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Musical Works Are Mind-Independent Artifacts

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Abstract. Realism about musical works is often tied to some type of Platonism. Nominalism, which posits that musical works exist and that they are concrete objects, goes with ontological realism much less often than Platonism: there is a long tradition which holds human-created objects (artifacts) to be mind-dependent. Musical Platonism leads to the well-known paradox of the impossibility of creating abstract objects, and so it has been suggested that only some form of nominalism becoming dominant in the ontology of art could cause a great change in the field and open up new possibilities. This paper aims to develop a new metaontological view starting from the widely accepted claim that musical works are created. It contends that musical works must be concrete and created objects of some sort, but, nevertheless, they are mind-independent, and we should take the revisionary methodological stance. Although musical works are artifacts, what people think about them does not determine what musical works are. Musical works are similar to natural objects in the following sense: semantic externalism applies to the term 'musical work' because, firstly, they possess a shared nature, and, secondly, we can be mistaken about what they are.

1. Introduction

The research that has been done in the field of ontology of musical works in the last few decades falls into two broad categories on the basis of their metaontological premises. On one side of the divide are those who, like Julian Dodd (2007) and Nelson Goodman (1968), tend to see

their theories of the ontology of musical works more as a part of general metaphysics. We might say that the starting point of their inquiry is the landscape of contemporary metaphysics, and, in it, they strive to find a place where musical works would fit well. On the other side of the divide, there are such authors as Jerrold Levinson (1980) who take musical intuitions and practices to be their starting point in the metaphysical inquiry, and, because of it, they seem to be willing to add new kinds of entities to the current metaphysical landscape.

Christy Mag Uidhir discusses these two opposing methodological positions held by different ontologists of art in his book *Art and Abstract Objects* (2013). He calls them, respectively, *Deference view* and *Independence view*. According to the first of these, all tools and ontological categories offered by contemporary metaphysics must be sufficient for the ontology of art, and, in the case our metaphysical commitments conflict with our art-theoretic commitments, we should sacrifice the latter in favor of the former. By choosing this position, we can make the ontology of art less insular and more interesting to those working outside of the field. An ontologist who aims to establish a dialogue between art ontology and the general contemporary metaphysics and who is also not content with committing to unique art ontological categories should support the Deference view. According to the Independence view, ontological categories of artworks do not have to conform to those offered in general metaphysics because our general metaphysical commitments should be seen as less important than art-theoretical commitments, and, should a conflict arise, we should sacrifice the former in favor of the latter. An ontologist who holds the Independence view sees no problem in creating ontological categories that pertain only to art objects. By choosing this position, ontologists of art distance themselves from the metaphysics that lies outside their field.

Because the distinction between Deference and Independence has methodological primacy in the ontology of art, it is not irrelevant to the controversy between revisionary and descriptive approaches to ontology. The descriptive approach, according to Peter Strawson, is

concerned with the current structure with our thought, while the revisionary approach devotes itself to the search for another, better structure (Strawson 1990: 9). Before choosing between the revisionist and descriptive methodology, we have to investigate our premises: why should we treat musical objects either as something that must merge into the framework of general contemporary metaphysics, or something that should be seen primarily through the lens of the art theory in the first place?

One possible answer is proposed by Andrew Kania, who explicitly claims that there is a gap between the ontology of musical works and fundamental metaphysics, and explains that gap by the fact that musical works are dependent on social practices:

> The fact, if it is one, that fundamental metaphysics is revisionary does not directly imply that musical ontology is revisionary. Moreover, the considerations [...] about the dependence of musical works on complex social practices give us reason to suspect that musical ontology is descriptive whether or not fundamental metaphysics is." (Kania 2008: 438)

This paper is dedicated to the problem formulated by Kania in the quotation above: is musical ontology in some way significantly different from fundamental metaphysics? If so, why is it different? To put it another way, we are interested in the most fundamental assumptions about the nature of musical works and the relation of said works to other kinds of objects that are subject to ontologists' reflection. These premises also lead musical ontologists to choose between either revisionary (see Dodd 2013, Davies 2017) or descriptive (see Thomasson 2005, 2005; Kania 2008, Killin 2018) methodological approaches.

My main aim here is to offer a position that would be middle way between the positions called Deference and Independence View. Mag Uidhir calls such a third option the Reciprocity

view. According to this position, aesthetics must take its ontological categories from general metaphysics, and metaphysics, in turn, must provide ontological categories that are capable of reflecting art theory in a convincing manner. In order to offer a methodology of musical ontology compatible with the Reciprocity view, first we have to address the problem formulated by Kania by providing reasons as to *why* musical works have to be something that must find a place among general metaphysical categories. We shall uncover these reasons by discussing musical works in regard to the distinction between natural, social and artifactual kinds.

This work shall defend the position that musical works, being of the artifactual kind, are such objects that allow us to be mistaken about their properties despite the fact that their existence depends on human consciousness (depends in a sense that no musical works would exist if human consciousness never existed and that musical works are created intentionally). In one sense, musical works are intention-dependent: as products of human creation, they causally depend on the intentions of their creators. Whenever intention-dependence is mentioned further in this paper, it should be taken to imply *causal* dependence. However, musical works are not intention-dependent in another, more critical sense: the *essence* of musical works is independent of our intentions or of any conception of musical works we might have. Muhammad Khalidi discusses similar cases of entities that are *causally*, but not *constitutively* dependent on human minds, such as roentgenium, a chemical element that has only been proruced by humans. Despite being produced exclusively in laboratories, roentgenium‘s essence is defined by it atomic number, similarly to other elements like uranium. Khalidi draws a parallel between these two elements, arguing that the difference in their production histories – roentgenium originates from the lab, while uranium occurs naturally – doeos not provide sufficient grounds to adopt a realist stance only towards uranium, but not roentgenium. (Khalidi 2016: 226–227). In a similar vein, this paper argues that musical works

are mind-independent in the sense that their essence does not *constitutively* depend on the human mind, irrespective of their history of creation.

This paper presupposes the following conception of musical works: musical works are artifacts[1], i.e., first, they are product of a largely successful intention to make music.[2] Second, they are best understood as collective artifacts causally dependent on the intentions of more than one author (composers and performers).[3] [4] Third, they necessarily consist of sounds

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[1] Although some philosophers take musical works to be created *abstract* objects (Levinson 1980 and Friedell 2020), according to the standard metaphysical view, abstract objects exist eternally and cannot be created. Since creation is normally understood as a causal relationship between the creator and her creation, but abstract objects cannot enter causal relationships, it is metaphysically unclear what kind of a process creation of an abstract object is (Mag Uidhir 2013: 15). If we reject the possibility of the existence of created abstracta, treating musical works as artifacts presupposes a commitment either to some sort of musical idealism (Cray and Matheson 2017) or nominalism (different versions of musical nominalism include class nominalism (Goodman 1968), perdurantism (Caplan and Matheson 2006), endurantism (Tillman 2011) and stage theory (Moruzzi 2018)).

[2] This condition originates from Amie Thomasson's definition of artifact (Thomasson 2003: 600).

[3] Such analysis of collective artifacts has been proposed by Risto Hilpinen: "Let us assume that several agents make a number of objects which together form a cultural object of a certain type *D* (for example, a village). Such an object may be called a collective object; an object *0* belonging to this type consists of a collection of simpler objects *0*,. […] In some cases collective artifacts are made in such a way that different agents (or authors) are responsible for different features of the object. For example, certain features of a performance of a musical work are due to the composer, whereas other features depend only on the intentions of the performer (if the latter is not the composer). Thus the performances of musical works can be regarded as collective artifacts, with both the composer and the performer as their authors." (Hilpinen 1992: 66).

