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The Poverty of Musical Ontology

James O. Young, Department of Philosophy, University of Victoria, Canada

Abstract

Aaron Ridley posed the question of whether results in the ontology of musical works would have implications for judgements about the interpretation, meaning or aesthetic value of musical works and performances. His arguments for the conclusion that the ontology of musical works have no aesthetic consequences are unsuccessful, but he is right in thinking (in opposition to Andrew Kania and others) that ontological judgements have no aesthetic consequences. The key to demonstrating this conclusion is the recognition that ontological judgments are a priori and aesthetic judgments are empirical. A priori judgements have no empirical consequences. Neither fundamental ontology of music nor higher-order ontological reflections have any aesthetic consequences.

1. Introduction

For many years, the ontology of musical works has attracted a good deal of attention from philosophers. More recently, Aaron Ridley has raised a question about whether the attention devoted to the ontology of musical works will have any aesthetic payoff. (Ridley 2003) That is, Ridley asks whether views about the ontology of musical works have any implications for judgements about the aesthetic value, expressiveness, interpretation or meaning of any works or performances of music. (I will call these aesthetic judgements.) The hope is that all of the time and effort invested in the ontology of musical works will assist critics in arriving at the right aesthetic judgements about musical works or performances. Anyone with this hope will be disappointed. Nothing ontologists have to say about musical works will assist in making aesthetic judgements about music.

The ontology of music has focused on three questions. The first question asks about the basic ontological category to which works of music belong. Some philosophers answer the question by saying that works of music are eternal, immutable sound event types. (Dodd 2007) Others say that works of music are classes of performances (Goodman 1968), performances (Davies 2004), initiated types (Levinson 1990), perduring individuals (Caplan and Matheson 2006), and so on. Following Kania, we can call this the *fundamentalist debate*. The other debates are concerned with what Kania calls *higher-order musical ontology*. (Kania 2008a) These higher-order debates can be decided without determining which fundamental ontology is correct. Two distinct questions have been asked in debates about higher-order musical ontology. The first of these questions asks which conditions must be satisfied for a performance *P* to be a performance of a work of music *W*. Kania calls this the *identity debate*. Finally there are questions about the types of musical works found in particular musical traditions. Theodore Gracyk has, for example, argued that works of rock music are recordings (or tracks) for playback. (Gracyk 1996) Others hold that works of rock music are not ontologically different from works of classical music. Kania holds that works of jazz are improvisations rather than works for performance. (Kania 2011) All of these debates are irrelevant when we ask aesthetic questions about musical works and performances.

2. The fundamentalist debate and aesthetic judgements

Let us begin by considering whether the fundamentalist debate has implications for aesthetic judgements about works and performances of music. This is not the first paper to deny that positions in the fundamentalist debate have aesthetic consequences. It is not clear, however, that previous writers are right about why fundamental ontology has no aesthetic implications.

Ridley's specific arguments for the aesthetic inconsequence of the ontology of music have been refuted by Kania. (Kania 2008b) I will not repeat Kania's arguments here. Christopher Bartel is another philosopher skeptical about the aesthetic implications of musical ontology. He points out that a music critic can reach aesthetic judgements about a work or performance of music without having any ontology of musical works. (Bartel 2011) He concludes that positions adopted by participants in the fundamentalist debate have no aesthetic implications. Unfortunately, this conclusion does not follow. One might wonder about the value of fundamental ontology to critics given that they successfully make aesthetic judgements in complete ignorance of the fundamentalist debate, but the fact that people can make aesthetic judgements in complete ignorance of fundamental ontology does not entail that they would not change their aesthetic judgements if they were to read some papers on musical ontology. We need to look elsewhere for an argument to establish the aesthetic poverty of musical ontology.

I will begin the case for my conclusion with an analogy. It seems clear that views about the ontological category to which other types of artworks belong have no implications for aesthetic judgements about works of these types. Consider, for example, paintings. Suppose that I have been convinced that paintings are individual mind-independent material objects. While holding this view about the ontology of paintings, I form an aesthetic judgement about some painting, say, Jan Davidszoon de Heem's *Still Life with Books and Lute*. Let us suppose that I judge that the painting is expressive and that it insightfully represents profound melancholy.

Now suppose that I take an introduction to philosophy course and I learn about the ontology of George Berkeley. I come to believe that all objects of experience are ideas in the mind of God. *Ipso facto*, I now believe that *Still Life with Books and Lute* is an idea in the mind of God, and not a mind-independent material object. This change in my

views about the ontological category to which the painting belongs has absolutely no implications for any judgements about experience of the work. Having accepted that the painting is an idea in the mind of God, my experience of the painting is no different from what it was when I believed that is a mind-independent physical object. The colours and shapes that I perceive do not change. I still believe that the painting is rectangular, painted in subdued colors and so on. I can go on believing that it is expressive and represents profound melancholy. I still believe all of the art-historical facts about the painting that I previously believed. In particular, I still believe that it was painted in the seventeenth century, that is a still life of the Dutch school, and so on. (Notice that I am not presupposing aesthetic empiricism, the view that only experience of a work itself is relevant to its aesthetic evaluation.) The change of my ontological views does not compel me to revisit any of my aesthetic judgements about paintings. Thinking that a change of ontology has aesthetic implications is like Dr. Johnson thinking that he could refute Berkeley by kicking a stone. My aesthetic judgements are independent of my ontological judgements because my ontological judgements have no empirical consequences.

What goes for paintings goes for works of music. Suppose that I have believed that Levinson (1990) is right and that works of music are initiated types. While holding this belief, I listen to a recording of Tchaikovsky's *Pathétique* Symphony. I then form the aesthetic judgement that the performance is deeply moving and expressive of tragic despair. Suppose that I subsequently read Dodd (2007) and I am completely persuaded by his arguments. Under Dodd's influence, I now believe that works of music are Platonic abstracta: eternal, immutable sound event types. My ontological conversion does not compel me to revise my earlier aesthetic judgement. After I have accepted Platonism about works of music, my experience of the performance is identical to how experience of the performance was when I believed that symphonies are initiated types. I still believe all of the art historical facts about the symphony that I previously believed: that it is in b minor, that it was composed in 1893, and so on. I still hear the same notes when listening to the recording. There is no reason to believe that I will not make the same aesthetic judgements about the *Pathétique* Symphony and any other work or performance.

Here is another illustration of this point. Levinson and Dodd go to a concert where they hear Bach's Double Violin Concerto. Levinson thinks that they have heard a token of an initiated type while Dodd maintains that they have heard a token of an eternal, immutable sound event type. Suppose now that Levinson makes the aesthetic judgement that the performance was disappointing. Dodd disagrees and thinks that it was quite good. The two philosophers enter into a debate about the aesthetic virtues of the performance. Levinson may argue, say, that excessive use was made of vibrato and that the tempo was too relaxed. Dodd, in contrast, is not troubled by the vibrato and the tempo. He points to the tasteful use of rubato in defence of his aesthetic judgement. Had he said that the rubato was tasteful *and* the performance was a token of an eternal type, he would have added nothing to his view. Similarly, if Levinson had offered as a rejoinder to Dodd that the performance was too slow *and* they had heard an initiated type, he would have added nothing to his initial claim about the aesthetic value of the concert.

Here we have been considering aesthetic judgements about performances. Some writers have claimed that the fundamental ontological category to which works belong affects aesthetic appraisal of the works. For example, some ontologists have held that they will be more impressed by a work if it turns out to have been created rather than discovered. I am at a loss to see how this could be. Suppose that musical works are discovered and not created. If so, this cannot possibly affect the relative aesthetic values of musical works. Some philosopher might be disappointed to learn that a favourite composition was discovered, not made. But every other composition was also discovered, not made. Consequently, there are no grounds for revising the relative aesthetic assessment of any particular work of music. If ontological discoveries affect the aesthetic value of compositions, they affect all compositions equally.

More importantly, perhaps, one has no reason to change one's judgement about the aesthetic value of a composition if one comes to believe that all musical works are discovered and not made. Regardless of whether Bach created or discovered his Double Violin Concerto, his actions were what they were. He sat down at his desk, dipped his pen in some ink, and put some marks on a sheet of paper. He engaged in his creative process. Like other composers, Bach would have, as Dodd says, worked away "imagining and reimagining sequences of sounds, playing and amending sequences on

an instrument" until he reached a satisfactory resolution. (Dodd 2007: 117) Bach's compositional process can be described as creating or as discovering, but the empirical facts about what Bach did do not change when they are variously described. Whether he was creating or discovering, he was being creative and writing music of the highest quality without any assistance.

One might wonder why positions in the fundamentalist debate in musical ontology have no aesthetic implications. The answer is that all positions in the fundamentalist debate are equally compatible with all of the empirical evidence about musical works. (Young 2011) Positions in the fundamentalist debate are not empirical. They are the product of a process of a priori reasoning. In contrast, aesthetic judgements are empirical judgements. An aesthetic judgement is based on experience of an artwork and on knowledge of the empirically ascertained art historical facts about the work. A priori judgements do not have any empirical consequences. Consequently, ontological theories have no aesthetic implications.

One could take issue with my argument by maintaining that sometimes a priori judgements have empirical consequences. Consider the disjunction $A \lor E$, where A is an a priori judgement and E is empirical. Is the disjunction empirical or a priori? Suppose that $A \lor E$ is a priori. In this case, the validity of $E \vdash A \lor E$ demonstrates that empirical judgements can have a priori consequences. Similarly, if $A \lor E$ is empirical, then $A \vdash A \lor E$ demonstrates that a priori judgements can have empirical consequences. (Williamson forthcoming) My argument depends on the view that a priori statements cannot have empirical consequences. But it seems that the line between a priori and empirical judgements is not as hard and fast as my argument requires.

I allow that empirical judgements can have a priori (ontological) consequences. So the inference from E to $A \lor E$ need not trouble me. In contrast, the inference from A to $A \lor E$, on the assumption that $A \lor E$, is empirical, is worrisome. Properly understood, however, $A \lor E$ is a priori, not empirical. There are two senses of a priori. In the positive sense, a statement is a priori if and only if it can be justified independently of experience. In the negative sense, a statement is a priori if and only if it is immune to empirical revision. (The negative conception of the a priori is found in Field 1998.) On either conception of a prioricity, $A \lor E$ counts as a priori. On the positive account, $A \lor E$ is a priori because it can be justified independently of experience. On the negative

account, $A \lor E$ is a priori because it cannot be empirically refuted. On either conception of a prioricity, a priori judgements entail only a priori judgements. On both the positive and negative conceptions, if A is a priori and $A \vdash B$, then any justification of A can become a justification of B but the justification will be a priori and B will be a priori.

In my view, this argument is decisive. However, even if some a priori judgements have empirical consequences, the conclusion that positions in the fundamentalist debate about musical works have empirical aesthetic consequences does not follow. The cases just considered (which involve the disjunction of empirical and a priori judgements) establish at most that some a priori judgements have empirical consequences. These special cases involving the disjunction of a priori and empirical judgements do not establish that a priori ontological judgements about musical works actually have aesthetic consequences. The burden of proof remains with those who believe that ontological judgements have aesthetic consequences to provide an example.

3. Ontology and meta-aesthetics

So far we have been concerned with the question of whether the fundamentalist debate has any aesthetic implications. We have found that it cannot since the ontological debate is conducted a priori and aesthetic judgements are empirical. The possibility that ontological judgements have meta-aesthetic consequences remains open. This is possible since meta-aesthetics, like ontology, is an a priori inquiry. One might think that the meta-aesthetic judgements may have aesthetic implications and that, in consequence, ontological judgements have (indirect) aesthetic consequences.

Meta-aesthetic judgements are judgements about what sorts of aesthetic judgements are possible and the form that they take if they are possible. Many possible meta-aesthetic positions are available. One is aesthetic non-cognitivism, according to which aesthetic judgements are just displays of approval or disapproval. Another is an error theory according to which, in the absence of aesthetic facts, all aesthetic judgements are false. Most aestheticians believe that some sort of aesthetic cognitivism is correct and that some aesthetic judgements are true. (In this essay, cognitivism is assumed to be true and error theory false.) Which aesthetic judgements can be true depends on what sorts of aesthetic properties exist. This is where ontology comes in.

Positions in the fundamentalist debate have consequences for questions about what sorts of aesthetic properties exist. Consider, for example, the debate between Levinson and Dodd on the question of whether or not works of music are created. If musical works are not created, then they cannot possess certain aesthetic and art historical properties. For example, Dodd (2007) argues, Wynton Marsalis's *In This House, On This Morning* (1994) cannot possess the property of being expressive of pride in African-Americans of the Deep South. The sound event type that is, on Dodd's view, the work could have been first tokened in 1594, when it could not have been expressive of pride in African-Americans of the Deep South. Similarly, Dodd believes that something that is eternally existent cannot possess the property of originality or the property of being Liszt-influenced. Liszt, who was not born until 1811, cannot have influenced something that has existed eternally and is immutable.

Nevertheless, I still maintain that judgements about the ontology of music have no aesthetic implications. Ontological judgements about works of music may have meta-aesthetic implications. Meta-aesthetic judgements, like judgements about ontology, are a priori. Being a priori, meta-aesthetic judgements can have no empirical consequences. Judgements about the particular aesthetic properties of particular works of music are not the consequence of any meta-aesthetic judgements or, indirectly, the consequence of judgements reached in the fundamentalist debate. For example, the melancholy of some performance is independent of the meta-aesthetics anyone adopts. (Of course, if for some meta-aesthetic reason, a work cannot be expressive of melancholy, or any other emotion, then it is not.)

Ontological positions can be adapted to be compatible with empirical evidence (as they must be in order to be viable). For example, Dodd's ontology of musical works has the consequence that works of music cannot have, for example, the property of being Liszt-influenced. This seems to be incompatible with the well-supported empirical judgement that certain compositions are Liszt-influenced. Dodd does away with the incompatibility by re-describing uncontroversial empirically ascertained facts. Brahms's Second Piano Sonata cannot be described as Liszt-influenced. Rather, Dodd holds, Brahms's compositional process was influenced by Liszt. (Dodd 2007: 258) Similarly, on his view, works of music cannot be original, but the composers' actions can be. In cases of this sort, there is no disagreement between Levinson, say, and Dodd on the

empirical facts. There is only a difference of opinion about how to describe them within the framework of a particular fundamental ontology.

Dodd does continue to resist the conclusion, on ontological grounds, that *In This House, On This Morning* is expressive of pride in African-Americans of the Deep South. (He does not deny that it is expressive of pride *tout court*.) Two comments need to be made about Dodd's views. For a start, good empirical reasons can be given for thinking that works of music (without lyrics or program) cannot be expressive of something as specific as pride in African-Americans of the Deep South. According to the resemblance theory of musical expression, works of music (without lyrics or program) are expressive of some emotion when they resemble verbal or non-verbal behaviour characteristically expressive of emotion. (For a recent review of the resemblance theory, see Young 2012.) The resemblance theory is an empirical theory. There is reason to doubt whether there is a characteristic behaviour expressive of an emotion as specific as pride in African-Americans of the Deep South. The second point is that *In This House, On This Morning* is not pure music without a program. The sections have titles and enough other clues are available for listeners to experience that, at least as tokened by Marsalis, a performance of the work is expressive of a specific sort of pride: pride in African-Americans of the Deep South.

4. The identity debate and aesthetic judgements

While it is clear that fundamental musical ontology has no implications for aesthetic judgement, one might still think that views on higher order musical ontology have aesthetic implications. Let us begin by considering the identity debate, which is concerned with the question of when a performance is a performance of a given work. Kania, who has been outspoken in defence of the view that ontological positions have aesthetic implications, allows that the positions adopted in the fundamentalist debate have no consequences for aesthetic judgements but maintains that higher order ontology does. (Kania 2008b) If all ontological claims are known a priori, it is already clear that higher order ontological claims do not have aesthetic implications, since aesthetic judgements are empirical. Nevertheless, let us look at some debates in higher order ontology to confirm this conclusion. Let us begin by considering whether positions in the identity debate have aesthetic implications.

