Musical Works as ‘Indicated Type’:
Jerrold Levinson on the Ontology of Music

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In analytic aesthetics relating to the ontology of music, one of the interesting issues is to which ontological category a musical work belongs. Some theorists argue that musical works are fusions of performances [1], whereas others argue that musical works are compositional activity itself [2]. Each theory pays attention to the character attributed to musical works - for example, being audible or being changeable as time goes by - and tries to offer an ontological category which can conform to such musical characters.

In this paper, I examine the theory of Jerrold Levinson (b. 1948). He looks at two characteristics of musical works - repeatability (i.e. musical works can have many occurrences via performance, playing and so on) and audibility (i.e. musical works can be heard). Levinson agrees with the basics of pure type theory, which argues that musical works are types; this idea explains repeatability by arguing that type can have instances and audibility by arguing that we can hear a musical work as a type through hearing an instance of it. However, in addition to these two kinds of character, Levinson gives creatability and fine individuation of musical works some weight. He thinks that musical works can be created by composers and individuated in part by the musico-historical contexts at the time of their composition. However, this idea, taken at face value, is not entirely consonant with pure type theory. Type is traditionally an abstract entity; thus, it is causally inert, and it exists eternally [3] - that is, it cannot be created. Thus, instead of pure type theory, Levinson presents indicated type theory, which can wholly capture the various characters of musical works.

This paper aims to examine indicated type theory in terms of both the ontological legitimacy and creatability of indicated type. In section 1, after explaining pure type theory, with which Levinson essentially agrees, I survey Levinson’s objection to type theory. In section 2, I present the musical works offered by Levinson as indicated type. In section 3, I examine two critiques of indicated type theory offered by Julian Dodd and Stefano Predelli. Here, I wish to point out that Levinson restricts his range of musical works to ‘the fully notated “classical” composition of Western culture, for example, Beethoven’s Quintet for piano and winds in E-flat, op. 16’ (Levinson [1980] pp. 64-65) [4].

Finally, although in this paper I treat only Levinson’s application of indicated type to musical works, Levinson further argues that indicated type applies not only to musical works but to artefacts [5]. Therefore, this paper can contribute not only to the ontology of music but also to that one of artefacts.
1. Levinson’s objection to sound structure theory

In this section, I survey Levinson’s argument that musical works cannot entirely be identified with sound structures.

Levinson agrees with the basics of the claim that musical works are identified with entities of structural types. Why does he think of this claim as basically correct? First, when we regard musical works as entities of structural types, we can explain the repeatability of musical works by asserting that ‘instances of this type are to be found in the individual performances of the work’ (Levinson [1980] p. 64). Second, we can explain the audibility of musical works in that ‘the type can be heard through its instances’ (Levinson [1980] p. 64) [6]. Given that musical works are entities of structural types, what kind of structural types are musical works? Levinson identifies the theory that musical works are identified with sound structures as ‘sound structure theory’ and regards this theory as prima facie ‘the most natural and common proposal’ (Levinson [1980] p. 64). Sound structure is described by Levinson in the following way:

Sound structures are types of a pure sort which exist at all times (Levinson [1980] p. 65)
Purely sound structures are in effect mathematical objects - they are sequences of sets of sonic elements. (Sonic elements are such as pitches, timbres, durations.) (Levinson [1980] p. 66)
Sound structure includes not only pitches and rhythms, but also timbres, dynamics, accents - that is, all purely audible properties of sounds [7]. (Levinson [1980] p. 64, fn. 3)

However, Levinson thinks that sound structure theory is deeply unsatisfactory. In the remainder of this section, I survey his objection [8].

1-1. Objection on the basis of creatability

Levinson’s first objection to sound structure theory is that it cannot satisfy the creatability of musical works.