[4] Performers create parts of the artifact that are often called instantiations (especially in the Platonically orientated literature). There is a discussion about the conditions of instantiation of musical works. Jerrold Levinson claims that there must be either an intentional or causal connection between the performance and the composer's creative activity, in other words, a sound sequence must come into existence either together with the

arranged into concrete structured sound sequences. These sound sequences are intentionally organized to be heard, to have physical properties that ensure the experience of at least one basic musical feature (such as the pitch or the rhythm), and to be listened to for such musical features.[5]

One of the main methodological disagreements in the ontology of musical works revolves around the determination thesis, according to which what musical works are is determined by the way we think about them (Dodd 2013: 1055). In this paper, I defend the following thesis: although we *create* musical works, what we think about them does not determine what they are. In this respect, musical works are no different than natural objects: semantic externalism applies to the term 'musical work' because musical works have a common nature, and we can be mistaken about what they are.

Since the arguments in this paper are founded on the premise that musical works are artifacts, I will begin with a brief overview of the existing literature on natural and social kinds, along with some reflections on the position of artifact kinds within this framework. My primary emphasis will be on the issue of intention-dependence and an exploration of what is meant by the assertion that musical works, as artifacts, are dependent on intentions. This exploration aims to establish the idea that while musical works are causally dependent on the intentions of

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performer's intention to perform that musical work, or by using the score which secures a causal relation between the performance and the composer's creative activity (Levinson 2011: 85). Whatever is the nature of this connection, it is quite clear that instantiation depends on something more than merely on acoustic properties, otherwise, two performances of two distinct scores written by two distinct composers, which, by sheer accident, turned out to be acoustically indistinguishable, would each instantiate two musical works (Walton 2015: 231).

[5] According to Andrew Kania's structural definition of music, music is "(1) any event intentionally produced or organized (2) to be heard, and (3) either (a) to have some basic musical feature, such as pitch or rhythm, or (b) to be listened to for such features." (Kania 2011: 12).

their creators, they are not constitutively dependent on them. In the rest of the paper, I will focus on the kind term "musical work" and the plausibility of semantic externalism. The aim is to demonstrate that two conditions for semantic externalism are met: firstly, that musical works share a common nature, and secondly, that as a society, we can be mistaken about their nature.[6]

2. Realism about Musical Works: Introducing the Problem

Are musical works different from natural objects because they are based on social practices, and in which ways does this dependence on social practices matter metaphysically? There is an established philosophical tradition according to which there are natural kinds, that is, kinds of objects that exist independently of psychological and social facts about human beings – kinds such as gold, water, beavers, tigers, and asteroids. It is widely accepted that the natural kind terms refer to natural objects in virtue of the causal connection between the user and an instance of such a kind (Kripke 1980; Putnam 1975, 1977). These terms are used with a presupposition that there is a common nature underlying these objects – such as a common microstructure, common physical properties, a common genetic code or chemical composition – even if we, as a language community, do not know what that nature is, or even if we have false beliefs about that nature. Inquiry into what natural kinds *really are* is a matter of discovery, and there can be substantial error in our conception of them.

Social kinds – for instance, money, lectures, weekends, institutions, and elections – seem to be of a very different nature. These kinds of objects would have never existed if human beings had not existed; moreover, they depend – at least partially – on our propositional

[6] This paper discusses the semantics of the *kind term* "musical work". The semantics concerning the names of specific musical works is a slightly different issue, requiring a separate consideration on another occasion.

attitudes towards them. Social objects do not share a common microstructure or physical properties, and therefore, they do not seem to have a common underlying nature. It is often argued that the causal theory of reference is not applicable to the terms that refer to social kinds, as their existence is mind-dependent and determined by our concepts and associated beliefs (Hayek 1943; Searle 2007; Thomasson 2003; Olivero 2019). Accordingly, a philosophical study of social kinds appears to be confined to descriptive endeavors.

We may now raise the question of where in this scheme would musical works fall, and whether realism about musical works is possible. One of the ways to define realism, offered by Michael Devitt, is to claim that realism is a doctrine of independence – it claims that "tokens of most current common-sense and scientific physical types objectively exist independently of the mental" (Devitt 1996: 21). Realism about musical works is, accordingly, a position that musical works exist independently of 'the mental'. Is such realism about musical works possible?

Musical works, like other works of art, are standardly held (and here also taken) to be artifacts – objects made by people intentionally.[7] The existence of musical works depends on the human intention to bring them into being. Some philosophers call art-kinds *paradigmatical* social kinds, because "an entity's membership in the class of artworks, music, paintings, etc. depends entirely on human actions and interests, rather than on the entity's causal powers, homeostatic property clusters, or microstructural properties" (Xignesse 2018: 138). Along similar lines, many definitions of art mention the creator's intention as a necessary condition for an object to belong to the realm of art, and Christy Mag Uidhir even claims that any philosophical inquiry which fails to take intention-dependence as a necessary condition for being art must be rejected (Mag Uidhir 2013b: 6). In psychological and empirically-informed

[7] The exception is musical Platonism which denies that musical works are created and believes that musical works are abstract objects (Wollheim 1980; Wolterstorff 1980; Kivy 1983; Dodd 2007).

philosophical literature, there is an especially influential account of artifact concepts by Paul Bloom which sees a fulfilled intention as being central to the folk conception of artifacts. According to Bloom, "[…] we determine that something is a member of a given artifact kind by inferring that it was successfully created with the intention to belong to that kind" (Bloom 1996: 1). Bloom's definition is based on Jerrold Levinson's intentional-historical definition of art,[8] and the latter, also, emphasizes the importance of intention regarding artworks.

Musical works, as other works for performance, might be treated as collective artifacts that are dependent on the intentions of more than one author: some properties of a musical work depend on the composer's intentions, while others on the performer's intentions (Hilpinen 1992: 66). In order to instantiate (and continue) a musical work, a performer must have an intention to do so, and the intention has to be successful in terms of making a structured sound sequence.

One might have an intention to create a musical work, but merely hitting cello strings with a bow most likely would not be enough to succeed. Amie Thomasson offers a definition for an artifactual kind which includes the success of the creative intention as a necessary condition. According to this definition,

> Necessarily, for all *x* and all artifactual kinds *K*, *x* is a *K* only if *x* is the product of a largely successful intention that (*Kx*), where one intends (*Kx*) only if one has a substantive concept of the nature of *K*s that largely matches that of some group of prior

[8] According to this definition, "*X* is an artwork at [time] *t* = df *X* is an object of which it is true at *t* that some person or persons, having the appropriate proprietary right over *X*, non-passingly intends (or intended) *X* for regard-as-a-work-of-art, i.e., regard in any way (or ways) in which objects in the extension of 'artwork' prior to t are or were correctly (or standardly) regarded." (Levinson 1979).

> makers of *K*s (if there are any) and intends to realize that concept by imposing *K*-relevant features on the object. (Thomasson 2003: 600)

Thomasson argues that concepts are constitutive of the nature of artifacts, and the success of an intention should be measured by the resemblance to the concept.

Because of their intention-dependence, artifacts are often put into the same class with institutional objects: the majority of philosophers claim that realism does not apply to artifacts (e.g. Devitt 1996: 17; Xhignesse 2018), and they choose to draw a line between artifacts and natural objects. However, artifactual kinds share similarities with both natural and social kinds: their instances remind us of natural objects as they usually are physical objects, such as chairs, pencils, or sculptures. Artifacts seem to differ from institutional objects because they normally have a well-defined physical foundation. Like other artifacts, for example, a table that is created by a carpenter by arranging pieces of wood into a new object, musical works are created by composers and performers, intentionally arranging sounds into structured sound sequences.[9] Here we understand sounds in accordance with Casati and Dokic's Located Event Theory: they are located at the sound source and should be identified with the vibration process (Casati and Dokic 1994).

