seconds of ‘Classical Gas’ has heard the whole thing. This would not be true if the work is a long process that stretches from the late 1960s to the far future. He argues that “it is plainly intuitive to think that an audience hears entire works in a performance” and that the four-dimensionalist construal cannot accommodate this (2007, p. 157). My intuitions differ on this, and I am perfectly comfortable saying that the audience hears an entire *performance of the work* but does not hear the entire *work simpliciter*. In any case, from Dodd’s handling of modal and temporal flexibility, it is clear that one intuition one way or another will not settle this matter. The core of the issue is whether Rohrbaugh’s suggestion could possibly be respectable metaphysics.

Second, Dodd insists that the construal of works as four-dimensional objects fails because they would be ontologically multifarious (2007, pp. 160-2). The worry is this: A particular occurrence of the work would be a temporal part of the overall work; e.g., the part from 8:00 PM to 8:03 on a particular day. Yet when two guitarists play ‘Classical Gas’ at just that time in different places, the temporal part would contain *two* performances. So some occurrences would be spatially unified (when there was only one performance of the work during that time slice) and others spatially scattered (when there was more than one performance at that time). Occurrences altogether would lack any sensible ontological unity. Call this the *argument from multifariousness*.

³ Dodd says ‘continuant’ instead of ‘historical individual’, but he is clear that he intends to mean by the former exactly what Rohrbaugh does by the latter; see Dodd 2007, fn. 1, p. 144.

Apparently, Rohrbaugh himself does not favour the four-dimensionalist construal of his proposal.⁴ Rather, he prefers to think of historical individuals as abstract objects which ontologically depend on but are not constituted by their embodiments. A work would thus be wholly present every time and place it is performed. It would endure, rather than perdure. Note, however, that there is nothing in Rohrbaugh's original argument which necessitates this. On face, an historical individual seems to have none of the markers of an abstract object. Abstract entities are not perceptible, do not enter into the causal order of things, and exist outside space and time.⁵ In contrast, historical individuals may be perceptible. They necessarily enter into the causal order, coming into being and going out of being. They are spatially and temporally local. I will not pursue this point, since most of Dodd's arguments do not depend on whether a musical work is a thing constituted by its embodiments or an abstract object dependent on its embodiments.

To sum up, I have distilled Dodd's resistance to Rohrbaugh into arguments from bizarre ontology, repeatability, and metaphysical multifariousness. At the core of these is an insistence that the ontology of musical works as historical individuals just does not make sense.

3. Pluralism and fictionalism

Taking the reactionary line, the argument from bizarre ontology shows not that Rohrbaugh's account of art is unsatisfactory but rather that the sensibilities of metaphysicians are too timid. If the account fits what we say and do, then that is our picture of art. Andrew Kania, considering Dodd's attack on Rohrbaugh's "new category", notes that Rohrbaugh's argument relies crucially on the way that we actually think and talk about art (2008, p. 433). As a descriptive or anthropological account, it does not need a "further *metaphysical* defence" (p. 434). As we saw earlier, he recommends fictionalism — an option that we should not embrace too quickly.

In a paper coauthored with Christy Mag Uidhir, I argue for art concept pluralism (Mag Uidhir and Magnus, 2011). Our claim is that there are multiple legitimate ways of thinking about *art*. Applying different art concepts, we argue, yields different answers to questions about which objects are occurrences of which works.⁶ Applying the *aesthetic art* concept to music, two identical sound structures will both count as instances of the same work. Applying the *historical art* concept, two sound structures must have the same provenance in order to count as instances of the same work.⁷ For ordinary purposes, it is unnecessary to tease these apart. Since they will typically yield the same judgements, there is an advantage in the looseness of our usual talk about 'art'. Specifying one or the other is only required to make sense of extraordinary cases and philosophical disputes.

⁴ Dodd says that Rohrbaugh has said as much in personal communication (2007, p. 148).

⁵ I take this list from from Zoltán Gendler Szabó (2003), but it is entirely typical.

⁶ In the paper, we talk about 'instances' of works. I say 'occurrence' here in order to be neutral between Rohrbaugh's and Dodd's ontological proposals.

⁷ The *conventional art* concept would also require common provenance.

Art concept pluralism explains why there are intuitions that line up on both sides: The competing intuitions are honed by different art concepts. We can see the different intuitions as guiding when and how each concept is applicable.

It is tempting to say that there are simply different ontologies appropriate to the different concepts: Musical works *qua* aesthetic art are types. Musical works *qua* historical art are individuals. This would be too quick, however. As Mag Uidhir and I are careful to point out, pluralism should not be used as a universal solvent to dissolve any philosophical dispute. If Dodd is correct that works-as-individuals is an unsatisfactory and incoherent ontology, then it will not do even as the ontology for works *qua* historical art.