Levinson argues that sound structures exist at all times because ‘they[…)can always have had instances’ (Levinson [1980] p. 65). According to sound structure theory, Beethoven’s Quintet op. 16 is identified with a particular sound structure. However, according to the conception of sound structure mentioned above, Beethoven’s Quintet op. 16 as a sound structure must have existed at all times, that is, even before Beethoven's compositional activities, so Beethoven cannot have created his Quintet op. 16.

However, Levinson argues that we insist that composers create their compositions. Why? He offers two reasons. First, he appeals to our intuition, that is, our intuition that artists, including composers, bring into being what did not exist before. He thinks that such an intuition ‘is one of the most firmly entrenched of our belief concerning art’ (Levinson [1980] p. 66) [9]. Second, ‘some of the status, significance, and value we attach to musical composition derives from our belief in’ (Levinson [1980] p. 67) composers creating what did not exist before.

If sound structure cannot be created, but musical works are indeed created by composers,
it would follow that we cannot identify musical works with sound structure. This is Levinson’s first objection.

1-2. Objection on the basis of fine individuation

Levinson’s second objection is that musical works must be individuated more finely than sound structures, and properties of musical works depend on musico-historical contexts in composition. I shall explain.

First, in our ordinary talk and thought about musical works, we do individuate more finely than we do with regard to sound structures. Levinson argues that in the ontology of music, theorists must respect our ordinary talk and thought about musical works [10]. He refers to our ordinary talk and thought about the aesthetic and artistic properties of musical works. ‘[W]orks of music must be specific enough to bear the aesthetic and artistic attributes we importantly ascribe to them’ (Levinson [1990a] p. 241). Here is an example to clarify his claim. We can understand the following critical discourse and examine it: ‘The Dresden Chorale in Mendelssohn’s Fifth Symphony signifies an old state governed by Catholicism; on the other hand, Lutheran hymns speaks of Reformation’ [11]. According to Levinson, Mendelssohn’s fifth symphony necessarily predates the Dresden Chorale and Lutheran hymns.

Second, Levinson argues that the aesthetic and artistic properties [12] of musical works depend on the musico-historical context of their composition. Using dependence on the musico-historical context, he formulates his argument against sound structure theory in the following way (Levinson [1980] p. 68):

1. If a musical work is identified with sound structure, and two distinct composers determine the same sound structure in different musico-historical contexts, they necessarily compose the same musical works.
2. However, two musical works composed by distinct composers in different musico-historical contexts inevitably differ in their aesthetic and artistic properties. Thus, according to Leibnitz’s Law, two musical works must be distinct.
3. Therefore, a musical work cannot be identified with sound structure.

Levinson argues that musical works possess determined aesthetic and artistic properties. But what are aesthetic and artistic properties? What character do they have? Musical works ‘truly have those attributes which they appear to have when correctly perceived or regarded’ (Levinson [1980] p. 69, fn. 15). What does ‘correctly perceiving or regarding’ means? He explains that correct hearing refers to using the musico-historical context as background. Why? In his ‘Aesthetic Contextualism’ (2007), Levinson argues in the following way. Artworks, including musical works, are ‘an artifact of a particular sort, an object or structure that is the product of human invention at a particular time and place, by a particular individual or individuals’ (Levinson [2007] p. 4). He goes on to argue that this fact affects ‘how one properly experiences, understands, and evaluates works of art’ (Levinson [2007] p. 4). That is, ‘artworks are essentially historically embedded objects, ones that have neither art status, nor determinate identity, nor clear aesthetic properties, nor definite aesthetic meanings, outside or apart from the generative
contexts in which they arise and in which they are proferred’ (Levinson [2007] p. 4).