While paradigmatic social objects, such as cheques, may be partly physical, but, as a cheque, it has its properties conventionally, not because of the paper's physical qualities. Artifacts, in contrast, have at least some of their properties in virtue of their physical, microstructural qualities and causal properties. And, in the case of musical works, our appreciation of them depends upon their performances, upon their instances made of material

[9] However, we should note that the approach proposed here is also compatible with many other theories of sound, that is, property theories (e.g. Pasnau (1999)), medial theories (e.g. O'Callaghan (2009)) and maybe even some versions of the proximal theory.).

sounds, because, in Nannicelli's words, "musical works are things 'to-be-listened-to' " (Nannicelli 2011: 402). Quite obviously, a musical score is not an instance of the work, but should rather be seen as instruction – it does not have any sound qualities that we are interested in when we listen to music, we cannot listen directly to the score.

Experiencing a musical work does not require having human consciousness either. Unlike paradigmatic social objects, such as weekends and promises, musical works can be at least partially experienced by a beaver that accidentally finds itself in the middle of a concert.[10] Although the beaver cannot be said to properly understand a musical work or to recognize it as a musical work, it encounters music and might, for example, run away after experiencing terror caused by the sonic properties of that work. We can imagine a beaver drinking water, climbing upon a table and running away from (or maybe even enjoying) a musical work – it can enter into relationships with these objects, and, in this sense, their existence is equally independent from our propositional attitudes.

Another difference between musical works and paradigmatic social objects lies in the fact that one person is enough to create a musical work or another kind of artifact – unlike social objects – and, similarly to natural objects, they do not require the existence of a society. Even if musical practices came into existence and flourished as collective, social activities, musical works do not have to be shared in order to exist. Robinson Crusoe could have created and performed musical works to himself on his lone island. Some musical works that belong to some outsider music tradition (part of *l'art brut*) might be created only to never reach anybody else's ears.

To give a more precise example, one might consider the black metal tradition, and especially the phenomenon of one-man black metal bands. It is very common among black

[10] The beaver's example is borrowed from Ferraris (2012).

metal musicians to remain anonymous. Moreover, many black metal projects refuse to perform live. For example, the Saudi Arabian band *Al-Namrood* has never performed live and remains anonymous – otherwise, the identification of the band members might lead to capital punishment. *Al-Namrood* is a band that consists of more than one member, but there is also an old tradition of one-man bands in black metal, one of the best known and most influential examples being Varg Vikernes, who recorded a couple of albums alone in prison after being convinced of murder and church arson. We might also consider the German-Swiss black metal band *Vinterriket* which consists of one member, Christoph "Vinterriket" Ziegler, who alone plays all the instruments. Although most of Vinterriket's recordings are released in very limited editions, according to *Encyclopaedia Metallum*, "In 1997 and 1998 two rehearsal-tapes have been recorded but they've never been released at all".[11] Considering these two aspects of black metal tradition – single musician projects and widespread anonymity – it is reasonable to assume that there are many more recordings that have been created by a single musician and never reached anybody else's ears. These musical works nevertheless exist.

Considering all these properties of musical works as artifacts, it seems that they occupy the middle ground between natural and social objects. Does their intention-dependence mean that realism about musical works is impossible because creators cannot be wrong about what they create? Furthermore, is it impossible for an entity to be a musical work if it is widely agreed that it is *not* a musical work? Is it impossible to be mistaken about the *real nature* of musical works?

Many agree that the reference of the natural kind terms is determined by the causal powers of the objects we pick out by that term, and their causal powers are common because of a common hidden nature and their microstructural properties. Now, we shall discuss whether the

[11] https://www.metal-archives.com/bands/Vinterriket/11800

term ‘musical work’ can also have externalist semantics, or the nature of musical works is determined by our thought and language alone – in the latter case, we should conclude that the realist position is unfeasible.

2. Semantic Externalism about Artifactual Kind Terms: Common Nature

Diego Marconi formulates two conditions for a kind-word to have an externalist semantics:

(a) Members of the word’s extension share a nature, i.e. there are features necessarily belonging to all and only the members of the word’s extension;
(b) The word’s extension is determined by possession of such features independently of whether the linguistic community (and its individual members) are aware of it or can accurately describe it. (Marconi 2013: 501–502).

In short, for a kind term to have an externalist semantics, the members of this kind have to possess an essence, some kind of trait or traits, and they have to possess this trait or traits metaphysically necessarily and exclusively, but not epistemically necessarily – people might be ignorant or mistaken about the artifact’s essence. A common line of argument against the so-called ‘discovery view’, that is, an externalist and realist position in the ontology of art, denies that works of art have a ‘hidden nature’ that is subject to discovery, and claims that ‘massive mistakes’ about works of art are impossible.[12] Accordingly, in order to show that the

[12] Amie Thomasson describes the discovery view as a paradigm that the world contains mind-independent facts that can be discovered and we as a linguistic community can be mistaken about them. Moreover, these facts are empirically investigated to discover the real nature of mind-independent objects, and this nature can differ from the common-sense views, and “there is a complete range of mind-independent facts to be discovered, so

term ‘musical work’ might have externalist semantics, two tasks must be accomplished: first, one must offer a candidate for the role of a ‘hidden nature’ of the artifactual kind, and second, convincingly argue that we as a linguistic community can be mistaken and ignorant about that nature (Olivero and Carrara, 2021). Let us begin with the first problem.

3. Pencils and Glugs

There are several famous thought experiments often discussed in the literature on artifactual kind terms. Before discussing musical works, let us consider those cases that have traditionally been discussed in such contexts to determine whether and how traditional arguments can be applied to the case of musical works.

Hilary Putnam (1975, 1977) has famously defended the view that natural kind terms are indexical and that they refer to objects that have a common hidden structure. While a natural kind term can refer to the objects which have different superficial characteristics, it cannot refer to those which have a different structure – for instance, water could have been all vapor, but it could not have been XYZ instead of H_2O (Putnam 1975: 160). Putnam also considers artifactual kind terms as using the same mechanism of reference. In *The Meaning of ‘Meaning’* (1975), he discusses the famous case of the pencil:

> Imagine that we someday discover that pencils are organisms. We cut them open and examine them under the electron microscope, and we see the almost invisible tracery of nerves and other organs. We spy upon them, and we see them spawn, and we see the offspring grow into full-grown pencils. We discover that these organisms are not

that, for any empirical proposition P we could formulate about whales, either P or not-P is the case; the only challenge lies in discovering which.” (Thomasson 2005: 221).

> imitating other (artifactual) pencils – there are not and never were any pencils except these organisms. (Putnam 1975: 161)

However, Putnam denies that pencil-like organisms in this possible world are pencils – he claims that these objects are *epistemic counterparts* of pencils. If we discovered that pencil-like objects on Twin Earth are organisms, unlike on Earth, we would say that "the things on Twin Earth that pass for pencils aren't really pencils. They're really a species of organism" (Putnam 1975: 161). However, if pencil-like objects were organisms both on Earth and Twin Earth, we would likely say that these objects are pencils and that pencils are organisms. These thought experiments show that, although it is metaphysically necessary that pencils are artifacts, it is not epistemically necessary; therefore, artifactual kind terms function in the same way as natural kind terms. The argument goes as follows:

> If the local pencils are just what we think they are, then a possible world in which there are pencil-organisms is not a possible world in which pencils are organisms; there are no possible worlds in which pencils are organisms in this case (which is, of course, the actual one). That pencils are artifacts is necessary in the sense of true in all possible worlds – metaphysically necessary. But it doesn't follow that it's epistemically necessary. It follows that "pencil" is not synonymous with any description – not even loosely synonymous with a loose description. When we use the word "pencil," we intend to refer to whatever has the same nature as the normal examples of the local pencils in the actual world. "Pencil" is just as indexical as "water" or "gold" (Putnam 1975:162).

In a similar vein, James Nelson argued that we might discover that pencils are another kind of artifacts rather than organisms – that is, alien listening devices (Nelson 1982: 362). The main problem with causal reference and artifactual kinds is that artifacts do not share a common biological or chemical structure we could refer to in order to indicate the extension of these terms. While the extension of 'water' is determined by its chemical formula being H_2O, and the extension of 'ethanol' is restricted to objects having a chemical composition C_2H_5OH, and silver by its atomic number 47, it is less clear what hidden nature might limit the extension of terms such as 'pencil', 'chair', or 'sculpture'.