In order to be a non-fictionalist pluralist and insist that musical works even *as considered under specific art concepts* really are historical individuals, I must answer Dodd's allegation that the ontology of historical individuals is a category-violating disaster. The easiest way to do that is to show that it is not novel — contra claims by Rohrbaugh, Dodd, and Kania. Quite the contrary, it has been familiar to philosophers of biology for decades. It is now almost a consensus among biologists that biological species are historical individuals. In the next section, I explain this view and argue that musical works would be historical individuals in much the same sense.

4. The species-as-individuals consensus

The claim that species are individuals was originally proposed in the 1960s by Michael Ghiselin (1966; 1974). It was later popularized by David Hull (1976; 1978). It is not hollow bravado when Ghiselin calls it the 'philosophical consensus' (2002, p. 153; 2007, p. 283; 2009, p. 253). Even Richard Boyd, opposing individualism, acknowledges it as the default position (Keller et al. 1999). Members of a species are part of an historical lineage. Take the species *Anas platyrhynchos*, the common mallard. All of the mallards alive today share common ancestors and figure in the same historical narrative. Biological explanations of why ducks are like they are include evolutionary explanations in terms of this shared history. As such, an arrangement of molecules which came together randomly in a distant galaxy with the same intrinsic properties as a female mallard would *not* be a member of the species. The explanation for its having duck-features would be entirely different than the explanation for why female mallards have duck-features.

Ghiselin and Hull express individualism as an opposition to the view that species are classes. They explain this in terms of the relationship between a species like *A. platyrhynchos* and an organism like a particular duck. If the species were a class or set, then the duck would be a member of it — and instance of the type. If the species is an individual, though, the duck is *part* of the species. Ghiselin explains, "Organisms, which are also individuals, are not instances of species, but parts of them, just as cells are parts of organisms" (2009, p. 254). This is naturally construed along four-dimensionalist lines,

such that the species is the sum of its embodiments.⁸ So if the argument from metaphysical multifariousness discredits the view that musical works are individuals, then it should also work against the view that species are individuals.

The argument, recall, was that a three-minute temporal part of the work-as-individual could include one performance or many; so the temporal part might be spatially local or spatially disjoint. Apply this to a species-as-individual. A temporal part of *A. platyrhynchos* typically includes a great many organisms and is spatially disjoint. Yet we can imagine a near-genocide which kills all but a single duck. A temporal part after the duckpocalypse would include just one organism and would be spatially local. This does not show any problem with the species-as-individuals view. Rather, it shows that a particular organism is not merely a *temporal* part of a species. An organism is a *spatiotemporal* part. There is not one spatially disjoint mallard alive at the present time, but instead a great many individually local mallards.

The same answer can be given to Dodd's argument about musical works. An occurrence of a work, as a part of the historical individual, is not a mere temporal part. Rather, a performance is a spatiotemporal part. When there are two performances of 'Classical Gas' at the same time but in different places, there are two occurrences of the work. The occurrences are distinct parts of the work-as-individual, just as two ducks on a pond are distinct parts of the species-as-individual. So much, then, for the argument from metaphysical multifariousness.

Consider next the argument from repeatability. If a musical work were a type, then each performance would be an instance of the type. Dodd's worry was that there was nothing akin to *instantiation* for historical individuals. Yet species provide a model here. Each individual duck is a member of the species. Even though it is odd to say that each performance is a 'member' of the work, this is just a terminological difference. The performance may relate to the work as the duck relates to the species. As Dodd notes, there are plenty of things that have embodiments (stuff in the world upon which they ontologically depend) but which do not have occurrences. Embodiments will not always count as occurrences. Mallards are repeatable in the straightforward sense that there are a great many of them now and that they will produce future generations that include even more. The objection that embodiments do not *always* underwrite repeatability is beside the point. Species as individuals provide a model of how *some* embodiments can count as occurrences. Of course, not all embodiments of a musical work will count as occurrences of the work. A printed score for 'Classical Gas' is an embodiment of it and can contribute causally to the production of further performances, but it is not itself a performance or occurrence of the work. Although it is not usually mentioned in accounts of species individualism, the parallel claim is true about species. Mallard sperm and a mallard egg might be combined *in vitro* and used to produce a new mallard. Yet the cells in a test tube are not themselves mallards. So much for the argument from repeatability.