Assuming the conception of musical works, Levinson offers some thought experiments in order to argue that the musico-historical contexts of compositions in part determine the aesthetic and artistic properties that the musical works possess [13]. I look at two examples - first, an example of aesthetic property. Suppose the composer Toenberg is entirely like Arnold Schoenberg except for a lack of counterpart in Verklärte Nacht. Schoenberg composed Pierrot Lunaire in 1912. If Toenberg composes a piece which has the same sound structure with Pierrot Lunaire in the same musico-historical context as Schoenberg, does it have the same aesthetic properties as Pierrot Lunaire? Levinson answers no. Levinson argues that perceiving an individual musical work correctly requires perceiving it against the background of the remainder of the composer’s oeuvre. On the assumption that musical works truly have those attributes which they appear to have when correctly perceived, as mentioned above, a piece Toenberg composes does not possess aesthetic properties which are resonance with Verklärte Nacht. Second, I take an example of artistic property. Levinson argues that if Beethoven had composed a piece with the same structure as Brahms’s Piano Sonata op. 2, that piece could not have the property of ‘being strongly Liszt-influenced’ and that it might have the property of ‘being visionary’, which Brahms’s piece does not have.

Thus, even if two musical works share the same sound structure, the musico-historical context of the composition inevitably makes a difference in the aesthetic and artistic properties of each of the works. Hence, by Leibnitz’s law, two musical works cannot be the same [14] and be identified with sound structure.

2. Musical Works as indicated type

In the previous section, I surveyed Levinson’s objection to pure sound structure theory. In this section, I cite Levinson’s formulation on what a musical work is. He answers that question in the following way:

I propose that we recognize a musical work to be a more complicated entity, namely this:

\[(MW) S/PM \text{ structure-as-indicated-by-X-at-t}\]

where X is a particular person - the composer - and t is the time of composition. For the paradigmatic pieces we are concerned with, the composer typically indicates (fixes, determines, selects) an S/PM structure by creating a score. The piece he thereby composes is the S/PM structure-as-indicated by him on that occasion [15]. (Levinson [1980] p. 79)

How, then, do musical works as indicated type satisfy creatability and fine individuation? Levinson argues that, differing from sound structure per se, musical works as indicated type can be created by a composer, because

\[w\]hen a composer \(\theta\) composes a piece of music, he indicates an S/PM structure \(\psi\), but he
does not bring $\phi$ into being. However, through the act of indicating $\psi$, he does bring into being something that did not previously exist – namely, $\psi$-as-indicated-by-$\theta$-at-$t_1$. Before the compositional act at $t_1$, no relation obtains between $\theta$ and $\psi$. Composition establishes the relation of indication between $\theta$ and $\psi$. As a result of the compositional act, I suggest, the world contains a new entity, $\psi$-as-indicated-by-$\theta$-at-$t_1$. (Levinson [1980] p. 79)

Then, he emphasises the difference between indicated type and sound structure with accidental property:

indicated structures are entities distinct from the pure structures per se from which they are derived. Thus, in particular, $\psi^*\theta^*t_1$ is not just the structure, with the accidental property of having been indicated by $\theta$ at $t_1$, - $\psi^*\theta^*t_1$ and $\phi$ are strictly non-identical, though of course related. (Levinson [1980] pp. 79-80; $\psi$ signifies sound/performance means structure, $\psi^*\theta^*t_1$ signifies $\psi$-as-indicated-by-$\theta$-at-$t_1$)

Levinson explains fine individuation in the following way:

Indicated structures also serve to satisfy [fine individuation]. If musical works are indicated structures of the sort we have suggested, then two such works, $\psi^*\theta^*t_1$ and $\alpha^*\phi^*t_2$ are identical iff (i) $\psi = \alpha$, (ii) $\theta = \alpha$, and (iii) $t_1 = t_2$. But if musical works are necessarily distinct if composed either by different people or at different times, then it certainly follows that works composed in different musico-historical contexts will be distinct, since any difference of musico-historical context from one work to another can be traced to a difference of composer or time or both. (Levinson [1980] p. 80)

In section 1, I explained Levinson’s objection to pure sound structure theory and his motivation to identify musical work with indicated type. In section 2, I have mainly quoted Levinson’s thought on musical works as indicated type and why this conception of musical works is compatible with creatability and fine individuation. In the next section, I propose two objections to indicated type theory and examine whether Levinson can dismiss them.