The first point to confirm is that the identity debate is not an empirical dispute. In order to see that this is so, consider, for example, a performance that reproduces every note but one of Beethoven's *Moonlight Sonata*. Goodman famously held that this performance is not a performance of the *Moonlight Sonata*. On his view, performers succeed in performing a work only if all and only the notes specified in the score are played. (Goodman 1968: 186-7) Stephen Davies, on the other hand, may argue that it is a performance of Beethoven's work. (Davies 2001: 158) On his view, the performance complies sufficiently with the score to count as a performance of the sonata and it is a performance of Beethoven's sonata (so long as certain other conditions are satisfied). Goodman and Davies are, however, not in disagreement about any empirical facts. They agree that the pianist's performance departed from Beethoven's score by one note. They can agree that there was an intention to perform the *Moonlight Sonata* and they can agree about the art historical facts about this composition. Since they can agree on all the relevant empirical facts about the performance, and disagree about whether the performance is a performance of the sonata, the identity debate is not concerned with an empirical question. Like other ontological debates, the identity debate is conducted a priori.

Aesthetic judgements about musical performances are, however, empirical judgements. They are based on judgements about the perceived properties of musical performances and on empirically discovered art-historical facts about musical works. A priori judgements have no implications for such judgements.

Nevertheless, Kania argues for the view that the identity debate has aesthetic implications. He does so by holding that, in order to make an aesthetic judgement about a work, we need to know the category of art (in the sense of Walton 1970) to which the work belongs. For example, one needs to know whether one is listening to a performance of the *Moonlight Sonata* or a performance of some other work before one can make a judgement about the aesthetic value of the performance. (The performance could be a good performance of the *Moonlight Sonata* or a very bad performance of *Twinkle, Twinkle, Little Star*.) Kania infers from this that the answers that higher-order ontology provides to identity problems have implications for aesthetic judgements.

Kania is right when he says that facts about the category to which some work belongs have implications for aesthetic judgements about the work. He is wrong,

however, in thinking that the identity debate has any aesthetic implications. In order to know that some performance is an aesthetically valuable performance of the *Moonlight Sonata* (rather than a poor performance of some other work) I need to know that it is a performance of the *Moonlight Sonata*. I do not need to know that it is a performance of the *Moonlight Sonata* because it satisfies Goodman's (or someone else's) conditions for being a performance of this work. Such ontological beliefs are, from an aesthetic point of view, irrelevant.

This can be demonstrated by the following argument. Imagine that I have been persuaded by Goodman's account of when a performance *P* is a performance of work *W*. I listen to a performance of the *Moonlight Sonata* which includes all and only the notes that Beethoven wrote. I judge that the performance is an aesthetic triumph: a subtle, shimmering, and deeply moving performance of the *Moonlight Sonata*. Now I read Stephen Davies (2001) and I am persuaded that Davies provides the correct account of the conditions under which a performance is a performance of a given work. It is difficult to see how this change in my views about the identity debate has any implications at all for my aesthetic judgement about the performance. If I believed that the performance is subtle, shimmering and deeply moving, I will continue to do so. My aesthetic evaluation has not changed because none of the beliefs relevant to the aesthetic evaluation of the performance have changed. These are empirical beliefs about how the performance sounds and about the category (in this case, performances of the *Moonlight Sonata*) to which the performance belongs.

Someone might object that, in the argument just given, I have taken an example of a performance which is uncontroversially a performance of a work. Perhaps the situation is different when we are dealing with cases where there is a question about whether a performance is a performance of a given work. Let us consider, then, performances that depart from the original score in some respect. For example, a pianist adds an ornament not sanctioned by the score of the *Moonlight Sonata*. Goodman will hold that the performance is not a performance of Beethoven's Piano Sonata No. 14. Stephen Davies will disagree (so long as there is an intent to perform the sonata and other conditions are satisfied).

Now the question is whether Goodman and Davies will (in virtue of their differing ontological beliefs) reach different aesthetic judgements about the performance. Let us

consider what basis they will have for an aesthetic judgement. They can agree about how the performance sounds: there is no disagreement about which notes have been played. They do not disagree about an aesthetic category to which the performance belongs: performances of piano sonatas in the style of Beethoven. They can agree that there was an intention to perform the *Moonlight Sonata*. Goodman and Davies may differ about the aesthetic value of the performance, but their difference of opinion will not be based on any ontological considerations. Suppose that Davies judges that it is an expressive and moving performance. Goodman's views about the identity debate give him no basis for disagreement.

Someone might still think that this argument still does not do justice to Kania's views about the aesthetic implications of the identity debate. Perhaps we do not see that views in the identity debate have aesthetic consequences until we consider a different sort of example. Consider a work by J.S. Bach given a jazz treatment. I have in mind something like Jacques Loussier's rendition of the Toccata and Fugue in d minor. Let us call this *P*. Some positions on the identity debate will have the consequence that Loussier does not perform Bach's work. Other positions (Stephen Davies', perhaps) will allow that it is. One might think that these different ontological judgements about *P* have aesthetic consequences. One might reason as follows: when *P* is regarded as a jazz performance (and not a performance of Bach's work) someone may judge that *P* is aesthetically valuable. When *P* is regarded as a performance of Bach it may be judged to be an aesthetic failure.

These reflections do not lead to the conclusion that ontological positions have aesthetic consequences. The difference of opinion about the aesthetic merits of the jazz treatment of Bach is not the consequence of any ontological difference. In particular, differing aesthetic judgements about *P* are not the consequence of any position in the identity debate. Two people can agree that *P* is a performance of Bach's work. Likely they will nevertheless disagree about *P*'s aesthetic merits if one person places it in the class of jazz performances and the other does not. Likewise, if two people agree that *P* is not a performance of Bach's work, but disagree about whether it is a jazz performance, they are likely to disagree about its aesthetic merits.

The aesthetic disagreement is the result of putting *P* into different aesthetic categories. One judgement follows once *P* is put into the category of jazz performances.

Another follows from regarding it as, say, belonging to the category of historically authentic performances of baroque music. These categories, the sort of categories of which Walton speaks, are not ontological categories. Walton's aesthetic categories are based on empirical knowledge of artworks. According to Walton, decisions about the category to which some performance belongs are made on the basis of aesthetic considerations and considerations about the performer's intentions. These are empirical matters. We are still looking for a case where ontological judgements have aesthetic implications.

5. Genre specific types and aesthetic judgements

One final ontological debate and its possible aesthetic implications remain to be considered. We may call this the *genre specific work type debate* or, more briefly, the *type debate*. A variety of writers, including Stephen Davies (2001) and Gracyk (1996), have maintained that musical works come in a variety of higher-order ontological types and that these types are specific to musical genres. Gracyk, for example, has maintained that the works of rock music are recordings or tracks, not songs and contrasts this type of work with the sort found in classical music. Davies has distinguished between works for live performance and works for studio performance. Kania maintains that jazz works are improvisations. One might think that debates about this sort of claim have aesthetic consequences.

Once again, the type debate is not an empirical debate. Some people, such as Gracyk, believe that works of rock music are tracks. Other people believe that a more standard ontology applies to such works. There is, however, no disagreement on the empirical facts. Gracyk and his opponents all agree that this recording of *Back in the U.S.S.R* is 2:43 long, that it begins with the sound of a jet aircraft, that it was recorded in 1968, that Ringo Starr does not perform the drum part, that it is a parody of a Beach Boys song, and so on. The differences of opinion about the ontology of this song are due to a priori considerations. Once again, a priori judgements cannot have empirical consequences.

Nevertheless, writers such as Kania continue to maintain that the type debate has aesthetic consequences. The burden of proof is on those who claim that the type debate has aesthetic consequences. They need to give an example of an ontological view that

entails some aesthetic judgement. This turns out to be difficult. Even Kania allows that it "is difficult to give clear examples" of cases where the type debate has had implications for aesthetic judgements. He has, however, presented two cases in which, he suggests, ontological views have implications for aesthetic judgements. In the first instance he claims that a (possible) mistake about the ontology of works of rock music affected his own judgement about the aesthetic value of works in this genre. He read Gracyk and became convinced that the works in rock music are tracks. Having discovered that he "might well have been listening to the *wrong thing* when appreciating rock music (a work for performance rather than a constructed track) affected a kind of Copernican revolution in [his] experience of the music." (Kania 2012: 101) In the second instance, Kania suggests that debates about the ontology of music have implications for debates about the aesthetic merits of authentic (or historically informed) performances. Neither of Kania's putative examples shows that the type debate has aesthetic implications.

First consider how the knowledge that the works of rock music are tracks, not songs, might affect aesthetic judgements about rock music. My general strategy has been to argue that the adoption of a new ontological view does not entail a change in one's aesthetic views: ontological views have no empirical consequences and aesthetic judgements are empirical. Kania, however, claims that a change in an ontological view did change his aesthetic views. Kania does not tell us how Gracyk's ontology of rock music changed his experience of the genre so we can only speculate. Perhaps the knowledge that many rock recordings are not recorded performances but rather the product of combining many different recordings, of layering tracks on top of each other, changed how Kania listened to rock music. This is not, however, an instance of an ontological position having an aesthetic consequence.

The process by which rock recordings are produced is an empirically discovered art historical fact about rock recordings. Whether a recording is a combination of various tracks is arguably relevant to its aesthetic evaluation. Facts about the ways in which rock recordings are produced are relevant to questions about the aesthetic categories to which rock music belongs. The fact that rock recordings are engineered in a certain way is not an ontological fact nor does it entail ontological facts. One can consistently believe that rock recordings are produced by an engineering process

without believing that rock recordings belong to a particular ontological category: tracks for playback or some other category. It is hard, however, to see what other fact about rock music could have affected the Copernican revolution in Kania's views. I take it that my point here is similar to one made by Kraut (2012).

Turn now to a consideration of how ontological views could have implications for aesthetic judgements about authentic performances of early music. It is difficult to see what has led Kania to the conclusion that ontology has influenced aesthetic judgements about authentic performance. For a start, little of the philosophical literature on authentic performance has anything to do with ontology. (For a review of the literature see Thom 2012.) Mostly philosophers have simply analyzed the conception of authenticity held by members of the early music movement. I do not deny that philosophical reflection on authentic performance has influenced some aesthetic judgements about certain performances. Someone could, for example, read Kivy 1995 and come to the conclusion that historically authentic performances are aesthetically worthless because they lack personal authenticity. Kivy has not, however, made an ontological claim about historically authentic performances. Rather he has made the claim (a false claim, in my view) that historically authentic performances are necessarily derivative and unoriginal.

Perhaps Kania has in mind an argument of this sort. One can imagine advocates of authentic performance saying that an inauthentic performance is not, say, a performance of the *Goldberg Variations*. (These advocates of authentic performance are, perhaps, timbral sonicists and believe that a performance on piano cannot be a performance of BWV 988.) From this someone might conclude that the performance is, consequently, an aesthetic failure. (I do not know of anyone who accepts this argument.) This looks like an argument with an ontological premise (*P* is not a performance of the Goldberg variations) with an aesthetic conclusion (*P* is an aesthetic failure). The problem is that the argument is invalid and consequently we do not have a case of an a priori judgement with an empirical (aesthetic) conclusion. If you doubt that the argument is invalid consider this inference: Glen Gould's first recording is not a recording of the *Goldberg Variations*. Therefore, Glen Gould's first recording is an aesthetic failure. Of course, one can conclude from the premise that *P* is not a performance of *W* that *P* is not an

aesthetically valuable performance of *W*. However, this conclusion is known a priori and not an example of an aesthetic judgement following from ontological premises.

Kivy has an argument that Kania may have had in mind when he claimed that ontological debates about authentic performance influence aesthetic judgement. Kivy does not adopt a position in the type debate, but he does have what may appear to be an ontological position with aesthetic consequences. Kivy holds that, "Performing classical music is most akin to, though not, of course, literally, arranging music." "The performer's art is," he adds, "…akin to arranging, the performer's product, a performance, [is] a work of art in its own right." (Kivy 2002: 236) A musician who is not creative or original and who simply imitates another musician does not, on Kivy's view, produce a performance. That is, Kivy builds an evaluative element into his ontology of performances. This view is a departure from usual ways of talking about performances. Usually we say that musicians produce a performance of a work even if their interpretation is not original. However, Kivy can, if he likes, adopt an ontology according to which something must be original in order to count as a performance. Here I only want to ask whether Kivy's views on performance provide an instance of an ontological position entailing aesthetic judgements.

On the face of it, this seems to be a plausible claim. Kivy uses his ontology of performances as a means to argue that authentic performances are aesthetically flawed. When, he argues, a musician aims for historical authenticity, "the performer ceases to be an artist in her own right and becomes something else." (Kivy 1995: 131) Instead of being artists, he believes, those who aim at authenticity are mimics or copycats. According to Kivy, performances are produced by artists, that is to say performances are original and the product of creativity. Consequently, members of the early music movement, who aim at authenticity, do not produce performances. (Those who aim for authenticity may be said to produce "music productions" rather than performances.) Even if this conclusion is right, which I doubt, it is not an instance of an aesthetic conclusion that follows from an ontological premise. Rather, it is an attempt to make aesthetic views have ontological consequences.

Kivy makes aesthetic views have ontological consequence by stipulating that they do. Kivy believes that an original performance can be aesthetically valuable while an unoriginal imitation of a previous performance is doomed to aesthetic failure. He

then simply stipulates that he will only call something a performance if it has an aesthetic feature (namely, originality). In this way, an aesthetic view (the view that originality is an aesthetic virtue) has an ontological consequence, but we do not have an instance of an ontological view with aesthetic consequences. The aesthetic problem with authentic "music productions" is not that they are not performances. The problem is that they are unoriginal. Saying that authentic "music productions" are bad because they are not performances (which are always original) is just another way of making the same point. The point has been dressed up in ontological garb, but it is an aesthetic claim: authentic music performances are aesthetic failures because they are unoriginal. The only reason that Kivy's views on performances have aesthetic consequences is that they have an aesthetic component.

Of course, I regard Kivy's line of reasoning as illegitimate. The question of whether authentic "music productions" are original has to be determined empirically and not stipulated. How anyone can listen to performances (and this is what they are, contrary to what Kivy would have us believe) by today's advocates of authentic performance and think that they are unoriginal is beyond me. I have in mind the violin playing of Andrew Manze, the singing of Sandrine Piau, and performances by Il Gardino Armonico. For present purposes, however, the crucial point is that Kivy's thoughts about authenticity are not an instance of an ontological view having aesthetic consequences.

6. Conclusion

This essay contributes nothing to the understanding of musical works and their meanings. It simply clears away, as Locke might say, some of the rubbish in the way of apprehending musical meaning. Ontology will be of no assistance whatsoever in this regard. In this essay I do not deny that the ontology of musical works is intrinsically interesting. The views expressed here can be accepted without accepting the view that the ontology of music is a pseudo-problem, a view advocated by Young (2011). I simply maintain that ontological views about musical works (whether fundamental or higher-order) have no implications for judgements about the meaning, interpretation, or

aesthetic value of musical works or performances. The ontology of musical works, like virtue, must be its own reward.[1]

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Buñuel's Liebestod

– Wagner's *Tristan* in Luis Buñuel's early films: *Un Chien Andalou* and *L'Âge d'Or*

Torben Sangild

Department of Arts and Cultural Studies, University of Copenhagen, Denmark

Abstract

The research of the first two films of Luis Buñuel (which he made in collaboration with Salvador Dali) suffers from a neglect of the importance of his insistent use of the music from Richard Wagner's opera *Tristan and Isolde*. This analysis shows how a closer look at the Wagnerian themes and their specific use in *Un Chien Anadalou* and *L'Âge d'Or* are crucial to an understanding of the themes of love and death.