⁸ As Reydon (2003) notes, however, some authors take the species as individual to be merely the sum of the organisms that exist at a particular time.

The mere fact that individualism is a familiar and comfortable option in philosophy of biology suffices to answer the argument from bizarre ontology. So Dodd's concerns have all been answered. Since historical individuals are respectable *onta*, there is no reason to bite the bullet and deny that musical works are modally and temporally flexible. Considered as historical art, musical works are historical individuals.

5. Causes in the wings

We saw earlier that there are different ways of filling in the metaphysical details of the view that musical works are historical individuals. The analogy with individualism about species does not settle the issue. The general picture of species-as-individuals — just like the suggestion that musical works are individuals — might be ontologically filled out in various ways.⁹ Talk of individuals and parts, as opposed to classes and instances, should not be taken as a brief for mereology over set theory. What is centrally important to the idea is just the core insistence that a species has continuity. In an early paper advocating individualism, David Hull is especially clear about this:

By 'individuals' I mean spatiotemporally localized cohesive and continuous entities (historical entities). By 'classes' I intend spatiotemporal unrestricted classes... The terms used to mark this distinction are not important, the distinction is. For example, one might distinguish two sorts of sets: those that are defined in terms of a spatiotemporal relation to a spatiotemporally localized focus and those that are not. (1978, p. 336)

Similarly, the arguments in defense of works-as-individuals (§2) are not at the level fundamental ontology. Historical individuals might, at the fundamental level, be localized and causally-specified types. This still contrasts with the usual view of works as types, and it is certainly not the view that Dodd defends. So when Rohrbaugh considers such a proposal, he observes that, for works-as-types theorists, the requirement of causal connectedness would be “already to concede defeat” (2003, p. 196).

Whatever exact metaphysical account is to be given, the continuity of an historical individual is *causal* continuity. As Rohrbaugh says, causation “clearly waits in the wings” (2003, p. 200). In the remainder of the paper, I turn my attention to the account of species as *homeostatic property clusters* (HPCs). For those familiar with the HPC view, this may seem like an odd choice; it is often seen as a rival to species-as-individuals.¹⁰ I argue that the HPC view is better seen as a specification of what it is to be an individual: Individuals are HPCs united by a single token causal history. This way of thinking fits both species and musical works.

The HPC account was originally devised by Richard Boyd as an account of kinds like rationality, reference, and moral goodness. Yet the stock example an HPC is a biological species, and the account has

⁹ Ghiselin himself sees individualism about species as “the inspiration for a new ontology with profound implications for knowledge in general” (2009, p. 253). Rohrbaugh's treatment of musical works as individuals would thus be a specific development in that program. Engagement with Ghiselin's more detailed metaphysics is beyond the scope of this paper, since the approach is decidedly reactionary (in the sense of §1).

¹⁰ See, e.g., the discussion of HPCs in Richards (2010).

been most widely accepted by philosophers of science.¹¹ Consider mallards again. There are intrinsic properties typical of ducks. Although none of these are necessary or even together sufficient for species membership, they do occur together quite often. Duck properties come clustered together in many spatially-separated packages: distinct organisms that look like ducks, walk like ducks, and quack like ducks. The central idea behind the HPC account is that the kind is not characterized just by these typical properties. Instead, it is unified by the causal processes which produce and maintain packages of these properties. As I argue elsewhere (forthcoming), we should not treat the *property cluster* as merely one list of typical properties. It is better to treat it as a structured complex of properties: the duck is characterized by different properties at different points during her life cycle, and female and male mallards differ in systematic ways. This property complex is produced and sustained by causes at several levels. When we look at a specific duck, the explanation for why the duck properties remain together can be given in terms of her physiological processes. The explanation for why the properties play out over time as they do (as a cluster of duckling properties before, a cluster of duck properties now, and a cluster of geriatric-duck properties later) can be given in terms of her developmental processes. The explanation for why there are several similar clusters of duck processes on the lake, that there were last year, and that there will be next year can be given in terms of the reproductive processes of mallards. All these processes are themselves situated in the evolutionary history of the species. The evolutionary origin of all ducks is the same token event.

Imagine again that there were intrinsically-identical, duck-like organisms here and in a different galaxy. The explanation for why they maintain bodily integrity would be the same. The immediate physiological processes would be of the same *type*. Yet the explanation for why there were duck-like creatures *there* would be different than the explanation for why there are ducks *here*. The former would have to be given in terms of whatever produced the organism in that distant galaxy, the latter could be given in terms of the evolutionary history of the species here on Earth. Even if the histories were of a similar *type*, they would be different *token* processes. Evolution is a madly contingent business, and it is the shared evolutionary history that explains how members of a species share what they do.