3. Examination of objection to indicated type theory

My first objection to indicated type theory concerns whether the ontological character of indicated type is legitimate and the other is whether indicating sound structure can bring a new entity - that is, a musical works - into existence. I argue that Levinson can reply to the former objection, but Levinson’s response to the latter is insufficient.

The first objection to Levinson’s approach is that indicated type, in fact, does not demonstrate the characters that Levinson thinks it does. He posits indicated type in order to explain not only the repeatability and audibility of musical works, but also their creatability and fine individuation. However, Julian Dodd thinks Levinson’s strategy fails [15]. Dodd argues that, as Levinson admits, indicated type has a particular individual and particular time
as constituents and they ‘figure [in indicated type] ineliminably’ (Levinson [1980] p. 82). Furthermore, Dodd continues, according to Jaegwon Kim’s notion of event, an entity which has particular time as a constituents is not a type but an event. Hence indicated type cannot satisfy the repeatability and audibility which musical works seem to have.

I think Levinson can reply to this objection. He asks why we should apply ‘ready-made ontology [...] which just happens to be lying around’ (Levinson [1996] p. 145) to indicated type. Levinson thinks that ‘it seems preferable to identify artworks in a “metaphysically obscure” manner, if such it be, than to apply metaphysically more lucid - though really only more familiar - categories to them in Procrustean fashion’ (Levinson [1996] p. 145). In relation to this thought, even if indicated type includes a particular time ‘ineliminably’, Levinson can reply that it is simply ‘what Wollheim called generic entities, that is, things that can have instances and that can be exemplified in a concrete manner’ (Levinson [2012] p. 56).

We can think of the dispute between Levinson and Dodd as such that ‘the conflict between the need to provide an ontology of works of art that is adequate to ordinary beliefs and practices regarding the arts, and the need to choose from the ready-made categories of familiar ontologies’ [16]. Dodd assumes ‘Levinson’s indicated types look like queer, cross-categorial entities: ontologically suspect things that have been gerrymandered into existence for the express purpose of sweeping away an ontological difficulty’ [17]. Dodd’s criticism concerns the ontological legitimacy of indicated type. For Dodd, even if indicated type can satisfy the requirement imposed by our belief and practice of art - that is, our belief and practice that musical works are creatable and finely individuated relative to their origin - we should not admit indicated type itself; therefore, we cannot identify musical works with indicated type. On the other hand, Levinson argues regarding musical ontology that we should identify musical works with some entities which conform to our belief and practice, and if we cannot find such an entity within ready-made ontology, we need a novel entity to be identified with musical work. In this regard, they seem to dispute where the priority lies in musical ontology.

The second objection concerns how to create musical works - that is, new abstract entities - by indicating sound structures.

Levinson describes the process by which musical works as indicated structural type are brought into existence: the composition establishes the relation of indication between a composer $\theta$ and sound structure $\psi$. As a result of composition, the world comes to include new entities - that is, ‘$\psi$-as-indicated-by-$\theta$-at-t$_1$.’. Predelli, however, points out that in general no new entities are brought into existence by someone’s entering into a relationship $R$ with object o at a time t [18]. He argues that ‘it does not appear to be the case, if you show me the tallest building on campus, you thereby bring into existence a new object, that is, the building–as–shown–by–you.’ [19]. I agree with his objection. If a new entity is brought into existence as a result of composition in Levinson’s sense, the relation of indication between the composer and the sound structure must be a special kind of relation and must differ from one that obtain between someone and the tallest building.