When Buñuel employed the music of *Tristan* to the otherwise silent movie *Un Chien Andalou* interchanging with a light Argentinean tango, the intricate play of contrast and dialogue between solemnity and mockery, between empathy and cynicism, is emphasized. At the same time, the theme of love/death can be seen as a thread which unifies the otherwise very confusing filmic collage.

In *L'Âge d'Or* ('The Golden Age') the music of *Tristan* is a clear leitmotif surrounding the mad love of the protagonists. When this music is played live in the garden, it ignites not only their desire but also a sequence of inner and outer events and conflicts, resulting in a tragic, enraged breakup. Before this concert, Wagner's music occurs in brief passages, emphasizing the unity of the lovers, transcending spatial separation.

In both films Buñuel employs Wagner in an ambivalent gesture where the themes of desire and death are emphasized while at the same time the more solemn metaphysical implications in Wagner are deflated, moving from romanticism towards surrealism while at the same time creating a link between the two.

1. Introduction

> Perhaps a truly passionate love, a sublime love that's reached a certain peak of intensity, is simply incompatible with life itself. Perhaps it's too great, too powerful. Perhaps it can exist only in death.
>
> (Luis Buñuel *My Last Sigh* p. 146)

When Luis Buñuel's and Salvador Dali's first film, *Un Chien Andalou*, premiered in Paris in April 1929, Buñuel performed what might be considered the first DJ mix in history, although very simple.[1] He stood behind the screen with a record player, alternating two records at precise moments in the film, later to be reconstructed in the sound version. One of the records contained collected Argentinean tangos, the other an instrumental version of Richard Wagner's *Tristan and Isolde*, more specifically the piece popularly known as 'Liebestod', "love-death" (Buñuel *My Last Sigh* p. 106).

The remarkable fact that Buñuel boldly juxtaposed fragments of Wagner with fragments of tangos have almost been ignored by scholars and biographers alike. After all, this was a silent film and focus has therefore been on the visual elements - thematized in the film by the famous prologue where the eyeball of the female protagonist is sliced with a razorblade by Buñuel himself. There is little doubt, however, that the painstaking effort of providing a musical collage consisting of the two sources in question was no trifle, and that he would have made a musical soundtrack at the time if he had the means: More than 30 years later Buñuel undertook the project of arranging a meticulous studio reconstruction of the Tristan-tango-collage for official copies of the film.[2]

With interpretations of Buñuel's and Dali's second film, *L'Âge d'Or* (1930) the ocularcentric perspective ought to have been modified. As one of the first sound/talk films produced in France, the musical soundtrack is strikingly sophisticated.[3] Wagner's

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[1] It is of course not a mix in the sense of what a modern DJ does, but rather an interchange between two sources.

[2] Soundtracks by Wolfgang Rihm and Martin Malaton have been used in other video versions. There is a significant difference in the experience of the film depending on the soundtrack. The present analysis refers to Buñuel's own soundtrack version from 1960, which is now the official version. The credits of the 1960 version state that "La sonorisation de la version intégrale de ce film a été réalisée en 1960 sur les indications de Luis Buñuel, conformément à la sonorisations par disques qu'il effectua lors de la première présentation." (The soundtrack of this version of the film was made in 1960 from Luis Buñuel's instructions in accordance with the grammophonic soundtrack of the premiere screening).

[3] Dali apparently had nothing to do with the soundtrack. Indeed he only played a significant role in the creation of the first draft of the manuscript, primarily adding disconnected ideas and images. For a

Tristan is not only the dominating part of the non-diegetic soundtrack; it is also diegetically inserted with the extensive concert in the garden. Furthermore, the female protagonist is explicitly concerned with potential sound problems in the arrangement of the concert:

> Those musicians will be enough because six of them playing close to the microphone make more noise than sixty placed far away. I know a lot of sound gets lost out of doors but we can seat the guests nearer the orchestra.
> (24:00-24:22. Buñuel *The Scripts* p. 36)

This concern with sound is one of the very few spoken lines in a film where the talking is reduced to a minimum and music dominates the sound. Hence, one could expect scholars to revel in analyses of sound and music in *L'Âge d'Or* just as was the case with vision and voyeurism in relation to *Un Chien Andalou*, but surprisingly one finds mainly occasional remarks in primarily visual and narrative analyses, noting the use of Wagner, especially in relation to the concert.[4]

This article is an attempt to compensate for the lack of attention that Buñuel's repeated integration of Wagner's *Tristan and Isolde* has been given. I will argue that there are significant meanings which reveal themselves more clearly when seen through the Wagnerian lens, or rather, when we *listen* to the early films of Buñuel. Aspects of love, sex, death, affect, longing, premonition, and transgressive musical power will thus be stressed and considered in a different perspective, analyzed scene by scene. The aim is not to minimize the other aspects of the films, but to supplement and contribute to the general interpretation of Buñuel. He is no straightforward Wagnerian and his films are not versions of *Tristan*, but the music adds significantly to the meaning and expression of the two films, both as correspondence, as ironic counterpoint and as accentuation of certain aspects of the film.[5]

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thorough account of the respective contributions of Dali and Buñuel based on primary sources see Short pp. 147-57.

[4] A few scholars comment on the use of music: Claude Murcia (Murcia) includes the sound montage in the general analyses of both films. As for *Un Chien Andalou* Phillip Drummond (Drummond pp. xxii-xxiii) comments on the soundtrack in a separate passage, and Jenaro Talens (Talens p. 63) notes a thematic link in the use of *Tristan*. As for *L'Âge d'Or*, Priscilla Barlow comments on the whole soundtrack (Barlow). She provides interesting facts and observations, focused on the distinction between classical and popular music. Many scholars comment on the garden concert and mentions Wagner in connection with this scene, which is thus an exception to the rule. There has been no detailed analysis of Buñuel's use of *Tristan* in these films.

[5] The term "counterpoint" is of course derived from the famous 1928 "Statement" of filmmakers Sergej Eisenstein, Vsevolod Pudovkin and Grigori Alexandrov. They roughly define the possibility (and

I will show how Buñuel is able to meet Wagner with burlesque gags and surreal fantasy without destroying the essence of Wagner's music – its expressive qualities as well as intertextual meanings. There is an ambivalence towards the import of *Tristan* in these films, which appear skeptical towards the metaphysical aspects as well as the bourgeois reception of the opera, yet on the other hand cherish its transgressive aspects of forbidden, ecstatic desire and mad love. The possible transcendence in Buñuel is temporary and phantasmatic rather than a rescue in the realm of death. Such an analysis will, of course, also accentuate certain aspects of Wagner's *Tristan* in light of surrealism and thus contribute to an understanding of the remarkable fate of this opera.[6]

That Buñuel was intimately familiar with Wagner; that *Tristan* was his favorite piece of music and that he was very conscious of the connotations of this music is biographically documented (e.g. Buñuel *My Last Sigh* p. 219; Aranda pp. 38-9). Before developing my analysis of the films, I must first briefly comment on the opera.

N.B: The important overviews Figure 1 and Figure 2 are located at pp. 37-38.

2. Wagner's *Tristan and Isolde* – Mad Love-Death

I will focus briefly on some of the dominant themes and aspects in this extensive opera that are relevant to *Un Chien Andalou* and *L'Âge d'Or*.

Wagner loosely based his opera on one of the medieval versions of the romance, namely that of Gottfried von Strassburg, yet instead of Gottfried's focus on courtly status and intrigues, Wagner turns *Tristan* into a metaphysical drama. Wagner's story is mainly a concentration of Gottfried's long and digressive story into a few defining moments of love, death and longing. These moments are then expanded to comprise the whole four-hour opera where the outer action is reduced to a minimum, and where the focus is on the 'inner action' (e.g. Dahlhaus pp. 49-51), meaning not only the mental life of the protagonists, but furthermore the dialectic unfolding of the metaphysics of

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demand) of a "contrapuntal" use of sound in film, where the sound is not a perfection of cinematic illusion, but is rather in discord with the images, creating another montage layer (Eisenstein p. 114). They take the term from classical music, where however the counterpoint is not discordant, but rather involves independent melodies, which are nevertheless in harmony. I use the term in the derived cinematic sense as opposed to a correspondence between image and sound/music. The counterpoint thus creates a tension between image and music, which often has a powerful effect of ambivalence.
[6] For a general account of the fate of *Tristan* I recommend Elliott Zuckerman's study of *Tristan* receptions and adaptions in music, philosophy and especially literature (Zuckerman).

love and death. The primary narrator of this unfolding is the music, which often speaks beyond the conscious individuals on stage. Inspired by Arthur Schopenhauer, Wagner absorbs the idea of individuality as a semblance veiling the metaphysical will, an absurd force of desire for endless reproduction and striving, governing our meaningless lives. But unlike Schopenhauer, for whom love is just a matter of the absurd procreation instinct (Schopenhauer Chapter XLIV), Wagner sees a potential in sexual love as a transgressive force.[7]

From the beginning of the opera, forbidden love is infused with death. And the longing for love becomes increasingly a longing for death, where Tristan and Isolde can be united, without inhibitions, beyond the lies of earthly life.

The musical development is one of constant longing and frustration. With a bold harmonic step further away from traditional tonality, the unresolved tension is part of the very musical structure with its long chains of harmonic suspensions without release – until the final B major chord, where the motif which opened the opera is finally harmonically resolved as Isolde with her last sigh sinks heroically and is transfigured upon Tristan's already dead body. This resolving and modulation from A flat to B is adumbrated a few times, but not executed before this last chord.[8]

Tristan and Isolde is an extreme opera in more than one way. The musical language is radical in its complexity and its transgression of romantic harmony from within (Dahlhaus p. 64). The lack of outer action is also remarkable, in that Wagner has reduced Gottfried's plot so that each act focuses on a central moment: I. The love pact; II. The lovers' tryst and decision; and III. their death.

The content is, perhaps, the most controversial element. This is not only an opera about transgressing custom and fixed marriage to follow the all-engulfing desire; *Tristan* is furthermore about choosing death in a world that has no room for untamed

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[7] Wagner wrote (but never sent) a letter to Schopenhauer in December 1858 with a critique of Schopenhauer's disdain of sexual love, instead promoting it as a way to self-knowledge and knowledge of the will beyond individuality (Wagner p. 208). It has been a matter of general dispute whether the relation between Tristan and Isolde is sexually consummated or whether it should be regarded as Platonic. Contemporary stage versions as well as analyses are usually in favor of the sexual interpretation, regarding sexual love as a path to the metaphysical, in line with Wagner's own letter (e.g. Scruton; Chafe).

[8] The harmonic of the opera is famous for this and has been analyzed numerous times, including the famous 'Tristan chord', probably the only chord with a nickname. Wagner's use of the tritone is crucial in the harmonic effect. See Chafe pp. 85-99 for a recent analysis of the basic principles. Below, I will focus on the excerpts that Bunuel employs.

love. The philosophical content is explicated in Act II, where daytime, life and the visible world are denounced as pompous delusion, torture and anxiety. Opposed to this spurious life is the peaceful union beyond any distinctions in night and in death. This dualistic tribute to death is even more radical than Schopenhauer, and is probably inspired by Novalis' *Hymns of the Night* (1800).

2.1 Prelude and 'Transfiguration'

Buñuel specifically uses the Prelude and the orchestral version of the ending in his films. Whereas the ending is often mistakenly referred to as 'Liebestod' ('love-death'), this name was actually given to a part of Act II and later for the Prelude. The ending is actually called 'Verklärung', or 'Transfiguration' (Bailey pp. 41-43), and in the service of precision I have chosen this term. For Buñuel, however, as for most people, the name and content associated with the 'Transfiguration' theme is the less religious sounding 'Liebestod', the combination of love and death in one word.

The *Prelude* can be described as a series of musical-dynamic waves intensifying towards a climax and then receding. It is dominated by a few motifs, which are repeated and varied.[9]

Tristan 1 – Prelude (first motif)

Tristan 2 – Prelude (second motif)

The most important one in this context is the second motif, which occurs significantly in *L'Âge d'Or*, section B (see Figure 2). The musical motif at stake here occurs for the first time in bars 16-17. It is a continuation or a temporary 'answer' to the fragile longing of the first motif, and often bridges towards the flowing desire of the third motif. The opera begins with three muted, hesitant variations of the first motif. The second motif then comes as a climax, as a full unfolding of the expression of longing that the first

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[9] I will not go into the alleged fixed meanings of these motifs as *leitmotifs*. Wagner did not intend such easy fixations; the motifs are very flexible in this opera. There are many different names for and interpretations of the motifs, which could be a proof of their more open, plural meanings.

motif restrained. It can be seen as expressing the moment of contact between Tristan and Isolde, as the moment where their mutual desire is confessed. Notably, in Act I the first and second motif break the silence that follows the drinking of the love potion. Again, this motif is highly intense, as the motionless Tristan and Isolde wait for death but instead feel the boosting of their desire into an uncontrollable mad love and the union of two individuals.

In the program note to the orchestral Prelude Wagner himself describes it with the words:

> 'From the timidest lament in inappeasable longing, the tenderest shudder, to the most terrible outpouring of an avowal of hopeless love, the sentiment traverses all phases of the vain struggle against inner ardor, until this, sinking back powerless upon itself, seems to be extinguished in death.'
> (Bailey p. 48)

And the 'Transfiguration':

> 'Yet what Fate divided in life now springs into transfigured life in death: the gates of union are thrown open. Over Tristan's body the dying Isolde receives the blessed fulfillment of ardent longing, eternal union in measureless space, without barriers, without fetters, inseparable!'
> (ibid.)

The 'Transfiguration' is the most prominent Wagner excerpt in Buñuel. The hesitations of the Prelude have vanished, and in the opera this is the closest we get to an aria in an aria-less opera. Isolde sings ecstatically about Tristan and their future union, ending with the famous words 'to drown, to sink, unconscious – supreme bliss'.[10] The words of Isolde are, of course, absent from the instrumental version, but inevitably they are intertextually implied.

'Transfiguration' opens with a prominent motif, often referred to as the 'Liebestod' motif, which is featured in most of the passages Buñuel uses. The first time it occurs in the opera is in Act II, scene 2, when Tristan and Isolde sing: 'Then we die, undivided, one for ever, without end…'[11] Almost a signature melody of the opera, it is melancholy, but with a sense of release.

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[10] In German: 'ertrinken / versinken / unbewusst / höchste Lust' (quotes are from the booklet for the CD - Deutsche Grammophon CD 413 315-2).
[11] 'So starben wir, um ungetrennt, ewig einig, ohne End…'

Tristan 3 – Transfiguration motif (so-called 'Liebestod' motif)

Another prominent motif is a variation of the second motif from the Prelude, albeit more ecstatic. This motif comes in waves of higher and higher intensity until the final toning down in resolution. I will refer to this theme as the *climax* of 'Transfiguration'.

Tristan 4 – Climax of 'Transfiguration'

3.1 *Un Chien Andalou* – **Characters and Residual Storyline**

The immediate response to *Un Chien Andalou* after experiencing it for the first time is usually dominated by confusion. The unities of action, space, and time and those of cause and effect are eliminated and even parodied. This could lead to giving up ascribing any meaning to it at all. Repeated viewings, however, point in another direction. The collage-element will tend more and more to slide into the background, highlighting instead the many correspondences and continuities. Indeed, as Robert Short has pointed out, in order to create poetic confusion and not mere chaos, the film employs not only visual metaphors and the logic of a dream in order to engage the viewer, but also many conventional features of coherence. The deconstruction of both mainstream and current avant-garde cinema in *Un Chien Andalou* places it in a state of productive ambivalence and a strong part of this lies in the 'residual storyline' as well as the semi-consistent characters (Short pp. 94-98).