Recall Hull's minimal conception of historical individuals as "localized cohesive and continuous entities" (1978, p. 336 cited above). The cohesion and continuity are importantly *causal cohesion* and *causal continuity*. The different parts are produced as part of the same historical narrative, the same token causal story. An HPC kind that is unified by a single token causal history will count as an 'individual' in this sense. Indeed, Boyd urges that "the distinction between natural kinds and (natural) individuals is... merely pragmatic" — "almost just one of syntax" (1999a, pp. 163, 164).

Now let's return to musical works as individuals: There are patterns of sounds that recur when a work is played. None of these precise sounds are necessary in order for this to be an occurrence of the work, because the work might be interpreted or arranged differently. For each performance of the work,

¹¹ Richard Samuels and Michael Ferreira write that "philosophers of science have, in recent years, reached a consensus — or as close to consensus as philosophers ever get — according to which natural kinds are *Homeostatic Property Clusters*" (p. 222, 2010).

there is a skilled musician which produces such a sound structure.¹² Yet the patterns of sound are not sufficient for an occurrence of the work. Performances of the work all share a single, distal cause: the original composition of the work. All the occurrences of the work as similar sound structures are part of the same token causal story, just as all the mallards as similar organisms are part of the same token history. That is to say: The musical work is an HPC unified by a token history. It is an individual.

One might object that Boyd himself thinks of species as HPCs but *not* as individuals. The complication is that Boyd thinks that a single species might originate multiple times in different places. However, he is not concerned with philosophical examples like molecular duck doppelgangers in a distant galaxy. Instead, he is concerned about species that result from hybridization (see Boyd 1999b). Imagine that two parent species can be crossed to produce viable offspring and that different specimens from the parent species are crossed on several occasions. Boyd insists that the hybrids from each cross and their offspring, although part of separate causal histories, would count as members of the same species. So he insists that a species-as-HPC might be unified simply by a *type* of unifying cause. A proper individual, in contrast, must be unified in the broadest scope by a single *token* cause. If species must be individuals, then the separate hybrid lineages — even if they were indistinguishably similar — would be distinct species. So, because he allows the possibility of separate hybrid origins for the same species, Boyd denies that species are individuals.

Boyd's worries about hybrids do not obviously arise for musical works. Imagine note-for-note identical compositions being written by two composers. These would be separate works, at least considered under the rubric of *historical art* or *conventional art* rather than *aesthetic art*. We might instead imagine a case in which a single musician composes a tune, writes it down, forgets about it, and later composes a note-for-note identical tune. Structurally, this would be like the cases of repeated hybridization that worry Boyd. The important difference is that Boyd's case is biologically plausible; it actually occurs among plants. The parallel case of repeated musical composition seems more fantastic. I am unsure of what to say about it. Suppose one said that the two tunes would be distinct works; the two works would each be historical individuals. Suppose instead that one said that the two tunes would be the same musical work; the works would not be individuals, strictly speaking, but property complexes unified by causal origins that were sufficiently similar. In this latter case, both causal origins would still crucially share the same individual actor — the selfsame composer. So even if we allow that the same work could be composed twice in this way, it would still be an HPC, and there would be significant constraints on what could count as a composition of the work. This odd kind of counterexample to works-as-individuals still puts the work in the same category (HPCs). It would provide no comfort for traditional works-as-types approaches, such as Dodd's Platonist sonicism.

¹² Recorded and synthesized occurrences of the work complicate the story somewhat. Each time a computer plays a MIDI file of 'Classical Gas', there is a different kind of local cause than when there is a live performance of it. Nevertheless, there are still local causal explanations to be given in both cases, and the two share a distal cause (the original composition).

Conclusion

Rohrbaugh argues from our understanding of musical works, their flexibility and temporality, to the conclusion that they are historical individuals. Dodd objects that this is an unacceptable ontology. Seen as a struggle between a revisionist (Dodd) and a reactionary (Rohrbaugh), this could only be settled at the level of philosophical methodology. Yet Dodd's objections fail, as the analogy with individualism about species makes clear. The analogy does not fully resolve things, but instead leaves us the task of elaborating what 'historical individual' must mean. I have argued that 'individuals' are best understood as homeostatic property clusters (HPCs) which are unified by a common history rather than merely by a type of process. So we can see musical works, under the rubric of *historical art*, as HPCs.

Since HPCs are important for a general account of the world, seeing works of music as HPCs is not a reactionary position at all. If the account fits with art practice, then the view is not revisionary either.

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