What, then, is the feature mentioned above? Levinson accepts Anderson’s proposal concerning the notion of ‘indication’ [20] in his ‘What a Musical Work Is, Again’.
[M]y vagueness on the relation of “indication” is usefully redeemed by this discussion of making normative...Making-normative certainly at least helps explain what indicating consists in, and differentiates it from other activities of an intentional nature directed on abstract structures. (Levinson [1990a] pp. 260-261)

Anderson distinguishes normative type from descriptive type [21]. Norm type can have improperly formed instances. For example, even if an instance of type ‘lion’ lacks one leg, it is an improperly formed instance of type ‘lion’. By contrast, because type ‘square’ cannot have an improperly formed instance, it cannot be a norm type. How should we characterize norm type? Suppose norm type ‘Tn’ exists. Tn is defined in terms of properties (P1,⋯,P), which are normative within T [22]. In contrast, descriptive type ‘Td’ also has the same properties, which are not normative within Td.

According to Anderson, the composer’s indication of a sound structure means that he or she changes a sound structure as descriptive type into a musical work as normative type through making the sound structure normative. To make the sound structure normative is ‘laying some feature [of sound structure] down as required in order for a properly formed performance (what I call an instance) to have occurred’ (Levinson [1990a] p. 260). For example, we can think of a sound structure which has the property ‘a G above middle C’. This property, in nature, is non-normative. As Anderson says, ‘[w]hen the wind whistles through the canyon rocks it either sounds a G above middle-C or it does not’ [23]. A case in which this property is changed into being normative is one in which this property is located in the context of musical works [24]. It makes sense for us to point out that a G sharp above middle C sounds incorrect only if a G above middle C is specified in the musical score.

However, Predelli argues that if we understand the notion of indication along this line, a new entity cannot be brought into existence by indication [25]. When a composer selects a certain sound structure and claims that it comes to have normative character, although the composer invites us to consider it in a certain manner and though such an invitation has not existed before, the sound structure itself still exists eternally. Even if we adopt a certain attitude toward an eternal (or atemporal) entity, we cannot thereby create a new entity.

Levinson explains in detail the notion of ‘indication’ in his latest article, ‘Indication, Abstraction, and Individuation’ (2012). In this article, he introduces a distinction between simple indication and artistic indication. Simple indication is like showing the tallest building on campus, as mentioned above. This sort of indication has the following features. In the case of showing the tallest building, we aims at drawing someone’s attention to that building, and such simple indication is ‘purely transitory’ (Levinson [2012] p. 52). In addition, we do not intend to establish something in simple indication. In the case of artistic indication, though, the composer wants to notice us a certain sound structure in addition to simple indication. However, the composer also selects a particular sound structure among ‘the tonal domain as a field of possible sounds’ (Levinson [2012] p. 53). He or she thereby enters a relation of ‘appropriation’ into that sound structure. For example, the ‘Tristan chord’ is ‘Wagner’s compositional appropriation of this already-available chord’ (Levinson [1990a] p. 220). In particular, in composing ‘musical works for performance’, not improvisation, the composer
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‘ordain[s] a rule to be followed by performers wishing to instantiate or perform a given work’ (Levinson [2012] p. 54). As Levinson says, artistic indication ‘normally involves a deliberate choice, an act of appropriation, an attitude of approval, and the establishment of a rule or norm’ (Levinson [2012] p. 54).

However, although Levinson succeeds in clarifying the notion of ‘indication’, I think his response is insufficient. All that is required is for him to explain the concrete mechanism of how indicated type as abstract type is brought into existence through ‘choice’, ‘appropriation’, ‘approval’, and ‘establishment of a rule or norm’.

4. Conclusion

In this paper, I survey indicated type theory and examine whether Levinson can reply to two objections. I conclude, first, that Levinson can defend his claim against the objection that indicated type cannot possess the ontological characters offered by Dodd. I thus conclude that Levinson’s reply to the objection that indicating structure cannot create indicated type is insufficient.

Although Levinson must describe in detail how to create indicated type, his notion of indicated type applies to a large range of things. In particular, it helps us to investigate the ontological matter of things that are both abstract and being brought into existence [26]. This explanation still faces some difficult issues. For example, in systematizing such a theory, we may respect our intuition that there is a difference between ordinary artefacts like models of cars, an artifact of a particular sort like musical works, literary works, and paintings. However I have omitted this last problem in this paper.