Stephen Schwartz disagrees that Putnam's account of natural kind terms can be extended to artifactual kinds. He claims that the latter do not have a shared hidden nature; moreover, we use a natural kind term in such a way that our use presupposes a shared common nature, even if we do not know what it is. In the case of artifactual kinds, on the contrary, we do not even have the presupposition that there is one. According to Schwartz, there is nothing more to being a pencil than a collection of common superficial characteristics, and an object is a pencil as long as it satisfies the description which is associated with the term analytically, rather than by virtue of being discovered by scientific inquiry (Schwartz 1978: 572). Thus, he concludes that artifactual kind terms are nominal kind terms, and not indexicals.

Hilary Kornblith offered an example intended to show that artifactual kinds do carry a presupposition of the common shared nature that can be scientifically investigated, and the real nature and function of an artifact *is* subject to discovery, rather than just analytical inquiry. His thought experiment has us imagine a Martian anthropologist who discovers an object unknown to him – a doorstop – and then starts investigation of the nature and function thereof:

> Consider the Martian anthropologist, ignorant of the nature and function of doorstops, who points to my doorstop and says, "Let's call the kind of which this is a member

> ‘glug’.” It seems that in spite of the Martian’s ignorance of the function of doorstops, he has succeeded in using the term ‘glug’ to refer to doorstops. Now it might seem that the Martian’s ability to use the term ‘glug’ is parasitic upon the existence of human doorstop experts, but this is not the case. First, it may be supposed that the term ‘glug’ is introduced into the Martian language only and that no human being associates any description with the term ‘glug’. Second, we may even suppose that the Martians visit Earth after the human race has died out, and thus there would be no doorstop experts at all. The Martian anthropologists might then try to construct a theory about the nature and function of glugs. (Kornblith 1980: 114)

Here we can distinguish two aspects: whether there is an actual common nature of a kind and whether we speak about these kinds *as if* they had a common nature. To address whether Marconi’s first condition for semantic externalism can be met in the case of musical works, we must ask: what precisely would this nature be?

4. Against Function Essentialism about Artifacts

There is a discussion on what could be the nature of an artifactual kind if there is no common hidden physical, chemical, or biological structure. One common candidate is the function. Artifacts are usually defined in the literature as objects created intentionally to serve an intended function (Baker 2004: 99). Hence, one migh propose that the common nature of musical works is their function. In this section, however, I intend to show that this traditional option is not adequate, and that we should think of other, more promising alternatives. Let us

consider several reasons why the function cannot be regarded as the shared nature of musical works.

The view called function essentialism about artifacts is defined by two conditions: "(1) the view that each artifact has a certain function (or perhaps more than one), without which it would not be an artifact, and (2) that membership in an artifact kind is determined by a particular, shared function" (Juvshik 2021).

Function is one of the most popular candidates to fulfil the role of artifactual essences, and the artifact function is often seen as a social, non-natural aspect of an artifact. According to John Searle, artifacts do not have a function intrinsically, they have it only because humans collectively assign it to the objects they create. He claims that functions are observer relative, they have a normative component to them that does not exist in the natural world – for instance, we claim that the function of the heart is to pump blood only because we value life, therefore, statements about the function of natural objects also indicate the assignment which is, in essence, normative and observer relative (Searle 2006: 17). For many authors, the fact that the functions of artifacts are dependent on the human intention and given to these objects intentionally seems to be at least a good reason to think that these objects significantly differ from the natural objects, while, for others, it even seems to be enough to deny that artifacts exist (Hoffman and Rosenkrantz, 1997: 173).

It is important to mention that function essentialism about artifacts – and not only about artifacts – is, indeed, an intuitive view. The literature of cognitive psychology suggests that we think about various objects in terms of their functions and purposes. It is the basic mode of ordinary thinking. Teleological intuitions about both natural objects and artifacts, a tendency of seeing a purpose instead of thinking in physical-causal terms, is considered to be a cognitive default (Kelemen, Rottman, and Seston 2013). Research in experimental philosophy shows that, in folk theory, the persistence of ordinary material objects is held to be dependent on their

function preservation. A material object is thought to survive extensive change as long as its function remains the same (Rose 2015).

With that being said, people think about musical works in a different way from other artifacts and artworks: empirical research on intuitions about the identity of musical works shows that ordinary intuitions give preference to musical sonicism – a position which claims that the identity of musical works depends on their acoustic properties (Mikalonytė and Dranseika 2020; Mikalonytė and Dranseika 2022). The results of these studies suggest that we think about musical works primarily in terms of their perceptible properties. It seems that we ordinarily think of musical works as of sonic structures, and not in terms of their function, at least when making identity judgments. That is the first argument against functional essentialism about musical works, although, on its own, this argument is plainly insufficient.

Let us proceed to the main argument against functional essentialism in so far as it regards artifacts and artworks in particular. If we add a third argument – about musical works – there will be three points to consider: (1) there are artifacts without a function, (2) artworks do not have a common function, and (3) musical works do not have a common function, either.

First, not all *artifacts* have functions. Risto Hilpinen offered a thought experiment about a functionless artifact: a triangular figure cut from a piece of cardboard without any purpose might be regarded an artifact (Hilpinen 1992: 63). Second, *artworks* do not have a single function, and some of them might be functionless. The traditional functional definitions of art, such as representational, expressive, aesthetic accounts of art, have lost their popularity due to the fact that they are exclusive and not extensionally adequate (Juvshik 2021: 9). Moreover, there is a variety of art forms – music, film, poetry, dance, theatre and others – and they each have individually distinct functions. It is very hard to find a distinctly artistic function that pertains to all these kinds of art (Juvshik 2021: 9). Finally, turning to *musical works*, we observe that they do not have a single function, either. Even if we confine our inquiry to the search for

a uniting function that all musical works might have, the multitude of functions seems hardly deniable. To briefly mention just a couple of very different examples, musical works may have a political function (Goehr 1994), they also can have a religious function, for instance, sufi musical works that belong to the tradition called Qawwāli have the function to arouse mystical love (Qureshi 1992). Musical works have been used for alleviating grief in funeral rituals (Davidson and Garrido 2016), and recently for their therapeutic function (Hanson-Abromeit 2015). Music production is also cross-culturally associated with such behaviors as dance, play, processions, rituals, entertainment, storytelling, greeting visitors, war, group bonding and other behaviors (Mehr et al. 2019). There is a widely known (although anecdotal) story which recounts that Johann Sebastian Bach's *Goldberg Variations* were commissioned by Count Kaiserling who wanted some pieces to alleviate his insomnia. There is a wide array of functions of music.

Could there be one single function common to all musical works and only to musical works? Programmatic music might have a representational function, while pure instrumental music is unlikely to have it. In order to find one function that all musical works might share we should look for something more general. Perhaps the most suitable candidate would be the aesthetic function. The aesthetic function is part of Levinson's aesthetic definition of music which claims that music is "[i] sounds [ii] temporally organized [iii] by a person [iv] for the purpose of enriching or intensifying experience through active engagement (e.g., listening, dancing, performing) [v] with the sounds regarded primarily, or in significant measure, as sounds" (2011: 273). But, sometimes, music can be played without the purpose of enriching anyone's experience. For example, a piece of music can be played – and not only a musical work can be used for that purpose, but also a new musical work can be created – with the intention to wake someone up (Kania 2011), and noise music is also hardly ever listened to for aesthetic appreciation. There is also a huge cultural phenomenon called Muzak – background

music that is created or used solely for commercial purposes, that is, to increase productivity or to stimulate sales.[13] Without a common function, functionalism about musical works thus loses its appeal. Thus, to fulfil the first requirement for semantic externalism, which specifies that entities of the same kind must share a common nature, we might want to seek another candidate rather than function. Let us explore whether such nature could be identified within the sound structure.