Should one be allowed to focus on this residual storyline and put the fragmentation and absurdities in brackets for a moment, the plot can be summarized as follows: It is a love-story about a man and a woman in a frustrated relationship. The man goes through many phases and seems to struggle with himself (Man 1 and Man 2 are both played by Pierre Batchef and can be seen as two sides of the same person). The woman leaves him in favor of the apparently more grounded, sporty and self-secure Man 3 on the beach. Their happiness ends in death. See Figure 1 for storyline and overview.

Admittedly, the abstraction from the surrealist elements in the outline above doesn't do justice to the expression of the film as a whole. Still, the residual story is there as a significant thread. I will focus in more detail only on aspects that are connected to the soundtrack – a soundtrack that emphasizes the love-story with its elements of desire and death.

3.2 The 'Mix' in *Un Chien Andalou*

As already mentioned, Buñuel reconstructed his soundtrack in 1960 for a soundversion of *Un Chien Andalou*. The interchanging of *Tristan* and tangos divides the film in five parts,[12] different from the conventional division made from the intertitles (cf. Drummond p. xxii). Figure 1 shows an overview of the music in the film.[13]

Wagner's 'Transfiguration' is cut in two. The tangos are unnamed, and I refer to them as *Tango 1* and *Tango 2* in Figure 1.[14] *Tango 1* is clearly dominant, whereas *Tango 2* seems mainly to fill out the gap as *Tango 1* reaches its end in the middle of a scene.

Apart from the innovation of 'mixing' two records live at the premiere, the juxtaposition between two very different musical languages is in itself highly unconventional at the time. Wagner's harmonic complexity and endless melody meets the simple, melodic tone and repetitive gesture of the tangos - a genre that was highly popular in Paris at the time. What was known as high art and popular culture meet. On other levels, however, the theme of longing, sexual tension and tragedy might potentially give them a common feature which enables a dialogue rather than a simple contradiction of opposites.

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[12] One could argue that the shift from Tango 1 to Tango 2 in the piano/donkeys scene could provide another caesura. However, this shift is a result of the finishing of Tango 1 and it comes in the middle of a somewhat coherent scene, suggesting that Tango 2 is primarily expanding the tango sequence, filling out the gap.

[13] Note to paper version: Figure 1 and Figure 2 conveying an overview of the music of the films are located at the end of the paper (above the bibliography).

[14] My research to track the tangos down has reached the conclusion that they really are anonymous and nameless. A fragment of Tango 1 has been released on CD with anonymous performers and the title 'Un Chien Andalou' (CD *Surrealism reviewed*, LTM 2343, 2002).

3.3 Sections I, III and V: Tango

The dominant *Tango 1* is in many ways typical of the genre. There is also a slightly comical effect embedded in its rough, syncopated rhythms, which is clear in section III with the erotic chase in the apartment (6:30-7:40). In the other sound versions of the film this sequence has a more disturbing atmosphere of sexual threat and potential assault. In this version, the edge is taken off, as the music highlights the playful aspects of the behavior of the characters. The tango partly transforms the chase into a dance and the comical elements endow the sequence with ambiguity. This may be seen as contrary to Buñuel's ambition of creating a disturbing film, but it is consistent with the woman's later reactions towards Man 1, where she sticks out her tongue repeatedly at him in a childish manner before abandoning him.

The choice of ending the film with *Tango 1* instead of the obvious *Tristan* as the loving couple is buried in the sand is somewhat surprising. *Tango 1* is undramatic and

nonchalant in comparison with Wagner and this has the effect of covering 'the gloomy business' (Drummond p. xxii), not only of the apartment pursuit, but also of the prologue and the ending. This idea of the tango as a light-hearted counterpoint to the scenes is certainly relevant; to some extent the tango does create an ironic tension between image and sound. It is important, however, not to stop there but to see it as more than simply a move towards harmlessness.

What is striking is, of course, the *blasé gesture* of showing eyeball-slicing and macabre death with the attitude of light-heartedness.[15] *Tango 1* is not only light-hearted, but also up-tempo and cyclic, repeating the same two motifs over and over. The gesture appears to be saying 'these are the inevitable routines of everyday life', whereas the spectator will normally conceive of the incidents on the screen as highly bizarre and disturbing. In this respect it corresponds with the mock-ordinary, parodic, intertitles. The cynicism of this gesture, then, is on some levels more provocative than a conventional, dramatic soundtrack, not despite, but in virtue of the detachment. *Tango 1* thus participates in a dialectics of shock and indifference.

There is a posssible affinity between Wagner and the tango as genre in the focus on desire, including its darker, tragic side. Buñuel has, however, chosen a relatively light tango and thus emphasizes the contrast rather than the common features between the two genres.

3.4 Section II – Heroine, Anti-hero, Androgyne

The 'Transfiguration' theme is, of course, very charged. In *Un Chien Andalou* it works on two levels: as a specific, *intertextual* reference and as direct, abstract *expression* of certain moods. The most obvious intertextual references are the way that both sections with Wagner music (II and IV) end with a death. The Androgyne is run over by a car at a climax point of the ecstatic theme 'Transfiguration' theme mentioned in the introduction (6:08-6:11). The dead body of Man 2 is taken away to the last chords of *Tristan* (11:56-13:05).

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[15] This may be an incident of what Michel Chion has named "anempathy". (Chion p. 8)

At the same time, of course, the music expresses high emotion, longing and sadness, even for those who are not familiar with Wagner.[16] When Buñuel directed the sequence with Batcheff and Mareuil staring out the window he gave the instruction:

> 'Stare out the window as if you're listening to Wagner', I remember telling Batcheff. 'No, no, not like that. Sadder. Much sadder.'
> (Buñuel *My Last Sigh* p. 104)

Section II was intended to have a *Tristan* mood attached to it. What is important to emphasize, however, is that 'Transfiguration' often works more ambiguously here than just as a correspondence or resonance to the images. It sometimes works as subtle counterpoint:

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[16] To explain how music can express emotions and moods in a dialectics of nature and cultural convention is beyond the scope of this article. The important thing is that it works as expression. Wagnerian harmony has become an almost trivial expressive code of high emotion in film soundtracks, especially in classic Hollywood dramas.

When Man 1 is introduced in the film to the passionate soundtrack of *Tristan* he appears as the opposite of Tristan or of any knightly lover. He is skinny, dressed in feminine clothes and rides his bicycle very insecurely. The way he falls off the bicycle is just as ridiculous, even comical,[17] since there are no external causes that would put the bike out of balance (2:43). He just turns over and doesn't even try to keep his balance or to break his fall. He is utterly ungainly, a paralyzed anti-hero. He lies in that same position as the heroine rushes passionately down to save or heal him.

The Woman can be seen as an Isolde figure. Isolde reluctantly healed Tristan back in Ireland, even though she had reason to kill him, and the dialectics of love and death which saturates the opera originates in this past moment. The sequence with the bicycle performs an ambiguous intertextual constellation with *Tristan*, and at the same time the

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[17] As Drummond has pointed out, the resemblance of Batcheff to Buster Keaton in this scene may be deliberate (Drummond p. xvi).

music as expression endows the sequence with a tragedy that counterpoints the comically absurd elements.

In this phase the Woman is the agent, whereas Man 1 is incapable of doing anything. This loosely parallels the relation of Tristan and Isolde in Act 1 of Wagner's opera. Isolde is the main character, the one who acts, who speaks and who initiates the whole fatal tragedy, whereas Tristan is in denial (Nattiez pp. 141-45). The Woman can actually be considered the 'heroine' of *Un Chien Andalou*; the one in power and the one we follow after she leaves Man 1. Thus, whereas the chase scene may confirm gender conventions, the film as a whole doesn't.

In the sequence with the Androgyne in the street, Wagner's music as expression accentuates sadness and invites us to empathize with the Androgyne in an otherwise absurd scene. It also supports the Androgyne's facial expressions of otherworldliness.

Intertextuality is, of course, at play here. The music moves to the *climax* as she[18] is run over and lies dead on the street, apparently fulfilling the excited premonition of the now more vigorous Man 1 (6:08-6:11). 'Transfiguration' intertextually *accentuates* a transcendental aspect of the sequence, where the Androgyne's strangely absent-minded behavior corresponds with Tristan's and Isolde's longing for the other world beyond death and their increasing carelessness towards the worldly. 'Transfiguration' amplifies the sense of death, premonition and tragedy.

3.5 Section IV – The Death of Man 2

The second entering of Wagner's 'Transfiguration' is in a sequence with Man 1 and Man 2 (10:29). The sequence is divided not only by the music but also by the intertitle 'Sixteen years before'. Apart from the primarily comic inversion of the traditional intertitle function from orientation to confusion, this intertitle associates with the past, memory and maybe even nostalgia. This corresponds with the change from tango to *Tristan* and also with the sudden slow-motion. The whole mood of the sequence changes towards a more 'poetic' expression.

As we see the face of Man 2 for the first time it is not only clear that he is the double of Man 1, but also that he shows a very different side of his personality (10:37) . Until this turning point Man 2 has been seen only from the back, but now he turns around, throws off his hat and shows a remarkably soft facial expression, highlighted by the slow-motion effect and the pronounced facial make-up. Whereas he was evidently a severe, punishing father figure with the manners of a movie gangster before the shift, now we see a more feminized poetic type corresponding to the melancholy of the music. He turns to pick up two books that he apparently cherishes and hands them to Man 1 (whom he has put in the corner in a position reminiscent of a crucifixion) with a very different set of gestures than what characterized his body language before. After he has handed the books to Man 1 we see his theatrically emotional face in close-up as he slowly turns his head with moist eyes; apparently in sad, compassionate disbelief. He

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[18] The Androgyne is evidently androgynous, albeit with a predominance of the feminine. Hammond refers to her as 'second woman', whereas Buñuel and Dali called her a 'hermaphrodite'. What we see is a young woman, partly in men's clothing, including a tie.

affectively reaches out to touch Man 1's shoulder just as the music reaches the *climax* theme - a gesture of reconciliation and care, perhaps even of love (11:09-11:21).[19]

Wagner's music works expressively in this sequence, accentuating the sentimental, even pathetic elements that succeed the previous castigation. Man 2's transformation can also be seen as one from a man of action to a refined, or even decadent, man of letters. It corresponds with the musical shift to Wagner's *Tristan*, often considered the quintessence of decadent romanticism. The sequence with its exaggerations of affect is melodramatic to a point where it becomes parodic.

The reception of Wagner's *Tristan and Isolde* is divided in two: The negative mocking of its exaggerated, decadent affect and its metaphysical pretensions on the one

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[19] There is something therapeutic about this scene, since it is obvious to view Man 1 and Man 2 as not only doubles, but two sides of a man's personality in a dynamic process of struggle, discipline and reconciliation. As with the rest of this film, however, it is not unequivocal.

hand, and the positive worship of it as the most profound emotional expression ever on the other hand.[20] As a parallel, the sequence with Man 2 in *Un Chien Andalou* could be seen to play on a similar ambivalence.

The ensuing scene in the park is surprisingly naturalistic, slow and long (11:56-13:05). Man 2 lies dead, is discovered by incidental passers-by and carried away. There are no visual metaphors, no weird behavior, no surreal phenomena whatsoever. The scene stands out from the condensed, playful disorientation of the rest of the film, as if we should honor the death of Man 2 in a way that nothing else is respected here. And why is this scene so long? No critics or scholars have paid attention to it, and admittedly it is rather ordinary or even trivial compared to the rest of the film. The answer may be that it accompanies the end of *Tristan* to the final, redemptive chord of the opera, the B major chord that completes the endless melody and dissolves the dissonance, the longing and frustration. The weighty and highly romantic metaphysics of Wagner both corresponds with the theatrical death of Man 2 and contrasts with the prosaic view of the dead body in the park as something to be disposed of, something that does not really upset the passers-by. Some of them cannot even be moved to get their hands out of their pockets.

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[20] On the reception of Tristan, see Zuckerman. As mentioned below, there is also a second type of positive reception: the simple enjoyment of romantic music by a wider audience.

In the next scene the Woman, in contrast, stares at the death-head moth as if she is somehow in contact with Man 2's death (13:15-13:28).

3.6 Wagner in *Un Chien Andalou* – General Remarks

As we have seen, Wagner's 'Transfiguration' works as both expression and intertext. In addition it has an ambiguous role of accentuation, correspondence, and counterpoint. The film is about love and death; it plays with the dissolution of space, time and individuality – all themes in common with *Tristan and Isolde*. Still, the film is not Wagnerian in the sense that it expresses the same ideals. Rather, it plays with them the same way it plays with various cinematic techniques and conventions. This penetrating irony makes it difficult to extract a 'message' or even a stable meaning from it.

Wagner's music, however, adds a tragic expression to the film, which can lead to an awareness of the love story, of the inner struggle of the Man, of everyday death. It shows us how Tristan and Isolde would behave in a surreal, modern city. They are no longer metaphysical heroes from a distant past, but confused and immature beings in a chaotic world of desire and violence. There are many inhibitions that prevent love from unfolding, not least Man 1's immaturity, but also the burden of civilization, as represented in the grand pianos and their cargo (7:48-8:34). The dialectics of love and death does not end in any transfiguration, although there is an expectation of happy ending as Woman and Man 3 walks along the beach before being buried in the sand (15:14-15:23). The Wagnerian tragedy is intact in Buñuel's *Liebestod*, but now without the possibility of a transcendent rescue.

4.1 *L'Âge d'Or* – Forbidden Desire in a Bourgeois World

L'Âge d'Or is much longer and less disorienting than *Un Chien Andalou*. The characters are more consistent, the scenes are longer and the main part of the film follows a clear narrative logic, despite the occasional absurd elements. I will focus on the main part of the film, since the prologue(s) and the epilogue do not use Wagner and are thematically unlinked to *Tristan*.

This film is unmistakably about forbidden love. The male and the female protagonists are driven by their desire and have problems restraining their sexuality to fit into the codes of bourgeois (high) society. Especially the Man is driven almost completely by instinct and shows random aggression when he is restrained by others.

The parallel of the main part of the film to Wagner's *Tristan* is clear. Tristan and Isolde are in conflict with courtly moral, but their desire drives them to transgress all conventions and pursue their love. The major difference between the two is the ending. Whereas the longing in *Tristan* is resolved in death, the longing in *L'Âge d'Or* is frustrated – perhaps until the disconnected and provocative de Sade epilogue shows the ostensible redemption and apotheosis of desire in brutal torture and sexual violence. This epilogue, however, cannot be regarded as a solution to the situation of the lovers, but rather as a symbolic act of transgressing morality. Before this, the love-story ends with the heartbroken Man raging in his room.

4.2 The Sound Montage and *Tristan* in *L'Âge d'Or*

The dominant sound is the intricate montage of music, dominated by Wagner's *Tristan*, supplemented by numerous other excerpts, especially from canonized classical music (see Figure 2). Furthermore, the sound montage includes various concrete sound effects beyond the mere descriptive – most remarkably in the poetic scene where the woman sits in front of the mirror (25:59-27:08), accompanied by the sound of wind, the echo of cowbells (from the cow that she chased out of her bed), barking dogs (connecting her with the Man) and low, atmospheric strings. This analysis will focus on the use of *Tristan*.[21]

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[21] As for the other musical works employed, it could be noted that Mendelssohn's Italian Symphony corresponds with the part about Rome; The Catalan drums corresponds with the Man's rage. The solo violin fragment from Beethoven's concerto accompanies a man kicking a violin. See Barlow (2001) for

There are four major Wagner sections of various lengths (see figure 2). The most significant is the long diegetic section C with a concert performance of 'Transfiguration' in the garden. Two of the sections are interrupted – section A by the flushing of the toilet, section C by the telephone call from the Interior Minister.