Notes

[3] The former is from Rohrbaugh[2005] and the latter from Dodd [2007].
[4] Someone may complain about this restriction. For example, Sherri Irvin argues that even if Levinson can explain such restricted musical works, he cannot very well explain a case like John Cage’s Imaginary Landscape No. 4, in which the composer specifies not the sound structure but the performer’s activities. I think the ontology of music (not ‘classical’ music) must reply to such claims. But I shall focus on Levinson’s argument in this paper.
[6] Two caveats. First, ‘although the distinction between type and token is, including term itself, derived from C.S. Peirce, current general distinction isn’t necessarily authentic to his intention’ (Iida 2002, p. 35, fn. 5). Second, the explanation of type in this paper presupposes that type is a kind of universal. That is, type can have instances and, therefore, be repeatable. Linda Wetzel says that most philosophers admit that type is a kind of universal, but Quine and Eddy Zemach disagree with such a conception of type.
[7] Levinson uses the expression ‘the individual component sound type that they [sound structures] comprise’ (Levinson [1980] p. 65). He offers, for example, the ‘F-sharp minor triad’ and the ‘three-note French-dotted rhythmic figure’ as examples of sound type.
In Levinson [1980], he presents the objection that ‘musical works must be such that specific means of performance or sound production are integral to them’ (Levinson [1980] p. 78). However, this paper aims to examine two issues: the ontological legitimacy of indicated type and whether indicating sound structure create indicated structure, so I look at an intimately related objection. Anderson [1985] and Levinson [2012] also take the same strategy so that performance means are not taken into consideration.

Fukuda Says, ‘needless to say, musical works as well as other artworks are brought into existence by creators. The composer’s activity brings into existence what has not existed before’ (Fukuda [1988] p. 41). However, not all philosophers share the intuition that the composition bring something into existence. See Caplan and Matheson [2004] p. 114.

David Davies calls this methodological constraint ‘pragmatic constraint’ (Davies [2004] p. 18).


Levinson explains aesthetic and artistic property explicitly in Levinson [1990b]. According to him, aesthetic property is ‘higher-order, typically gestaltlike perceivable property’ (Levinson [1990b] p. 182) and depends on artistic context of the time of creation - properties like gracefulness, coherence, sadness are aesthetic properties. On the other hand, artistic properties ‘do not merely depend on the artwork’s relation to other artworks and surrounding artistic background [...] but are inherently a matter of that relationality’ (Levinson [1990b] pp. 182-183) - properties like originality, distinctiveness of vision, and skillfulness are artistic properties. In the case of painting, Levinson says ‘[t]he aesthetic properties of, say, a painting are those tied up with how, on a more than merely sensory level, it looks - with the impression it affords, the effects it produces, on properly backgrounded perceiver. The artistic properties of a painting are those that, while strictly relevant to its appreciation and evaluation as art, embody relations to surrounding cultural context as a whole (including, conceivably, relations to the creative history of that very work), and are thus not, strictly speaking, perceivable in the painting itself (Levinson [1990b] p. 183).

Many objections raise to the following thought experiments (see, for example, Dodd [2007] ch.9). They are generally regarded as the dispute between ‘Aesthetic Formalism’ and ‘Aesthetic Contextualism’.

Levinson uses the assumption here that aesthetic and artistic properties are ‘relevant - in common with all other attributes - to individuating’ (Levinson [1980] p. 84, fn. 29) musical works.


Predelli [2001].


Anderson [1985].

Anderson uses the expression ‘norm kind’ derived from Wolterstorff [1980]. However, as Levinson uses ‘norm kind’ and ‘norm type’ interchangeably, I use ‘norm type’ in this paper.

The property $P$ is normative within the norm-kind $K = df K$ is a norm-kind, and it is impossible that there be something which is a properly-formed example of $K$ and lacks $P$” (Wolterstorff [1980] p. 57).


Another example is tuning instruments.


See Thomasson [1999].
References


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