5. Musical Works on Twin Earth

Philosophers have offered many different qualities as candidates to be essential properties of musical works. Among the most often mentioned ones we should list audibility, creatability and repeatability.[14] In other words, musical works can be heard, they come into existence at the moment of creation, and it is possible to listen to the same musical work more than once. We shall argue that an artifactual-nominalistic account can accommodate the basic properties of musical works which are often portrayed as being in tension which each other.

One of the most important questions is whether the membership of the 'musical work' kind is determined by definition or by the object's features (Marconi 2019: 150). If the creator is free to determine which set of objective features makes up the relevant artifactual kind, in this case, the creator's conception is crucial for the application of the term, and thus internalism is hardly avoidable. In order to formulate a convincing externalist position, one has to

[13] See (Lanza 2004).

[14] Dodd, for instance, claims that his theory does the best job in explaining how musical works are both repeatable and audible (Dodd 2012: 77), thus he takes these two folk beliefs about musical works to be central, while Bartel sees musical ontology as being driven by endeavors to preserve the intuitions of repeatability and creatability (Bartel 2017: 349). David Friedel mentions all three qualities (Friedel 2021).

demonstrate that the necessary features of an artifact are not freely available for their human creators to choose. In other words, they are not merely projections of our language.

Although musical works are created intentionally, this section of the paper shall present an argument that, immediately after the moment of creation, they are as real as objects existing without human intention. In Tyler Burge's words, "once made, the artifacts are what they are, regardless of how we regard them. An amplifier is not a kind of thing only by courtesy of our projecting a principle of unity whose reality lies entirely in our projection." (Burge 2003: 319).

Crawford Elder claims that some patterns of behavior (he calls these patterns "copied kinds") have been copied from person to person through generations (Elder 2007: 49–50). Musical works are products of musical behaviors. Although their form is manmade, it could be said that it is nature that selects and structures the constituents through innate human preferences. It is still unknown if there was a history of evolutionary function, or is musicality a byproduct of other cognitive abilities. In any case, they are selected not conventionally and not at random, but in congruence with the human auditory system. Musical works have certain pitches, as well as harmonic and rhythmic structures not because we randomly decide on them, but because nature carves these structures through us, it makes the relevant properties cluster together.

Structured sound sequences are what we make when we engage in musical behaviors. We might explore the possibility of finding necessary and sufficient conditions of being a musical work in the sound structure. To put it another way, artifacts might have hidden essences – essences that are not determined by the creator's conception – but rather in the virtue of their constituents.

This conception satisfies two of the three crucial conditions – audibility and creatability. Sound sequences are created, thus, the artifactual-nominalistic conception allows us to avoid postulating dubious entities, such as created abstracta. Moreover, they can – unlike abstract

objects and mental entities – be heard. The final one of the three conditions – that of repeatability – is arguably the least important of the three. Most musical creations are not repeatable.[15] In cases where they are, the performer's intention must largely succeed in creating

[15] Most musical ontologists take works of Western classical music as paradigmatic cases, and so musicologists and philosophers representing the continental tradition routinely criticize musical ontologists for paying no regard to the historical and geographical variety of musical traditions and to those musical works based on improvisation. If we begin our philosophical inquiry by taking a look at the totality of musical practices, it quickly becomes clear that a large number of musical objects are not – or have not been – created with the intention for them to be performed repeatedly. This situation regarding the actual musical practices has been noted many times, pointing to the Western classical music before 1800 (Goehr 1992), as well as jazz music (Kania 2011), or other improvisation-based traditions. For instance, Philippe Alperson draws attention to the centrality of improvisational practices in such traditions as the musical performances in classical Greece, Church liturgical music, Baroque music, jazz, as well as numerous Indian, Asian and African traditions (Alperson 1984: 17). This centrality of improvisation means that many of these works have never been meant to be repeated. Many, if not most musical works – at least if we refrain from seeing musical practices through the lens of the Western classical music purist – have been meant to be singular performances. The concept of a musical work that emerged approximately two centuries ago has changed our musical practices in such a way that it hardened the boundary between the performing and composing activities – the boundary that had been much less clear and prominent before (Taruskin 1995: 10). In case we want our ontological theory stay closer to actual musical practices, we might consider putting more emphasis on the performance side of the work/performance pair (the pair which evokes the interest of musical ontologists and often motivates musical Platonism which, in turn, converts it into the type/token distinction). A theory that puts emphasis on the performance side of the distinction has the potential to be more inclusive of the totality of musical practices. Thus, an artifactual-nominalist approach might turn out to be a more compelling option than it is often seen to be. It is much more reasonable for a theory of art to be (if required) exclusive of exotic non-realistic cases (for instance, works that are impossible to perform (Cray 2016)) than, for instance, to treat a Western classical music work created after 1800 and pre-1800 as entities of distinct ontological kinds. After all, accommodating the standard musical practices better is more important than accommodating the exceptional or even merely imaginable cases.

a sound sequence that closely resembles previous instantiations of the work and is recognized as such. Repeating a musical work requires the artist to accurately reproduce the sound structure, while the auditory system and associated cognitive mechanisms must allow listeners to identify it as *the same*.

There is an ongoing debate in the ontology of musical works as to whether nominalist accounts can explain how musical works can be repeated and whether listening to a musical performance allows us to listen to the musical work in its entirety (Dodd 2007). Various nominalist positions have been proposed in the literature. For instance, set theory holds musical works to be sets of accurate performances (Goodman 1968), perdurantism posits that musical works are mereological fusions of their performances, each performace being a part of the musical work (Caplan and Matheson 2006), endurantism claims that musical works themselves are wholly present in each performance (Tillman 2011), while stage theory asserts that musical works are identical to their performances, as each performance is considered to be a spatio-temporal stage (Moruzzi 2018). While I will not defend any specific nominalist theory in this paper, at least the latter two forms of nominalism can explain how musical works can be concrete entities and yet repeatable.[16]

The structural conception of musical works proposed here is closely linked to Andrew Kania's *structural* definition of music, according to which music is "(1) any event intentionally produced or organized (2) to be heard, and (3) either (a) to have some basic musical feature,

[16] Other issues related to musical nominalism have also been raised. David Friedell argues that, intuitively, a symphony comes into existence prior to its first performance. It is created at the moment when the composer engages in the creative process, sometimes long before the initial performance. In other cases, the performance might never happen, and the unperformed work will still exist (Friedell, 2021). These concerns can be addressed, again, by examining musical practices. Standard musical practices often involve improvisation, where creative action unfolds simultaneously with the performance. However, in cases where a part of the creative process occurs well ahead of the performance, it seems reasonable to say that the composer has simply begun making a musical work. Without any performance, the work may not fully come into being.

such as pitch or rhythm, or (b) to be listened to for such features" (Kania 2011b: 12). Stephen Davies offers some counterexamples to Kania's definition, namely, Morse code, the chord that sounds when one starts their Macintosh, the drumming of fingers on the desk, the wind chimes, and tone languages (Davies 2012: 538–539). Davies holds the opinion that all these sounds, although musical, are not music. However, we can modify Kania's definition and replace the disjunction between (a) and (b) conditions by a conjunction. This version of a structural definition excludes Davies' counterexamples: Morse code, tone languages and the Macintosh startup sound are not primarily produced to be listened to for musical features as, to the contrary, they are produced primarily to communicate non-musical information. The drumming of fingers on the desk is most likely not intended to be listened to for its musical features, but if it is, it can be included to the realm of music.[17]

Are musical works *essentially* composed from structured sounds? Let us consider three versions of a thought experiment[18] which is an analogue to Putnam's pencil case, except that it is about musical works, and the nature of musical works is considered here to be structural.