It should be noted that the versions of the classical music are recorded especially for this film in arrangements for a small orchestra and piano, without vocals, horns, harp etc. The immediate effect of this is that the various pieces have less divergent sounds. It also makes the small size of the orchestra in the garden less unlikely and thus gives concrete meaning to the words of the Woman quoted in the beginning of this article.

As in *Un Chien Andalou* the use of *Tristan* is ambiguous, and here the ambiguity is sharpened. There is a very clear and dominating correspondence to the story about forbidden love and desire, even of a telepathic connection between the lovers. But there is also, momentarily, an explicit ironic detachment or even deriding of the solemnity connected with this music, most clearly in the fecal interruption in section A. However, when the music becomes diegetic in the garden scene the meaning of *Tristan* cannot be reduced to correspondence, counterpoint or accentuation. As we shall see, the garden concert is perceived differently by the bourgeois audience, the conductor and the lovers, which points toward the unstable status of *Tristan* between refined bourgeois taste, unbearably demanding metaphysics and sexual revolution.

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some of these and some other possible referential uses of the music. A thorough analysis of the whole sound montage of this film, including all music, speech and concrete sounds, remains to be done.

4.3 Mud and Feces

As the lovers are rolling scandalously in the mud in section A, the Man is erroneously considered a rapist, even though the woman shows clear signs of lust and pleasure. They look at each other with intense longing as they are separated by force (14:43-15:02). The music accentuates this longing, even when it is brutally interrupted by the woman flushing the toilet combined with images of bubbling, molten lava, reminiscent of feces (15:15-15:21). As the look on the Man's face indicates (and as the screenplay makes clear), this lavatory scene is a result of the Man's 'private fantasy' (Buñuel *The Scripts* p. 29).
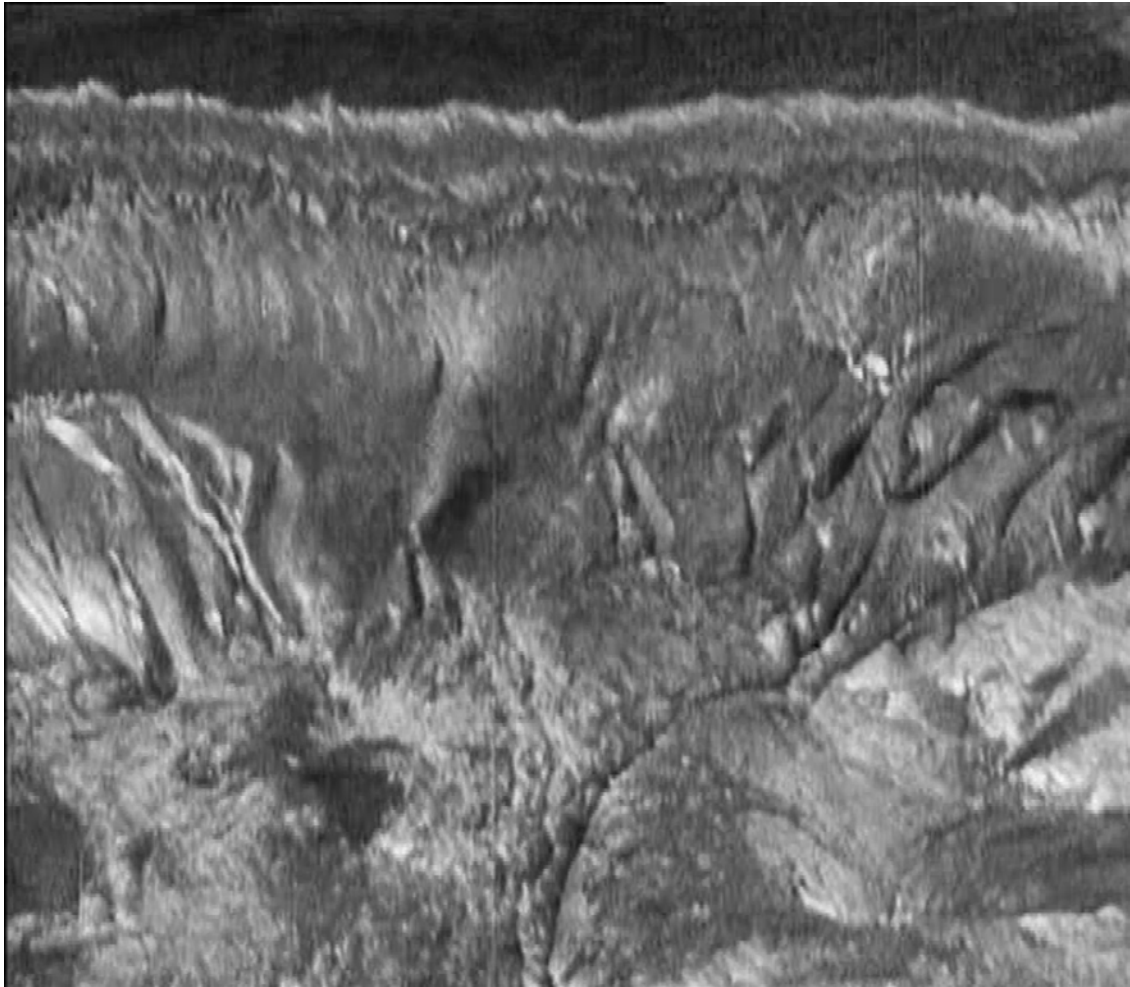
The interruption of the music can be interpreted in different ways. It can be regarded as the ultimate blasphemous debasement of the highest spiritual art with an infantile insertion of the lowest of all material things. Also merely in terms of sound, the interruption is unusually brutal. There is no fading; the flushing comes suddenly as a shock in the middle of a melodic development and returns to the music in the same abrupt fashion. As a surrealist, Buñuel is no stanger to debasing jokes, and shocking the audience was no doubt a part of the intention.

But there is more to be said here. The desecrating gesture has an element of profaning Wagner, not simply as a sarcastic rejection, but more literally as a way of materializing the metaphysical aspects of *Tristan*. The move is double: Buñuel takes the solemnity and the sacredness out of *Tristan* by a sudden detaching and profane gesture, *without* eliminating *Tristan*'s primary role as an expression of longing. In a surrealist

context love is often infused with the lowest matter, and the image of the immaculate woman sitting on the luxurious lavatory with a sensual, longing look on her face is one of striking poetry. The affect of *Tristan* is not destroyed, but is *blended* with profane sexual fantasy in a surreal montage.

4.4 The Man as Scandalous Knight

The Man is evidently a moral antithesis to the usual Tristan character. Tristan is at odds with courtly morals only in so far as he cannot resist the forbidden affair with Isolde. And this is allegedly beyond his control, for he is driven by the power of the love potion.[22] The Man in *L'Âge d'Or* acts contrarily to moral norms. His aggression, probably stemming from sexual frustration after being separated from his lover, makes him act cruelly towards animals and a blind man. But it turns out that he is also a trusted, official philanthropist, a modern noble knight, one might say, even though he doesn't hold this responsibility in high regard (27:49-29:30). The image of him is ambivalent. Later it turns out that the Minister accuses him of having dishonored and betrayed the trust in him, causing the death of many people (47:36-48:26). After this incident, the dominating moral image of the hero is one of anti-knight, pursuing his egocentric desire for the Woman with little care for other people. The relation to the noble knight Tristan is, however, still dialectic rather than a mere contrast. In Wagner, Tristan and Isolde pursue their love with no regard for the surrounding world (which they perceive more and more as a semblance dominated by attitude and vanity). The result of this disregard is that they are surrounded by dead bodies in the final scene. Many people, including their closest friends, have died as a consequence of their mad love, and they do not care for one second. The dark side of pursuing their desire is that they have moved beyond morality. Thus also the Man in *L'Âge d'Or*.

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[22] In Wagner's *Tristan* it can be argued that the magic of the potion is unnecessary. They are already doomed by uncontrolled desire before they drink what they think is a death potion. Facing death, they can let go and yield to the passion that especially Tristan has repressed in courtly loyalty.

4.5 Transcending Spatial Separation

In Section B there can be no doubt about the explicit intertextual reference in using Wagner. The second musical motif in the Prelude is played twice out of its musical context. This is an intense moment in the film. After the relatively light, melodic background music from Beethoven and Mendelssohn, there is a long silence as the Man watches the advertisement photograph and we see the Woman sitting in the exact same position (22:24-22:57). As we recognize this connection, the Wagner fragment sounds for the first time. As the Man is being dragged along against his will and the Woman seems to have the spell of contact/desire broken, the motif is played for the second time (22:58-23:10).

The silence and the repeated fragment endow Section B with an intense sentiment that was absent from the previous scenes. The moment of contact between the lovers in

L'Âge d'Or is supported by the second motif from *Tristan* both as intertextuality and as expression.

As in Buñuel, individuality, time and space are illusions in Wagner's *Tristan*, clearly formulated in Act II by the protagonists themselves. This is inspired by Schopenhauer's idea that the principle of individuality is the cause of suffering. As mentioned above (chapter 2), Wagner adds sexual love to the possible ways out of individuality, probably alluding to the ecstasy of orgasm as an experience of losing one's ego in common bliss.

4.6 *Tristan* Concert and Passionate Love-Making

Section C is not only the longest, but also the clearest evidence of Buñuel's intertextual use of Wagner, and this is also the single instance where Wagner is mentioned in much of the Buñuel literature. Most of 'Transfiguration' is played by an orchestra in the garden. This means that the *Tristan* music becomes diegetic, and hence that the characters in the film hear it and become affected by it. The volume is even adjusted so that it is louder when we see the orchestra and the audience and lower when we follow the lovers placed elsewhere in the garden. And during the telephone conversation indoors, the music is inaudible (47:26-48:36).

A striking aspect of the diegetic music is the difference between the reception and reaction from the concert audience and from the lovers. Wagner's *Tristan* cannot be reduced to 'bourgeois music', and neither can it be reduced to transgressive, revolutionary music. It has both potentials. As mentioned above, the positive reception of Wagner's *Tristan* has been divided between those who hear it simply as moving, romantic music and those for whom this is the most radical, ecstatic music; a threat to the whole bourgeois culture in favor of Dionysian desire. Nietzsche was indeed one of the first for whom this music was highly transgressive.[23]

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[23] Even the late Nietzsche, who condemned Wagner (including the Wagner within himself), acknowledged Tristan as the most powerful music ever written; so powerful, in fact, that it suspended critical thought, and therefore dangerous (Zuckerman Chapter III).

This divided reception of *Tristan* is also at stake in *L'Âge d'Or*. The bourgeois audience seems almost unaffected by the music. At least, they have learned not to show any affect, but to listen politely to whatever is being played. For them this is just another concert. Buñuel even plays a discreet, humorous trick on us when we get a brief glimpse of the Woman's mother holding a handkerchief to her cheek in an ecstatic musical passage (47:14-47:17). At first, one may see in this gesture finally a sign of affect. However, it becomes clear that her face is in no way showing any sign of affect, and that she is merely holding a cold cloth against her cheek to soothe the pain from the outrageous slap she received earlier from the Man. The unaffectedness of the bourgeois (or low-aristocratic) audience is mocked, and it is understood that the lovers are much more receptive to the power of music, even though they are not seated as audience let alone focused on listening.

From the beginning, even from the tuning of the orchestra, the film keeps cross-cutting between the lovers and the audience, as if underscoring the difference.[24] As the concert begins with the first brittle tones from 'Transfiguration', the lovers jump as if given a sensuous shock, even though they are located in another section of the garden. Their passionate, transgressive love, *amour fou*, is much more closely related to the content and sentiment of the music than the audience's bourgeois manners.[25]

In the second act of the opera, Tristan and Isolde condemn the sham and hypocrisy of courtly life and find truth in the night, in their passionate union and in

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[24] There actually seems no other reason for showing the concert in such quantity, since it has no dramatic, visual development. All significant action takes place between the lovers, and yet the concert seems to play an important role, both as a reminder that the music is diegetic and to show the audience as a contrast to the protagonists.

[25] The idea that some people are more sensitive to the ecstasies of *Tristan* than others can be seen not only in receptions such as Nietzsche's, but also in assimilations of *Tristan*, such as Thomas Mann's short story 'Tristan' (1903), even though the heroic status of the lovers is ambivalent.

death. Noble life is dismissed in the libretto as deceit, semblance, greed, guile and many other vices connected with living lies. In Buñuel's surrealist-Marxist perspective (and, indeed, already in Wagner's semi-revolutionist perspective) it will not be far-fetched to transpose these ideas from the medieval court to the bourgeois upper class.

The interpretations of the garden sequence are divided between the optimistic reading of a successful *amour fou* on the one hand and a pessimistic reading of the passage as a permanent *coitus interruptus*, demonstrating the necessity of obstacles to maintain passion, on the other hand. Of those who include the music as part of their analysis, Henry Miller is the most optimistic. He even claims that for the audience and censorship of the film, the most shocking element was the suggestion that Wagner's music could arouse sexual desire and perversion, that music can 'bring on orgasms' and drive people to mad, transgressive love (Miller p. 174). Priscilla Barlow, on the contrary, focuses on how the *Tristan* music has lost its transgressive avant-garde power and how the diegetic music even seems to be a *hindrance* for the consummation of the lovers. She does, however, recognize the positive telepathic element in section B, and seems to conclude that the music only supports the lovers when non-diegetic (Barlow p. 48).

It is true that the lovers in the garden, finally freed from any external constraints, can be viewed as being frustrated by inner inhibitions of psychological as well as surreal and absurd kinds. If we follow this line of thought in the *Tristan* perspective, we roughly reach the following development from the Middle Ages to surrealism: in Gottfried (as well as other medieval versions), the suspicions and intrigues are the primary narrative drives. These problems are not blocking the possibility of sexual consummation (which is clearly frequent), but are a constant threat to the lovers' life and courtly status. In Wagner, the external obstacles are reduced to a minimum in favor of a fundamental impossibility of free love in a world of illusion and lies. In Buñuel, one might see a similar distrust of the possibility of free love in a constraining bourgeois world that has even internalized itself into the psychic life of the lovers represented by inner obstacles. Whereas in Wagner death is a possible redemption there are no metaphysical solutions in Buñuel, only the transgression into sadistic torture, if we see the epilogue as the next logical step.

But the sequence in the garden could also be viewed slightly more optimistically if we regard what happens not merely as psychic inhibitions. The Man is distracted by the foot of the statue (the toe of which the Woman sucks passionately and sexually in his momentary absence) (44:22-44:53 + 46:35-47:08). They behave as a married couple still in love after many years in a conversation without oral speech (49:25-51:44). She falls asleep in his arms; his face is covered with blood and they claim happily to have killed their children (51:52-52:20). He screams his love out ecstatically. All the time they are unmistakably tender and passionate towards each other. These instances can hardly be reduced to psychic obstructions and *coitus interruptus*. They can be seen as a dream-like path to orgasm (Hammond p. 49), as a parody of pornography (Higginbotham p. 44), or even as a union beyond reality, space and time (Kyrou pp. 158-9). These interpretations point to different aspects of this sequence, divided between transgressive sexuality and fetishism, moving, tender love, and absurd gags, and it would be wrong to reduce it to any one of these.

Viewed in the Wagnerian light, the lovers are affected by the music to walk a non-linear path that ends with an abandonment of physical reality with all its ridiculous, petty obstacles in favor of an ecstatic, orgasmic union, reached at the point where the blood-faced Man repeatedly cries out 'mon amour!' while the music (almost as an engine of passion) reaches its climax and, shortly after, its halt (52:08-52:31).

4.7 The Erotic Power of the Conductor

The two main obstructions come from the outside: the interruption from the phone call and the final breaking off from the music by the conductor. Whereas the first of these is shaken off and passion easily revived, the interruption from the conductor turns out to be fatal. He holds a certain power, enabling him to replace the Man as the object of the Woman's desire, despite his old age and unattractiveness. He is normally interpreted simply as a father figure (and if we go along the *Tristan* line, he could perhaps be seen

as a King Marke figure, albeit with success), but in the present context I will focus on his role as the provider of Wagner's music.

The conductor is in some sort of connection with the loving couple during the concert; maybe even a two-way influence, a spiral, where the lovers are aroused by the music and the conductor aroused by the lovers, so that all three end in the highest ecstasy. For the conductor, this ecstasy is too much; he is over-heated and breaks off the concert at its musical climax, acting as if his head is about to explode (52:32-52:52). He steers directly through the garden labyrinth to the place of the lovers, and the Woman leaves the Man to kiss the conductor with increasing erotic passion (53:22-54:33). He seems to be the only person capable of mentally separating the lovers, and I will suggest that his role as a provider of Wagner's Dionysian music provides him with this status. The erotic power of music is emphasized once again.

In both films the woman leaves the man in favor of another man. But whereas *Un Chien Andalou* followed the woman into her new love, *L'Âge d'Or* follows the heartbroken man. The Man's rage is accompanied by the sound of militant Catalan drums. They begin exactly at the moment where he jumps up from his chair in anger (54:10) and continue into the de Sade epilogue. They are, however, interrupted briefly by Wagner in a moment of sentimentality.

In *Section D* 'Transfiguration' returns non-diegetically as the Man throws himself on the bed and cries his heart out. He embraces the pillow for comfort and caresses it in memory of the lost love. There is no doubt that the music here has the role of expressing longing and nostalgia for what happened in the garden. As the pillow is torn open from his caresses and his hands are filled with feathers there is a slow transition from grief to anger, supported by the return of the Catalan drums.

5. Wagner in Buñuel Concluded

I hope to have demonstrated how Buñuel employs Wagner in ambiguous and intricate ways. The ambivalence towards Wagner spawns burlesque gags and ironic counterpoints together with clear correspondences and loyal adaptations, often in the same sequence. Buñuel is able to *deflate* the solemn and metaphysical aspects of Wagner without giving up important aspects in the realm of love, desire, transgressiveness and the power of music. Furthermore, the use of Wagner often accentuates the tragic and emotional aspects of scenes that would otherwise appear more detached, while the tangos in *Un Chien Andalou* accentuate play and detachment in scenes that would otherwise appear disturbing, but with a somewhat cynical gesture. The metaphysics of Wagner is grounded in a more corporeal world – albeit with surreal phantasmatic possibilities. This is done by blending Wagner with profane sex and perversions, surreal gags and impotent or cruel Tristan figures.

As we have seen, *death* plays an important role in *Un Chien Andalou*, where it is closely connected with love. In *L'Âge d'Or* death is primarily present in the form of murders – the scorpion kills the rat; the gatekeeper kills his son; the Man is responsible for many people's deaths; the lovers have killed their imaginary children, and the epilogue is a retirement from de Sade's morbid orgy. The redemption and transfiguration in Wagner's *Tristan* is replaced by failure and aggression in *L'Âge d'Or* and by more worldly deaths in *Un Chien Andalou*. There seems to be no rescue from the pessimism in Buñuel's *Liebestod*.

An important symbolism in Wagner's libretto is that of day and night, connected with life and death. Probably inspired by Novalis, the enlightenment hierarchy is reversed and truth is connected with night, illusion with day. At night, things and individuals blur and merge in an indistinct dreamworld, governed by desire rather than reason. As a parallel, both Un Chien Andalou and L'Âge d'Or have the surreal logic of dreams - and Un Chien Andalou in particular has a nocturnal mood to it, even though most of the scenes are shot in the daytime. Buñuel even connects the medium of the cinema (the darkness in the theatre; the hypnosis of the screen; the possibilities of emulating dream logics) with sleeping and dreaming (Buñuel "Poetry and Cinema" p.

107). Instead of a metaphysical realm Buñuel operates with a more temporary psychological darkness of the surreal.

However, there is a sense of the inner life and the transcendent in Buñuel. As we have seen, time, space and individuality are confused or challenged in both films. There are contacts transcending space, premonitions transcending time and personality splittings as well as symbioses transcending individuality. Like Tristan and Isolde, Buñuel's lovers are connected on levels unrestrained by physical laws. Driven by desire, the lovers seem in close contact with the Schopenhauerian will, and in line with Wagner's revision of Schopenhauer, sexual love is not merely succumbing to this will but also a way of acknowledging it beyond individuality.

In Buñuel, like in Wagner, love cannot be fulfilled in the real world. In *Un Chien Andalou* love is mainly obstructed by Man 1's immaturity. But the final image is enigmatic. The lovers who walk along the beach in what promises to be a happy ending are seen grotesquely buried in the sand 'In the spring'. The pessimism goes further than that of psychic inhibitions. Are they buried because love fades out in their mature monogamous relationship? (Murcia p. 58). Or are they happily reunited in death? The tango gives no answer but expresses that this is everyday life for the bourgeois couple. In *L'Âge d'Or* love is fueled by the power of music, connected with will and desire. Love is as powerfully beautiful for the ones in love as it is brutal and careless towards the rest of the world. When the music's over the spell is broken as is the Man's heart. Transgressive surrealism and a play on melodramatic clichés go hand in hand.

There is no lasting solution to the problem of love in the two films. Whether we die in a *Liebestod* or dispense with all morality in a transgressive *amour fou* or end in a permanent bourgeois relationship it leads to a kind of death. The films are less radical in their metaphysical claims than the opera, but all the more pessimistic.

Figure 1 – Tristan in *Un Chien Andalou*

I

0:00-1:45 **Tango 1**. ”Once upon a time…”: The slicing of the eyeball.

II

1:45-6:30 **Wagner – *Transfiguration*** ”Eight years later”: Enter cyclist (Man 1) and the Woman in her apartment. Telepathic premonition. Bicycle accident and passionate aid. The clothes on the bed. The ants in the hand and its transformations. The death of androgynous woman in the street.

III

6:30-10:28. **Tango 1.** Erotic chase in the apartment. Man 1 pulls grand pianos with cargo.

8:14 **Tango 2.** Still pulling grand pianos. She escapes. He lies on the bed.

”At three o’clock in the morning”: Man 2 enters, bosses Man 1 around and puts him in the corner.

IV

10:29-13:05 **Wagner – *Transfiguration*** ”Sixteen years before”: Man 2 moves in slow-motion. Gives Man 1 books as part of the punishment. Books become revolvers and Man 1 shoots Man 2 . Man 2 falls dead in a park. Long scene where people find his body and carry him away.

V

13:06-end **Tango 1.** Death head moth on the wall. Argument between Man 1 and Woman. Woman leaves and meets Man 3 on the beach. They find and ridicule the clothes of Man 1 and wander happily along the beach.

”In the spring”: Woman and Man 3 are buried vertically in the sand.

Film facts

Sometimes given the English title *An Andalusian Dog*. 1928. Written by Luis Buñuel and Salvador Dali. Directed and produced by Luis Buñuel. Silent film with intertitles, premiered with gramophone mixing by Luis Buñuel. Sound version with Buñuels reconstruction of the music from the premiere (1960). 16 mins.

Figure 2 – Tristan in L'Âge d'Or

A - 14:32-17:40 *Prelude*.

The Man and Woman have interrupted a ceremony with their ecstatic screaming while rolling erotically in the mud nearby. As they are separated Wagner begins. The Man looks with sad longing after her. Cut to toilet scene and lava (Wagner interrupted briefly by the flushing). The Man is taken away and behaves aggressively. The ceremony continues.

B - 22:49-23:10 *Second motif twice*

The Man looks at a poster. Correspondence and intimations of contact between him and the Woman lying ecstatically in the same position as the image on the poster.

C - 43:36-52:34 *Transfiguration*

The orchestra performs the music (which then becomes diegetic). The lovers are alone nearby, trying to make love. They go through various phases. They are interrupted by a phone call. During the indoor phone conversation (47:26-48:36) the music is absent. The lovers continue. At the ecstatic climax the conductor interrupts the music and leaves the site of the concert.

D – 55:04-55:40 *Transfiguration*

The Man back in his room cries in his bed after the Woman has left him for the conductor.

Other music

Mendelssohn: *The Hebrides* (0:49-3:13); Mozart: *Ave Verum* (3:15-4:28 + 11:42-14:04); Beethoven: *Symphony no. 5*, third movement (5:15-7:25); Debussy: "La Mer est

plus belle" from *Trois Melodies* (9:21-11:39); Mendelssohn: *Symphony no. 4* ("The Italian Symphony"), third movement (17:42-20:05 + 21:30-22:24); Beethoven: *Concerto for violin and orchestra* op. 61, first movement (20:05-21:23); muted strings (25:59-27:08); unidentified classical music (28:14-28:43); Schubert: *Symphony no. 8*, first movement (30:03-34:16); Wagner: "Träume" (Wesendonk-lied no. 5)(39:30-41:32); Catalan drums (54:10-55:03 + 55:41-1:02:10); unidentifed light music (1:02:11-1:02:19). As for 'unknown': The liner notes to the DVD lists "occasional music by Georges van Parys".

Film facts

Sometimes given the English title *The Golden Age*. 1930. Written by Luis Buñuel and Salvador Dali. Directed by Luis Buñuel. Produced by Vicomte Charles de Noailles. Sound film with intertitles. 63 mins.

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Discography (sound clips)

'Tristan und Isolde Prelude und Liebestod' on *Wagner: Works*. London Symphony Orchestra, Yondani Butt. Nimbus Alliance, NI 6164, (2012).

Filmography (still images)

Un Chien Andalou and *L'Age d'Or*. 2DVD, British Film Institute, BFIVD623.

Temporality in Xenakis and Ferneyhough

Dimitris Exarchos, Associate Lecturer, Department of Music

Visiting Research Fellow, Contemporary Music Research Unit

Goldsmiths, University of London, UK

Abstract

This article comprises a comparative exploration of the conception of temporality by Iannis Xenakis and Brian Ferneyhough, as well as a study of their compositional responses to this conceptualization. Xenakis remarked that music exists primarily "outside of time," whereas Ferneyhough reflects on the "tactility of time." These ideas are developed here within a phenomenological framework, with particular reference to concepts by Jean-Luc Nancy, mainly those of *sense* and *resonance*. When cross-examined, Xenakis's and Ferneyhough's approaches, although quite different, are shown to resonate with each other, as both developed compositional methods based on sieves: the former for the production of sonorities and the latter as a means to formal articulation.

> We have to consciously destroy these liminal structures of time, space,

logic…

> —Iannis Xenakis

> To notate the work is at one and the same time to listen to its echo.
> —Brian Ferneyhough

1. Introduction

The figures of Iannis Xenakis and Brian Ferneyhough occupy distinct positions in the history post-WWII composition. Their oeuvre has preoccupied performers and musicologists in quite different ways. However, whereas the former would not hesitate for a moment to programme works by the two composers in the same concert, musicological work has insisted in keeping them apart. This is justifiable considering their different historical milieux. The two composers are almost one generation apart and Ferneyhough has referred to Xenakis only in passing[1] (when he differentiated his approach from that of the younger generation, who have studied Xenakis's work more closely; see Ferneyhough 1995: 425). Further, their compositional engagement exhibits sharp differences: whereas the name of Xenakis implies a "scientificist" approach, Ferneyhough is associated with "complexity." However, although their differences are significant, such comments seem to only scratch the surface as they point to one-dimensional labels of no consensual acceptance (certainly not by the composers themselves).

This article aims at unfolding a comparative study of intellectual and musical divergencies and convergences between the two, as they can be seen in their conception of musical temporality and in their respective compositional methods. After I briefly introduce their differences in compositional practice, I examine their conceptualization of temporality and then, back to their compositional attitude, I analyse their particular responses to issues raised by their critical thinking of musical time. The latter are located in the treatment of musical entities, formal articulation and practices of notation. My philosophical examination relies on the work of Jean-Luc Nancy with particular reference to his notions of *sense* (*sens*) and *resonance*. The former is taken in its two meanings of the bodily sense of sensibility (sensation) and that of intelligibility

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[1] One exception is his collaborative article on Xenakis's *ST/10-1 080262* (Keller and Ferneyhough 2004).

(understanding). Resonance, by analogy, is related here to a certain sonorous materiality and to musical representation through notation. The former pertains mostly to Xenakis's practice and the latter to that of Ferneyhough.

Xenakis's and Ferneyhough's practices are indeed distinctly different: the former favoured a statistical approach to handling the global and local properties of sound masses, whereas the latter's compositional strategies frequently employ linearly-conceived multiple layers of musical activity. Interestingly (or even strangely) when it comes to their conception of musical time, it is Xenakis who thinks linearly whereas Ferneyhough allows for a greater degree of complexity in temporal interpretation. I will show that ultimately, when cross-examined against Nancy's categories, both composers have touched upon different aspects of the same problematics of temporal experience in music. That is, the point of contact of their differing practices is precisely the idea that meaningful musical experience is beyond temporal linearity: to the former, this corresponds to the outside-time category and to the latter to oblique temporal sensations.[2] Xenakis's compositional response re-invented the musical scale as multiplicities of timbre classes, which he termed *sieves*; Ferneyhough's compositional strategies re-inscribed the function of complex notation and developed musical processes that correspond to what I call *formal sieves* of competing and interfering concurrent processes.

Let us take two works from either composers' early period. Xenakis first conceived of mass sonorities for *Metastaseis*, but the formal introduction of stochastics came with *Pithoprakta* (1955-56). The orchestra is divided to the extreme and the work follows what Solomos has called the "sound model" (1996: 27), progressing from noise to pure harmonics. Measures 52-59 comprise a well-known stochastic paradigm, a cloud of over one thousand glissandi allocated among the instruments according to a particular distribution (Gaussian). Example 1 shows the graph sketch by Xenakis and Example 2 the corresponding part of the score. Linearity has completely disappeared

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[2] Regarding linearity for example, both Xenakis and Ferneyhough identified the discrepancy between process and result in serial music. The former indicated "a contradiction between the linear polyphonic system and the heard result which is surface, mass" (Xenakis 1994: 42). Ferneyhough held the same point, in particular about integral serialism (see Ferneyhough 1995: 78), although his critique was directed to the responses to this impasse (as he was writing this much later). In any case, both composers responded differently to what they identified as the same problem: Xenakis by rejecting linearity and introducing the category of mass sonorities and Ferneyhough by developing complex multi-linear processes.

and forward motion is achieved almost exclusively by manipulating the sound mass and its evolution in time (by changing its direction, average density, instrumentation, timbre, intensity, etc.). Ferneyhough's *Epicycle* was composed in 1968 for string ensemble or "twenty solo strings" based on a "soloistic voice-leading" (Ferneyhough 1995: 89). In this case, individuation of the ensemble has not lead to mass sonorities; to the contrary, as it can be seen in Example 3, the individual instrumental line is meant to engage each performer in a polyphonic, mimetic, or homophonic whole. These compositional attitudes have been maintained by both composers throughout their oeuvre; however, they have changed in form, as new considerations arose. One overall guiding theme, common to both, is none other than the role of temporality in music perception and composition.
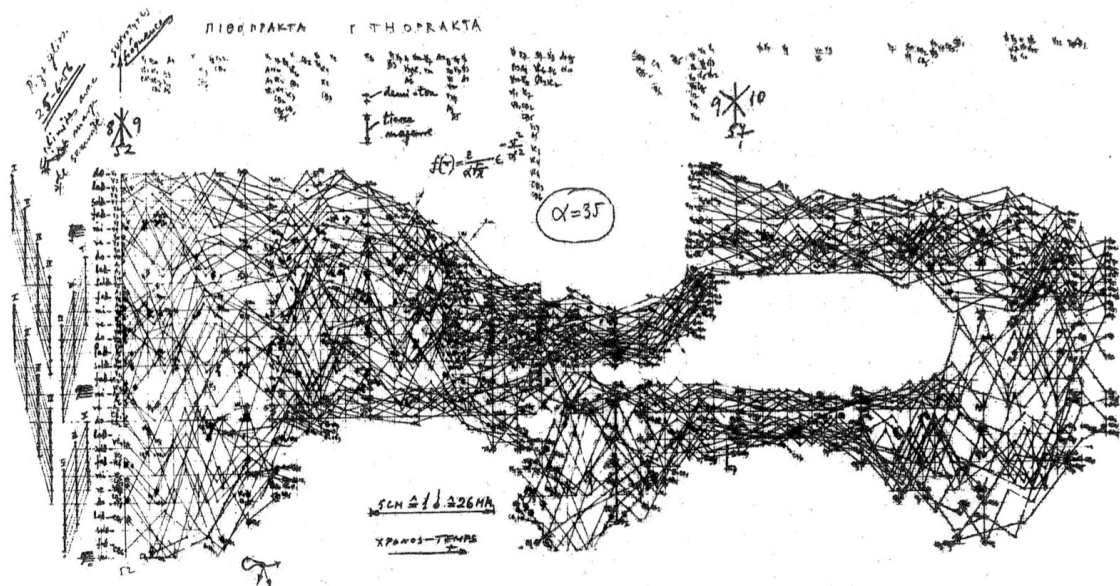
Example 1. Xenakis, Pithoprakta, manuscript graph of mm. 52-59. Source: Xenakis Archives. Reproduced by permission.