First, imagine that one day visitors from Earth discover that musical works on Twin Earth are neither created nor performed by producing structured sound sequences. Instead, musical works are produced as collective auditory hallucinations. Even if musicians in concerts make all the usual movements with their instruments and visitors from Earth are under the impression that they are participating in a normal, Earth-like concert, after the concert, musicians from Twin Earth explain that these movements are merely a kind of dance, and music there is produced without making any vibrations – each musician telepathically (or in

[17] Andrew Kania chose a disjunctive version of the structural definition because he wanted it to accommodate the modern and postmodern sound art. A conjunctive version of this definition might be criticized for being revisionary and excluding those kinds of works, sometimes called 'music' in the ordinary language. However, we have other categories for various marginal cases, namely, sound art and performance art.

[18] While the following thought experiments are based on the author's intuitions, it would be useful to conduct empirical research to determine whether these intuitions are shared by non-philosophers.

another way that is unknown to Earth scientists) transfers their auditory imaginings to the other musicians and to the audience.[19] In the case of this kind of discovery, would we say these objects that we experience on Twin Earth are musical works? Both kinds of objects – musical works on Earth and musical works on Twin Earth – are artifactual kinds, but, intuitively, it seems that musical works on Twin Earth are epistemic counterparts of musical works rather than real musical works. We would probably have the same intuition if it turned out that aliens elicit auditory experiences by using visual stimuli, for example, if they were orchestrating musical works by using colored lights.

In the case this thought experiment is not convincing enough, we can easily formulate a second, stronger version of it. Imagine that the hallucinatory musical process does not ensure a reliable way for composers and musicians to evoke the intended auditory experiences to their listeners. In other words, the hallucinations in this case are not collective but individual in their content. For example, one listener might have a subjective experience that strongly reminds him of Rachmaninoff's *Piano Concerto No. 1*, while another listener would have a subjective experience people usually have when they listen to Górecki's *Symphony of Sorrowful Songs*. There is no way a musician can predict what sort of auditory experiences his actions will evoke in the listener's mind. It seems intuitively obvious that whatever is the nature of what a visitor from Earth experiences on Twin Earth, it is not a musical work.

Both versions of this thought experiment, or at least the first one, describe artifacts that are not musical works. In the first version of the experiment, an object on Twin Earth is not a musical work because it is not made by arranging any sort of *sounds*, and there is no sound structure. The second version describes an object which – it could be argued – does not even

[19] A similar thought experiment about hallucinatory pictures has been proposed by Roberto Casati (2010). According to him, artifacts that induce a hallucination of their content that cannot be explained by a look at the structure of the visually accessible information might be considered pictures, but if the hallucinatory experience does not depend on a visually available object at all, we would likely resist the idea that what we see is a picture.

have artifactual qualities. The said object is not a musical work not only because of not being made of sounds, but also because the listeners' auditory experiences are not *intended* by the composers and the musicians creating the piece, and thus these objects lose even more of their objective character.

Irene Olivero claims that the original Putnam's pencil-organism thought experiment is flawed because it shows that we can be wrong about whether a term is an artifactual or a natural kind term (Olivero and Carrara 2021: 9; Olivero 2018: 209). A suitable thought experiment should indicate a common nature of the *artifactual* kind and illustrate the possibility of error or ignorance. The thought experiment about musical works offered above has, hopefully, convincingly shown that these two requirements can be satisfied, at least for an artifactual kind musical work: the performance happening on the stage in this thought experiment is an *artifact*, and the public can be wrong about whether it is a musical work or not.

All things considered, it makes sense to deny that whatever the audience on Twin Earth is listening to in both cases is musical works. On the other hand, if all musical works both 'here' and on Twin Earth turned out to be as described, it sounds reasonable to say that we made a discovery about the real nature of musical works: musical works are not made of sounds, they are purely mental entities (or results of visual stimulation).

Some might object to this proposal about the essence of musical works and claim that sounds are subjective sensations, and musical works are, in this regard, no different. However, this view has some unintuitive consequences, such as the fact that people could never hear the same sound (Casati and Dokic 1994: 36). Moreover, if musical works consisted of sounds as subjective sensations, two people could never hear the same musical work, in other words, this

claim contradicts the common position that musical works are public, shareable, audible, and playable rather than private and inaccessible (Cray and Matheson 2017: 3).[20]

There are some specific examples we may consider. When we read a score, we do not hear sound qualities and cannot appreciate them. We can 'hear' a musical work in our head in some sense – an experienced person can read off the tonal properties and rhythms from the score – but we do not experience a musical work in the full sense because it necessarily entails *hearing* sounds. Similarly, when we read a musical score and 'hear' its contents in our head, we do not say that we are listening to the musical work. Finally, if Shostachovich because of his brain injury could have 'heard' melodies when he turned his head on its side, he was not hearing musical works.

If we briefly come back to Kornblith's thought experiment about Martian anthropologists, we can imagine an alien scientist visiting Earth with an auditory system that can perceive only ultrasound. If they discovered our musical recordings, and then, after careful research, determined that these strange objects emit sounds which they were not able to hear, they would probably categorize those objects based on their acoustic properties. The alien scientist would not need to know the function of these objects.

Some critics claim that an externalist about artifactual kind terms has to show that a Martian could apply a neologism to a human artifact without merely being lucky or parasitic upon human experts and human usage of the term (Olivero and Carrara 2021: 9; Marconi 2013: 506). The structural properties (or form) of a musical work would be enough for reference – the reference would be governed by the objective features that a musical work shares with other musical works. According to Marconi, if a Martian in Kornblith's thought experiment found a

[20] According to Dodd, "if musical works were such mental entities, there would not be one work accessible to us all, but as many works as there were occasions on which a work was imagined, remembered, or otherwise thought about." (Dodd 2007: 26).

second doorstop, but it had a different shape and material (e.g. wood instead of iron), the Martian would not call the second object *glug*, he would rather call *glug* other heavy blocks of iron, and, for the Martian, *glug* would mean 'a heavy block of a certain size and shape', rather than 'doorstop' (Marconi 2013: 507). However, in the case of musical works, an intentionally created sound sequence of a musical *form* (that is, having physical properties that ensure the experience of at least one basic musical feature, such as the pitch or the rhythm) is enough for reference. Intentional creation could be inferred from the complexity of form, even if we would never be sure that a certain degree of ensures intentional creation. It is harder to say whether the Martian would correctly determine that the sound structure is not made primarily for some external function rather than to be listened to, for example, whether the Martian would be able to distinguish music from tone language. However, it would need some sort of additional reasoning and information to come up with the hypothesis that these sound structures are used primarily for communication. Although the Martian scientist's hypothesis would probably depend on their experience with acoustic objects on Mars, discovering the nature of musical works seems to be more than just a lucky guess. The term 'musical work' would then apply correctly to all objects sharing this nature without deference to experts or human language speakers.

Let us recap the two conditions of the word having an externalist semantics: first, members of the extension must share a common nature; and second, the linguistic community may be unaware of that nature. Speaking of the first condition, it seems that unlike purely social kinds, artifactual kinds – at least some of them, including musical works – have essential properties that can be discovered. They have those properties in virtue of their natural constituents. Artifactual arrangements of natural parts have causal properties both in virtue of their constituents and in the way they are arranged together (in the case of musical works – both in the virtue of being sound sequences and in the way these sounds are structured).

6. Radical Error about Musical Works

We have argued that the hidden nature of musical works is metaphysically necessary, but not epistemically necessary, but the second aspect should be looked at in greater detail. This will allow us to explore Marconi's second condition for semantic externalism: musical works not only need to have a common nature, but it must also be possible for us to be mistaken about what that nature is.