Example 2. Xenakis, *Pithoprakta*, mm. 52-57. © Copyright 1967 by Boosey & Hawkes Music Publishers Ltd. Reproduced by permission of Boosey & Hawkes Music Publishers Ltd.

Example 3. Ferneyhough, *Epicycle*, p. 13. © Copyright 1968 by Hinrichsen
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2. Temporality

The discussion of time in music inevitably defines one's approach to ontological issues, such as the status of the musical work and its perception—issues that pertain to the construction and treatment of sonic objects as well as overall formal articulation.[3] The matter is not simply the treatment of metric and rhythmic structures, but an approach to *temporality*, as that which enables and structures the experience of music. This involves a phenomenological discussion on the perception of time and space through the senses or the mind; as well as on the experience of subjectivity, presence, or materiality. Such themes, to the extent they relate to the thinking of Xenakis and Ferneyhough, permeate the discussion unfolded in the remaining of this article.

Both Xenakis and Ferneyhough have published extensively on their philosophy and practice. Their explicit preoccupation with temporality can be seen in a few texts of the 1980s, where they introduced their themes and references, as well as examples of compositional techniques and specific works. These texts, such as Xenakis's "Concerning, Time, Space and Music"[4] and Ferneyhough's "The Tactility of Time," discuss the temporal in terms that are akin to a phenomenological reading. Thus, I propose a provisional, introductory reading according to concepts by Edmund Husserl and Martin Heidegger for Xenakis and Ferneyhough respectively; but ultimately, both composers' ideas are shown to resonate with distinct categories of Jean-Luc Nancy's philosophy, as his thinking relies on the phenomenological tradition of the above-mentioned thinkers.

Over the decades, as I have already indicated (Exarchos 2015), Xenakis's account of temporality took two forms: earlier, in a compositional/analytical account he discussed the matter in relation to structures like sets, scales, and sequences; later, in a more philosophical account, he discussed this in terms of perception, exploring the importance of mnemonic traces during listening. As I will show, Xenakis suggested that our perception is constantly shifting—in a sort of quantum leap—between the temporal and the non-temporal aspect of music. Ferneyhough's account of temporality uses terms such as "tactility" in order to denote a "concrete," "physical" sense of time. He conceives of temporality in relation to a non-linear sensation of time: a linearly-

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[3] However, a problematics of musical ontology cannot be exhausted here.
[4] Henceforth "Concerning Time."

conceived temporal flow—although an immediate given—is not what structures musical experience. Further, he made explicit that such considerations are directly related to music's ontological status (with reference to Derrida) and that this status essentially depends on a special kind of motion. Echoing Xenakis, Ferneyhough suggests that the listening subject at moments "stands apart" and consciousness is engaged in an act of scanning and measuring outside of the immediate time-flow.

2.1 Xenakis

Xenakis denied the importance given by most composers to the temporal aspect of music. He explicitly privileged that which is ontologically independent of time, that which "remains of music once time has been removed" (1976: 211). His practice was largely intended to provide alternatives to articulating the non-temporal; as such, his theory of sieves (see Xenakis 1992: 268-276) was meant to provide tools for the construction of *outside-time structures*.

Interested in the mensurability of time, Xenakis considered time as a *linear structure* that can be "expressed with real numbers, and shown as points on a straight line" (Varga 1996: 82-83).[5] In several writings, Xenakis demonstrated his theory of temporality as a schema of two categories: outside-time and inside-time, while occasionally he would include a third, the *temporal* category. Any structure that does not require concepts of causality (e.g. "before" or "after") in order to be described is outside of time; whereas, if causal terms are necessary, the structure is inside time.[6] Therefore, a scale is outside of time but a melody based on that scale is inside time.[7] Rhythmic and durational structures (or the overall temporal structure of the work), is where outside-time structures are mapped onto, in order to produce the work inside time. This third term, the *temporal* appears only idiosyncratically in Xenakis's writings; as I have shown (Exarchos 2008: chapter 1), his schema eventually collapses into two categories, if anything, because the middle term can be viewed by both angles: as a

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[5] This linear conception of time does not imply, of course, that Xenakis's music does not include non-linear forms.

[6] Although succession and causality might not always be identical, Xenakis links the two in his discussion of chains of events and their reconstruction in memory (1992: 263), which I will examine later.

[7] A mathematical equivalent would be the distinction between set (outside of time) and sequence (inside time): the set's elements are arranged according to their intrinsic properties (e.g. smaller to larger), whereas the sequence requires a certain ordering (including any repetitions).

rhythmic sequence (whose elements follow the logic of causality), it is inside time; as a mensurable structure it is outside of time. Xenakis's compositional response came with the theory of sieves. This is a method for the production of scales (either as pitch scales or as rhythmic sequences), based on residue classes and set-theoretical operations on these classes, aiming at deeper levels of symmetry via a number-theoretic approach. What is important for my point here, is that Xenakis privileged the construction and use of scales over recourse to melodic shapes. Considering that his abstract image of time as points on a straight line is also the abstract schema of a sieve, he was able to maintain that rhythmic/durational structures too have an outside-time aspect. Already from the 1960s, Xenakis went as far as to claim that, although there is such a thing as "rhythm in its pure form," all music has an outside-time nature (1994: 68).

During the 1980s he was increasingly concerned with temporality and the perception of time in listening. His main thesis that music takes place mainly outside of time remained, but he was now preoccupied with *how* this is possible.[8] In "Concerning Time"9 Xenakis demonstrates his approach around three key terms: *separability*, *contiguity*, and *anteriority*. The first two are prerequisites for the third and as such, I suggest, they are more important. It is necessary that events are separable in order to be perceivable; that is, events need to be experienced as discreet, so that we can compare them and perceive the temporal relations between them. This separability is in turn co-dependant with contiguity, the state of direct contact; this is an invocation of materialism (see Xenakis 1992: 203), as direct contact of separate entities implies a fundamental materiality. Finally, anteriority stands for succession, causality, that which exists inside time.

Concerning the first term, Xenakis uses the metaphor of the trace in relation to temporality: "Thanks to separability, [perceived] events can be assimilated to *landmark points* in the flux of time, points which are instantaneously hauled up outside of time because of their trace in our memory" (1992: 264).[10] As I suggested earlier, this is an

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[8] For Xenakis the inside-time category refers to the instantaneous, that which "does not exist" (Xenakis 1969: 51). In this sense, his philosophy of music was in search of an ontology rather than a dialectics.

[9] The history of this article can be traced back to 1981, while it received its final form in Xenakis 1992 (see Solomos 2001: 237).

[10] The function of tracing relates directly to that of writing and Xenakis has occasionally referred to time as a blank blackboard into which structures are inscribed (see Xenakis 1992: 173 and Varga 1996: 84). For a critical exploration of the deconstructive function of writing in Xenakis's dichotomy see Exarchos 2008: chapter 2.

instance of how music in general—including rhythm—is placed outside of time. Although Xenakis has not referenced Edmund Husserl except once in a footnote (1992: 377 n. 1), we can find a Husserlian element in this approach to time-consciousness. Xenakis's account is phenomenological to the extent that it is concerned with what presents itself to consciousness. Importantly, in phenomenology the viable question does not relate directly to the ontological status of things independent from experience, but to the way reality discloses itself to, or constitutes itself in conscious experience. According to Husserl, the experience of spatiality cannot be separated from a certain temporality. He maintained that both past and future elements are incorporated in the constitution of momentary sensation, in a movement of *retention* and *protention* (anticipation). Husserl's favoured example for this was the "tonal process" of the melody. He considered the melody as a unitary temporal object that "is past only after the final tone is gone" (1991: 40). However, like Xenakis, he insisted on the *discreteness* of individual tones—the tone given now, the tones elapsed, and the ones anticipated. In Husserl's words, "at any given time only one punctual phase is present as now, while the others are attached as a retentional tail" (1991: 41). Experiential unity as such is achieved via mnemonic means (retention being our short-term memory, as opposed to *recollection*). We see in this way, that Xenakis's account echoes Husserl's with regard to the basic postulate of the separability of individual events.[11]

This linking of time and space is also found in Xenakis's own conception; in particular, he suggests that space is perceptible only across the infinity of "chains of energy transformations" (Xenakis 1992: 257). In a materialist world-view, a void in space-time is inconceivable by immediate consciousness. Thus, the events in such chains are necessarily contiguous (and separable). Given the above presuppositions, Xenakis suggests a thought experiment:

> Two chains of contiguous events without a common link can be indifferently synchronous or anterior in relation to each other; time is once again abolished in the temporal relation of each of the universes of events represented by the two chains (1992: 263).

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[11]I have indicated the connection between Husserl's and Xenakis's accounts of temporality in (Exarchos 2012: 9) where I also related this to Xenakis's "interpenetration of the tenses."

Therefore, separation and direct contact of events are the essential conditions for the temporal experience; for perceiving, that is, events in temporal succession (Xenakis's *anteriority*). So, when Xenakis talked of the "removal of time" he must have meant the removal of one or more of these three aspects. The removal of separability would abolish time due to absolute smoothness; that of contiguity would render time inconceivable; and the removal of anteriority would entail a universe of absolute simultaneity (see Xenakis 1992: 262-263).

We see therefore how Xenakis defines time as causality or succession; in other words, one-dimensional, linear. However, this is precisely why Xenakis insisted so much on the outside-time category; the everyday conception of time is that of linear time, which music has nothing to gain from, as it operates outside of such linearity. Xenakis's treatment relies on a certain spatio-temporalizing movement that structures temporal consciousness due to contiguity and separability, and which is not very different from the idea of a phenomenological primary spatiality/temporality that enables the experience of everyday space and time as such.

2.2 Ferneyhough

At around the same time as Xenakis, Ferneyhough presented his theorization of temporality in the "The Tactility of Time," originally a talk at the Darmstadt Summer Course of 1988 (Ferneyhough 1995: 42-50), where he discussed the possibilities of a *palpable* sensation of time in music (cf. Ferneyhough and Boros 1994: 123). Unlike Xenakis, Ferneyhough presupposes a non-linear conception of time. The possibility for concrete temporal sensations can only arise in moments when perception is detached from the immediate time-flow, "standing apart" and operating on a "speculative time-space" (Ferneyhough 1995: 43). Ferneyhough's talk comprises a programmatic statement in search of an appropriate language on temporality, with regard to *Mnemosyne* (composed in 1986 for bass flute and tape, as the final part of the *Carceri d'Invenzione* cycle). The resonance with Xenakis's account, especially the idea of standing-apart, is a further suggestion of such potential. In order to do so, it is necessary to refer to certain developments of Husserl's ideas in the work of Martin Heidegger.

Compared to Husserl, Heidegger was more interested in perception as the *purposeful* involvement in the concrete world.[12] Such involvement means that being is being-in-the-world, a world that is always already there; thus, spatiality is an *event of disclosure* or *opening* to the world. According to Morin (2012: 24), the mode of disclosure is that of "understanding," the decoding of a context and of available tools (although such understanding need not be conceptual). Spatial experience is always also temporal and as an opening to the concrete world the structure of temporality is "ecstatic" ("standing outside of") (cf. James 2006: 84).

Similar to Xenakis's placing outside of time, Ferneyhough's "standing-apart" denotes the "ecstatic" structure of temporality. Whereas the former conceived it (in a Husserlian manner) as a process of retentions and protentions, for the latter standing-apart takes place during our engagement with music (the "world") which is conceived as a complex dynamic process involving the here-and-now of one's own meaningful experience. This is clear in Ferneyhough's essay when he invokes the schema of the feedback loop between bodily temporality (breathing, heartbeat, etc.) and the "metric lattice" that mediates musical objects. The perception of time is conditioned by this relationship, according to a continually moving perspective. Ontological overtones arise at the conclusion of his argument: the listener's perspective changes constantly with respect to "the understanding of what is to count as an object at that point in the relationship" (Ferneyhough 1995: 44). Here, "standing apart," "measuring," "scanning," all refer to the kind of movement of projecting forward and backward, beyond mere retentions and protentions, according to an "irregular segmentation of experiential continuity" (Ferneyhough 1995: 43), a temporal continuity of differentiated "thickness." Such measuring is then constantly re-evaluated, according to the relationship between the two aforementioned poles (bodily condition and metric lattice), in the process of being constantly engaged with the music in a way that affords an experience beyond momentary immediacy. This is possible because our attempts of temporal interpretation are non-theoretical; Heidegger (1996) terms this kind of engagement *circumspection*. Opposed to theory or to leisurely looking around, circumspection refers to an attentive

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[12] He criticized Husserl for the ideality with which he had invested his phenomenological account, such as his *phenomenological reduction*, which excludes knowledge, belief, or other preconceptions when studying the experience of the world; or, such as his *transcendental ego*, that functions as the ultimate foundation of the relation between acts of consciousness and its objects.

and associative interpretation of actual affordances and possibilities in one's being-in-the-world. Such temporal interpretation is based on an ever-changing perspective of a projected future. Although retentional memory is also important, Ferneyhough's non-linear conception of time allows him to speak of "obliqueness" in the temporal experience (1995: 49), in a way that defies the Husserlian schema: the experience of listening "circumspectfully" goes beyond the paradigm of the linear melody.