Many philosophers claim that we cannot be collectively mistaken about what musical works are. As Robert Stecker writes in his paper *Methodological Questions about the Ontology of Music*,

> If our beliefs about the nature of musical works are immune from massive collective error, such works would be importantly different from whales and planets, about whose nature there actually seems to have been in the past a collective fundamental misconception. The reason for this difference is that works of art, like artifacts, social institutions, and other human creations, are what they are in virtue of our creating them and the practices that have evolved concerning them. The nature of these objects can only be found in our intentions and practices regarding them. Our conceptions of such objects are grounded in these intentions and practices. This leaves plenty of room for individual error regarding these objects, but not for massive collective error. (Stecker 2009: 19–20)

Stecker's position about the unlikeliness of a massive collective error about musical works is shared by many philosophers. The main point concerning the impossibility of a

massive error is that the nature of musical works depends on our intentions and practices (Stecker 2009: 20). Likewise, Amie Thomason claims that we are unlikely to be mistaken about artifacts because intentions are central to our artifact concepts – otherwise it would be impossible to distinguish artifacts from products of unintentional activity (Thomasson 2007: 67); moreover, we are epistemically privileged regarding artifacts (compared to the way scientists are epistemically underprivileged regarding natural kinds): concepts are constitutive of the nature of artifacts, but not of the nature of natural kinds (Thomasson 2007: 64). In Diego Marconi's words, "it would be surprising if a whole linguistic community were ignorant of an artifact's constitution or function while using the corresponding artifactual word competently: for, after all, we make artifacts." (Marconi 2013). Thus, internalists could be said to produce four overall important points: (1) the nature of musical works depends on our intentions; (2) intentions are central to the concepts of artifacts; (3) concepts are constitutive of the nature of artifacts; (4) we cannot be ignorant about the objects that we make.

Let us consider all the four points. First, there is the claim that the nature of musical works depends on our intentions, which is a claim about mind-dependence. While musical Platonism denies even the most general version of mind-dependence – the version which claims that musical works would not exist if human minds did not – even if we believe that musical works are artifacts, it is not easy to tell whether 'musical works' would exist if humans had no propositional attitudes directed towards them. It is important to draw a distinction between existence in the virtue of a broadly-conceived human intention and existence in the virtue of propositional attitudes towards the kind.

The production of musical works does depend on human intentions, but it is crucial to determine the precise character of them. Although intentions indeed constitute a part of artifact concepts, these intentions seem to concern the aim to produce and combine sounds rather than

to create a musical object that reflects a nuanced folk ontological conception. Therefore, intentions – but not concepts – form a part of the nature of the kind 'musical work'.

Although the existence of musical works is caused by human beings, it seems that musical works would exist even if we did not have propositional attitudes directed towards them; moreover, something can be an instance of a musical work even if we do not believe that particular piece to be a musical work. Muhammad Ali Khalidi offers a helpful distinction between three types of social kinds regarding their conventionality: (1) neither the existence of the kind, nor the existence of instances of the kind depend on our having propositional attitudes towards them (e.g. racism, recession); (2) the existence of the kind depends on our having propositional attitudes towards it, but the existence of instances of that kind does not (e.g. war, money); (3) both the existence of the kind and the existence of some instances of it do depend on our having propositional attitudes (e.g. permanent resident, prime minister) (Khalidi 2015: 104). All three kinds are mind-dependent in the sense that human mental states have to exist in order for that social kind to exist, and yet their mind-dependence is not equal. Mind-dependence comes in degrees.

To better explain what is meant by the concept being constitutive of an object or a kind, we can recall John Searle's example of a concept being constitutive of a *social* object, that is, a cocktail party. Searle claims that, if everyone in Paris were invited to a cocktail party, that would result in more deaths than the Battle of Austerlitz. Yet, this cocktail party is not a war, because being thought to be a cocktail party is constitutive of the nature of the cocktail party, and being thought to be a war is, too, constitutive of the nature of war (Searle 1995: 34). In Khalidi's opinion, in contrast, even if no one thinks about this event as of a war and everybody claims that it was a cocktail party, it makes sense to claim that it was not a party but a street fight (Khalidi 2015: 101). Even if no one thinks about a musical work as of a musical work, it makes sense to say that it is one if the earlier-mentioned conditions has been satisfied. For

instance, what concerns the drumming of fingers on the desk, if the drumming is rhythmical and intentional, it can be considered a musical work. It seems reasonable to claim that the concept of a musical work is not constitutive of the object, and no associated beliefs are necessary to make it a musical work, either. Nemesio Puy argues that musical works can be created when the composers and musicians are seen as those who have mastered the ability (or 'knowledge-how') of combining sounds. Music creation thus is a matter of skill and of rule-following. This ability does not require a full-fledged conception or a folk ontological theory of musical works (Puy 2021: 15–16). Dominic Lopes makes a similar argument regarding the creation of art without the concept of art. According to him, "there is reason to doubt […] that making art necessarily involves an intention to make art. True enough, art-making is a necessarily intentional activity. Works of art are artefacts, and artefacts are items made intentionally. Nevertheless, it does not follow that they are made with the specific intention to make art. They might be made with a different intention." (Lopes 2007).

Thomasson's claim about the human epistemic privilege is tightly related to the notion that concepts are constitutive of musical works. The core idea of the human epistemic privilege as regards artifactual kinds compared to natural kinds is that creating an artifact requires a substantive relevant concept, and that the creator's success is measured by the object's conformance to the relevant concept. While Thomasson argues that concepts are constitutive of the nature of artifacts, the success of an intention cannot be measured by the resemblance to the concept alone.

Certain African cultures, as it has been thoroughly described by ethnomusicologists, do not have a separate term for 'music', nor do they have ones for the concepts of 'melody' or 'rhythm' (Arom 2004: 10). Musical practices in Central Africa are hardly separable from dance and other types of art. Central Africans, thus, may only have an implicit conception of music. They do not have a specific term for the 'musical work' either; however, they do perform the

same songs repeatedly. While many concepts pertaining to the Central African music are not expressed or verbalized (Arom 2004: 10), it would be strange if musicologists refused to investigate African musical practices and African songs as *not musical* for the reason that Africans do *not* possess and manipulate these concepts. Having a concept of 'music' is not necessary to make music. By considering African musical objects as musical objects, as well as considering them a subject of musicological research, we do not view them merely as successful reflections of the creators' concept. To put it another way, considering musical objects independent from the creators' concept is inherent in our musical practices. Dominic Lopes makes a similar parallel argument concerninf art and the concept of art. He claims that acknowledging the existence of art without the art concept enables us to distinguish cross-cultural studies on the concept of art from cross-cultural research on art and art-making. This decoupling allows us to avoid projecting certain concepts on cultures that do not share them (Lopes 2007). The same reasoning would apply to music and musical concepts.

It seems more likely that the success of producing an artifact of musical work kind will be measured by the structural properties of the created object. Although there are many different concepts of music and musical works, there is no need to reject realism about music being conceived in a structural way. Music is universal – it appears in every society observed by musicologists (Mehr et al. 2019), and is often considered to be either a distinct musical evolutionary biological adaptation, or a by-product of other adaptations (Pinker 1997). Although it does not seem to have one distinctive function, it does have some universal structural properties. Auditory and music perception is influenced by the way our auditory system encodes auditory information. Musical preferences, therefore, are constrained by the innate properties of our auditory system – there are natural reasons why we prefer some pitch relations over others, for example, octaves or consonant intervals over dissonant ones (e.g. McDermott and Oxenham 2008; Stefanics et al. 2009). The length of musical works is also

likely to stay within the innate limits of attention spans. We do not choose sounds, their structures and properties conventionally – according to Elder, "the kinds into which we make artifacts fall are kinds which nature fashions through us." (Elder 2007: 40).

Finally, although Marconi claims that it would be surprising if a whole linguistic community were ignorant of an artifact's constitution or function, there are cases when we are. Let us begin with a discussion on function – although earlier I have argued that function is not part of the essence of musical works, many discussions in the literature discuss examples of artifactual functions and propose arguments concerning artifactual functions; thus it seems important to answer those counterarguments. There are many examples of how we can be collectively ignorant about musical works.

To begin with a broader discussion on the artifact function, Dodd offered an example of an artifact that its makers are fundamentally wrong about, that is, a dreamcatcher. Even if certain people produce dreamcatchers in order to catch bad dreams, and even if they believe that this is what dreamcatchers do, it is simply not the case. Therefore, it is possible for us to be fundamentally wrong about the properties of the artifacts we make (Dodd 2013: 1060). This example corresponds to what Beth Preston calls *phantom function* – there are artifacts regularly produced to fulfil a specific function, however, they are just not structurally capable of performing it, with no possibility of ever achieving it (Preston 2009). Howeve, Crawford Eldar suggests that we should not view these cases as instances of genuine errors concerning artifact functions. According to Eldar, these kinds of artifacts are reproduced not because of their capability to fulfil the intended or expected function, but because of the function they have historically performed (Eldar 2014: 36). Nonetheless, there can still exist at least failed expectations, which also constitute a form of error.

While Dodd offers a good example of a radical mistake about the properties of an artifact, there are no examples of possible mistakes about the properties of a musical work in

the literature. Let us explore one example of a belief about the properties of musical works where it is clearly not unthinkable that it might be mistaken. Let us consider a deeply entrenched belief, even a cliché, that "music is the universal language of mankind" (Longfellow 1857). This platitude can be interpreted as a statement that musical works have expressive properties that allow universally understood communication of emotions. However, whether musical works communicate emotions in a way that they would be universally understood – or not – is an empirical question, and there is nothing that can prevent people from being wrong. In fact, music cannot communicate propositional content in the way that it would be universally understood (not even intraculturally (Mikalonytė 2018). Empirical research shows that cross-cultural perception of emotions in music is quite limited: although six basic emotions are cross-culturally recognized in music above the chance level, the universal ability to recognize emotions seems to be limited to just two of them – 'happy' and 'sad' (Argstatter 2016). There is no intercultural agreement on the emotional valence of major and minor chords either (Lahdelma, Athanasopoulos, and Eerola 2021, Smit et al. 2022).

This example has two important implications. First, it is an example of a possibly, even likely false folk belief about musical works. Second, it is not just any belief about musical works – we are considering that the most 'social' aspect of musical works, the center of an artifact's social aspect, namely, its function, and even this kind of belief may be mistaken.[21]

[21] One might raise an objection that if artifacts belong to the category of social objects, their function belongs to the social sphere. In other words, its nature is by itself conventional. For example, one might say that dreamcatchers have the power to ward off bad dreams in the virtue of our belief that they have such power. One might also say that music has the power to communicate emotional information universally in the virtue of our belief that it can. Some artifact functions are indeed of an entirely conventional nature. For example, national flags function as symbols of national states only as a matter of convention of our society. However, not all artifact functions are conventional. Let us consider medication, for example, *Ibuprofen*. Medication is clearly a mind-dependent (in the causal sense) artifactual kind: it is hardly imaginable that *Ibuprofen* would

Olivero and Carrara claim that, to give a successful argument from error, a philosopher must show that we might not only discover new features of artifacts, but also that the new features would substitute for the usual ones (Olivero and Carrara 2021). To give an example of new features replacing old ones, we can think of music therapy and applications of music in the medical field. For example, there are studies examining the possibility of alleviating patients' pain by means of listening to music, that is, the possibility of music-induced analgesia (e.g. Lunde et al. 2019). There are studies that provide some support for such methods (e.g. Hole et al. 2015; Pedersen et al. 2020; Nilsson et al. 2001), while other research yields negative results (e.g. Meeuse et al. 2016; Cepeda et al. 1998). If it turned out that musical works do not have analgesic properties, medical professionals would most likely stop using them in the relevant medical contexts.

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exist if no human beings and no human mental states ever existed. *Ibuprofen* clearly is a result of the human mind and its creativity. The function of *Ibuprofen* is to treat pain and fever. But do we agree that the nature of this kind of function of an artifact is conventional? To put it another way, does *Ibuprofen* relieve pain in the virtue of our collective belief that it does? On the one hand, this claim is not entirely false. We know that homoeopathic medication can relieve pain by means of a collective belief that homoeopathy is effective – in other words, in the virtue of its placebo effect. However, it is still safe to say that homoeopathic drugs that consist of little more than sugar and water are not causally efficacious, and they are as effective (and, most likely, for the same reasons) as placebos. Although both *Ibuprophen* and homoeopathic painkillers are created by humans to fulfil the same function of relieving pain, and although both medications help to reduce pain at least to some extent, there is a crucial difference between them. We can deny that some human artifacts (for example, *Ibuprofen*) carry out their functions in a way that is independent of our propositional attitudes towards the artifactual kind, towards instances of the artifactual kind and propositional attitudes towards its properties and functions, only if we are ready to deny the existence of a meaningful difference between homoeopathic remedies and placebos on the one hand, and the effectiveness of medications which stems from their chemical properties on the other hand.

However, the analgetic properties of music have never been widely exploited by the society and medical professionals, and it might be argued that we could not stop using musical works for their analgesic properties because we never really started to use them with this goal in our mind in the first place. Another example might be the so-called Mozart effect: a belief that listening to classical music, especially the music of Mozart, can enhance intelligence and the intellectual development of children (Bangerter and Heath 2004). This urban legend started in 1993 after a small-scale study published in *Nature* showed that Mozart's *Sonata for two pianos in D major K488* might enhance abstract reasoning (Rauscher et al. 1993). For a certain period, there was a cultural practice to play Mozart's musical works to babies during gestation. This practice was motivated by an expectation that these babies will be born smarter than others. As a scientific theory, the Mozart effect quickly turned out to be untrue (Chabris 1999). Although it took much more time for the urban legend to lose its popularity among non-scientists, it is hardly fashionable anymore to put headphones on the stomachs of pregnant women to play Mozart to babies in gestation. This example shows that some functions of artifacts – and musical works in particular – can cease to be accepted as real.

Yet, we can also be collectively mistaken not only about the function, but also about the constitution of musical works, and this is the most important type of a mistake because it directly targets the second condition of semantic externalism – that the linguistic community (and its individual members) may not necessarily be able to correctly describe the necessary features.

It thus makes sense to say that an instance of what is collectively called a musical work can be denied to be one. John Cage's *4'33* is a classic example of an artwork that is presented as a musical work while there is widespread dissent (Davies 1997, Dodd 2018). Importantly, although often the denial that an object belongs to the realm of art can be seen (at least partially) as an aesthetic judgment (Liao, Meskin and Knobe 2020), the case of denying Cage's *4'33* as

a piece of music is not one of such cases – this reaction has more to do with the sonic properties of the work than with its aesthetic qualities. Cage's *4'33* is not a musical work because it is not made of the right kind of material and it is not structured in the right way, and not because of any presence or absence of its aesthetic value. A widespread belief that *4'33* is a work of music is a potentially false belief about an artifact's constitution; moreover, this belief is actually false if the arguments presented above are actually correct.

Thus, it seems that both conditions for semantic externalism – common nature and the possibility of a collective mistake – can be satisfied.

7. Conclusion

This paper started with the question of whether we should treat musical objects as something that must merge into the framework of the general contemporary metaphysics or something that should be seen primarily through the lens of art theory. The arguments presented in this paper have shown that we have no better reason to think that musical ontology is any more descriptive than the ontology of natural objects: although musical works are, needless to say, not independent of social practices, this dependence is not decisive in ontological matters.

The investigation has been guided by the goal of creating the simplest possible account of musical works. The conception presented here steers clear from postulating special kinds of ontological entities for musical works: musical works are considered here as a kind of artifact, while artifacts are considered to be in one important sense similar to natural objects: they are not constitutively dependent on human intentions. Semantic externalism pertains to the term 'musical work', and what we think about musical works does not determine what they are.

One of the most important methodological questions in the ontology of musical works is that of choosing between revisionism and descriptivism. The term 'musical work' has

externalist semantics: musical works have a common nature, and we can be in massive collective error about them. Therefore, in this respect musical ontology should not be seen as significantly different from fundamental metaphysics. This forms the basis for a revisionary methodology for the ontology of musical works.

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