A few years earlier, in "Il Tempo della Figura" (1995: 33-41) Ferneyhough discussed the general possibilities of energy release, which he terms *force*, conceived with the aid of a basic distinction between *gesture* and *figure*.13 The former is comparable to the linguistic vocable, a part of rhetoric with no inherent capacity of expressive energy (it is only expressive of sentiment). In contrast, the term *figure* is used to indicate a certain kind of "energetic volatility" as the potential of concrete gestures. Ferneyhough's exposition of such thoughts is introduced by the image (borrowed from a poem by John Ashbery) of a breaking wave. The *figure* relates to a wave breaking on a rock, whereby *gesture* expresses a shape that it gives up immediately: a shape that we realize only after it is gone (Ferneyhough 1995: 33). By avoiding proper definitions, Ferneyhough's compositional thinking invokes the figure as the "aura" that is potentially found in any concrete gesture, constellation, or formal unit (Ferneyhough 1995: 37). What allows him to indicate the place of the figure at the intersection of already-defined "vocables" is precisely his insistence on the nature of temporality in relation to conscious perception. According to Fitch, "Figurally charged parameters seek to escape the gesture, and the latter to recapture them, albeit incurring damage in the process. The continuous journey of the figural, from synthesis, to independence and 'back to' renewed synthesis … implies a temporal progression" (2005: 419-20). This insistence on movement allows Ferneyhough to think of the figure as an essential potentiality of musical consciousness: "our 'life-line' to reality might perhaps be interpreted as a special form of motion;" this is the movement of the breaking wave where "the present constitutes itself only as sensed absence" (1995: 35).

These sentences echo Derrida's discourse (1997) and Ferneyhough is quite explicit about the importance of *différance* in conscious experience and its temporality:

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13 See also Ferneyhough 1995: 21-28 & 131-38.

> Musical consciousness is always the impingement of the past upon the array of possible futures to which (*pace* Derrida) it continually defers. The moment itself is defined, not by any constancy of material substratum, but by its motion; it is the projection of figural energies which *make the pointer visible* by means of which the motion is measured (Ferneyhough 1995: 36).

This is not only anti-materialist, but also anti-foundationalist. The absence of ground appeals to the deconstructive claim against stable meaning: the breaking wave, one may say, is not receptive of damming barriers. Différance (an economic concept for differing/deferring) describes the kind of movement according to which "figural energies" afford the capacity of temporal measurement. The above quotation further reveals Ferneyhough's focus on the *projection* of energies, that is, on the *futural* aspect of temporality. This future—always deferred—is conceived as the oblique directionality of time. Using Heidegger's terminology, "being futural" refers to Being (*Dasein*) "running ahead" towards its ownmost possibility. But this future is not conceived in any narrow sense of an "already-there" that is in store for us; rather, this futuralness *is* Being itself:

> In running ahead there is neither expectation of something in the future nor is there a free-floating "future as such." Running ahead "is" that being's future which it itself is. But to be futural means to be "temporal." Here, temporal does not mean "in time" but time itself (Heidegger 2011: 48-49).

Overtones of such finite directionality can be heard in Ferneyhough's take on the time arrow in relation to the musical object: the greater the consistency of autonomy of the musical object the more the time arrow that traverses it is "bent." Reciprocally, the temporal "vector" damages the object; time is in a sense a force which compels the object to "reveal its own generative history" (Ferneyhough 1995: 45). This reciprocal relationship between object and time is essentially what gives rise to the musical figure as an event of confrontation and a process of energy accumulation and expenditure.

3. Nancy: Sense, Materiality, Signification

The ideas presented in the previous sections should have provided an introduction to the composers' theorization and a basic philosophical contextualisation. These philosophical ideas have been taken further by Jean-Luc Nancy, whose focus is somewhat different from Husserl and Heidegger. His account of spatiality and temporality has been described as "post-phenomenological," as it moves beyond visual motifs of appearance in relation to consciousness (see James 2006: 96). For example, in *Listening* he introduces the concept of the "resonant subject" as opposed to the "phenomenological" or "philosophical" one (see Nancy 2007: 21-22). Such quasi- of post-phenomenology may enable an analysis that relies less on traditional conceptions of consciousness and subjectivity. Both Xenakis and Ferneyhough defied traditional views, such as the conception that music exists in time or that the "work" somehow remains intact and survives the sequence composer-performer-audience. The deconstruction of the Husserlian melody as the paradigm for time-consciousness can be studied in terms provided by Nancy's work, which resonates with the responses of both composers, in particular with reference the notions of *sense*, *resonance*, (sonorous) *materiality*, and *signification*.[14] Neither Xenakis nor Ferneyhough referred specifically to Nancy. Therefore, the remainder of this article will remain removed from Xenakis's and Ferneyhough's own philosophical references; it will address the possibilities of a Nancean reading, as an alternative to and not a substitute for those.15

Nancy's writing avoids strict definitions and employs a more figurative than a denotational style, a style that is a direct result of his own philosophy. Nancy accepts Heidegger's approach but insists on the latter's (undeveloped) theme of *being-with* (*Mitsein*). This came along with a shift of focus from consciousness and signification (the particular way of understanding of the world and beings) to the notion of *sense* (*sens*), a word that Nancy takes in its multiple meanings, of which two are relevant here: the bodily sense of sensibility (sensation) and intelligibility (understanding) (cf. Barker 2012). To the extent that it designates the sensible, sense presupposes a materiality; and

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[14] As part of the post-structuralist strand, Nancy's philosophy has never appeared in one definitive account that would comprise a book in the "encyclopedic" sense; on the contrary, the idea of fragmentation is central in his thinking, which appears fittingly fragmented in various collections of essays on reccurent themes.

[15] Fitch (2005) analyses Ferneyhough's notion of the *figure* in relation to Gilles Deleuze's critical analysis of Francis Bacon's work (section 1.6). See part 3 in particular for a study of Ferneyhough's notion of the tactility of time and an analysis of *Mnemosyne* and other works, based on Deleuze's conception of rhythm, with reference to Theodor Adorno and Henri Bergson.

an ontology implicated in such a thinking can only be materialist. For Nancy, it is not so much that the world makes sense (intelligibly), but that it exists *as* sense, which is the condition for the existence of language, but at the same time it transcends it. Sense is *in excess* of language, at the same time prior to it and beyond signification: it is a sense of the world that is always already constituted *as* sense. Such thinking lends itself to terms that relate to the bodily, like that of *touch*. This term implies a certain exteriority and an impenetrable concreteness: what senses is a body and the mode of sense is that of touch-separation at the *limit* (see Nancy 2008a: 17), a movement on the external limit of the concreteness of matter. The sense of touch then is a metonymy for all senses. The way this movement also implicates language is shown emphatically by the following two quotes:

> It is not a matter of signification, but of the sense of the world as its very *concreteness*, that on which our existence *touches* and by which it is *touched*, in all possible senses (Nancy 1997: 10).

> Either as an audible voice or a visible mark, saying is corporeal, but what is said is incorporeal. … Language is not in the world or inside the world, as though the world were its body: it is the outside of the world in the world (Nancy 2000: 84).

We can formulate this relationship as follows: bodies *touch* on matter, while sense (as the bodily event) exists on the outer limit of language, although simultaneously being the site where language can occur.

  The concept that implicates the multiple registers of sense and that is most relevant here, is that of *resonance*. In *Listening* it is shown to relate to both matter and signification. Nancy thinks of sound, the vibration of the auditory body, as sonorous materiality, "voluminous and impenetrable" (2007: 40). Resonance is the sounding and re-sounding of matter, as sound presupposes the contact of material bodies[16] and as vibration and reverberation it is always already a re-sounding. One could say that vibration is the rhythm of resonance and timbre its materiality. Music for Nancy is not exactly a phenomenon, as it is not brought about according to a logic of manifestation, but of "evocation." The temporality of resonance is also the spatiality of a resonant,

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[16] In a way, resonance is the touching of atmospheric vibrations on the body, on our body or the body of the instrument (be it electronic or not).

acoustic space; it is the rebound of sound in space. It is through the opening up of space that Nancy connects resonance to the function of language: although the two are by no means equivalent they do share the space designated by the "referral" or *renvoi* (2007: 7-8).[17] Music and language share the space of the sounded and re-sounded, and of the said and re-said. Signification, as a system of references, is a tracing of space, or a spacing:

> Every spoken word is the simultaneity of at least two different modes of that spoken word; even when I am by myself, there is the one that is said and the one that is heard, that is, the one that is resaid (Nancy 2000: 86).

Listening is to strain towards a possible meaning (Nancy 2007: 6); but as sense, listening is also beyond understanding (here Nancy departs from Heidegger). Music and language are implicated in a relationship of touch and separation, which allows meaning to be perceived only at the limits, at the point of contact-separation between resonant materiality and signification. The exteriority in the mode of the relation between sense (listening), signification (language) and materiality (sound) is philosophically accounted for by a movement of tracing, of writing, which takes place at the limits between signification and sense, and between bodies (of sense) and matter. Nancy terms this movement of exteriorization, of writing at the exterior limit, *exscription*. Language always exscribes; it is outside of what it inscribes, as the outside of the world in the world (see James 2006: 150). According to Morin,

> What is inscribed […] is at the same time exscribed, placed outside of language by its contact with a material instance or a technical apparatus. […] It is through this double exscription of signification and sense, and of sense and bodies, that thought can touch the thing (2012: 132).

This subtle relationship between sense and matter, and sense and language provides the main vehicle by which to understand Xenakis's and Ferneyhough's approach to temporality, via the materialism of the former and the deconstructive strategies of the latter.

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[17] *Renvoi*, from *renvoyer*, means both to echo, to reflect, to refer, and to (re)send. Although Nancy does note the *renvoi* from sign to thing, signification should be here thought of as the spacing of the plurality of the modes of signs and of the *différance* of chains of signifiers.

Resonance is also closely related to Nancy's approach to subjectivity, presence and presentation.[18] He denies the Kantian *a priori* synthesis of the sensible and the intelligible (pure presentation and philosophical presentation) and considers the grounding of this unity to be suspended. Nancy uses for such suspension the term *syncopation*. This designates an essentially temporal, if not musical, movement of presentation and withdrawal: "What is called consciousness probably never allows itself to be grasped as an identity except when it blacks out: it is the syncope" (Nancy 2008b: 10). Such a suspension suggests an interruption of the "thinking subject" (see James 2006: 48). The constitutive moment of subjectivity, Descartes' *"I think therefore I am,"* precedes the possibility of its utterance, that is, of language. Nancy's response comes not as a concept, but as the figure of the gaping mouth (*la bouche*). What thinks itself is not a consciousness but a ruptured identity which is intricately implicated in a syncopated movement (of presentation-withdrawal and of opening).[19] We can now think of Nancy's "resonant subject," as the movement of *la bouche*; this is an instance of the aforementioned move beyond phenomenology:

> It is a question […] of going back from the phenomenological subject, an intentional line of sight, to an intensive spacing of a rebound that does not end in any return to self without immediately relaunching, as an echo, a call to that same self (Nancy 2007: 21).

Because of Nancy's insistence on the *being-with*, the plurality of being presupposes a contemporaneity as exteriority. As it precedes language but also goes beyond it, the resonant subject is a movement of syncopation and opening that takes place at the limits of presentation.[20]

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[18] Kane (2012) offers an interesting comparative study of Nancy's and Schaeffer's approach to listening, with particular reference to Nancy's conception of the "resonant subject" and the the possibilities it offers of moving beyond the phenomenological subject (see pp. 444ff. in particular).

[19] In "How Music Listens to Itself" Nancy elaborates further on a musical subjectivity: "listening is musical when it is music that listens to itself" (Nancy 2007: 67). Adorno claimed that we have to rethink the musical subject, in search of an aesthetics whose "medium would be the reflection of musical experience upon itself" (Adorno 1992: 321). Maas (2005) compares these approaches and provides a study of gesture in Xenakis with reference to Delleuze and the idea of the *fold* (*plissement*).

[20] Nancy's critique of Husserl touches on subjectivity: "[Husserl] does not concentrate his ear on musical resonance but rather converts it ahead of time into the object of an intention that configures it. Sound (and/or sense) is what is not at first intended. It is not first 'intentioned': on the contrary, sound is what places its subject, which has not preceded it with an aim, in tension, or under tension" (Nancy 2007: 20).

Nancy's elaboration of a materialist ontology also invokes a term from Maurice Merleau-Ponty: *partes extra partes* (*parts outside parts*), as the mode according to which an object "acknowledges between its parts, or between itself and other objects only external and mechanical relations" (Merleau-Ponty 2002: 84). Nancy's term for such conception of the world is *ecotechnical* (Nancy 2008a: 89) and its aesthetic counterpart is *technicity*: a term that responds to the sensible dimension of experience, as opposed to the religious/poetic. As sense (the beyond of signification), technicity is also beyond "Art" and beyond the logic of the work. Technicity is "out-of-workness [*désoeuvrement*]" (Nancy 1996: 37), it places the work outside of itself as an exscription of sense; thus it evokes another instance of opening or a syncopation of presentation.

Finally, Nancy's take on musical time has clear references to his de-centred subjectivity and syncopated presence. He defines rhythm as

> the time of time, the vibration of time itself in the stroke of a present that presents it by separating from itself. […] Rhythm separates the succession of the linearity of the sequence of length of time: it bends time to give it to time itself (Nancy 2007: 17).

This folding and unfolding movement is what gives rise to the resonant subject, to the extent that its temporality conditions its meaning. This is what Nancy means when he says that music "anticipates [the] arrival [of presence] and remembers its departure, itself remaining suspended and straining between the two: time and sonority, sonority as time and as meaning" (Nancy 2007: 20).

4. Xenakis and the Spacing of Time

Let us now return to Xenakis's thoughts on contiguity in relation to space-time, about which he poses the question: "What could […] time and space signify [if] contiguity is abolished?" (1992: 256). This is a question that relates to direct contact, to a materialist universe where no gaps are admitted. His thought experiment with the two chains of contiguous events, relates this notion (contiguity) to those of anteriority and separability. For Xenakis then, the mode of existence of entities is, in Nancean terms, that of touch-separation. The two chains in the aforementioned experiment have no common link; they can either be anterior to one another, in a relation of touch-

separation, or "indifferently synchronous," simultaneous. For Xenakis the contiguity-separability of chains of events (local clocks, as he called them) is the condition of temporality. In the case of sonorous events, this simultaneity would be the Nancean space-time of the "sonorous present" and of "sonorous place" (Nancy 2007: 13 & 16). We can then extend Xenakis's account even in the case of a single chain of events, via an analogy of spacing as tracing.

Anteriority accounts for temporality in the context of a singular instance of a chain of contiguous events. In Nancy's approach of the *singular-plural* any singularity exists in relation to other singularities. Space is the (temporal) unfolding of the exposing of singularities to one another (see James 2006: 61-62). The singular-plural mode entails a spacing, a movement of "exteriorization," a temporality that is spaced as a sharing of space-time: time is in that sense always already contemporary. As I have shown previously (Exarchos 2015), Xenakis's linking of time and space is radicalised when thought in Nancean terms: the possibility of temporal relations between the two chains of contiguous events is afforded by what the latter calls the *spacing of time*; an immediate effect of the singular-plural is that there is no pure succession without simultaneity.

The condition of the trace, which structures our temporal experience, is the contiguity-separability of entities and events. Xenakis thinks of the trace as the function of the Husserlian retention and protention; he thought that the events' traces, are "instantaneously hauled up outside of time". We can think of the trace here in the place of one of the two chains; and conversely, a single chain of events has its correlative events as traces, as another mode of the same temporal event (the sounded/resounded and the said/resaid). If, as Nancy would argue, time is always already contemporary, every sonic event is itself involved in a simultaneity brought about by a movement of tracing as the spacing of time (cf. Exarchos 2015: 9). This accounts for the Xenakian "outside of time" as what enables the experience of time in musical listening, even in the elementary instance of a single stratum of musical activity (by providing its own reference-events as traces).[21] As the contemporaneity of time is only conceivable in a

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[21] In Xenakis's compositional/analytical approach of temporality, the spacing of time is equivalent to outside-time structures as *ordered* structures, where "you can arrange all the elements into a room full of the other elements. You can say that the set is higher in pitch, or later in time, or use some comparative adjective: bigger, larger, smaller" (Zaplitny 1975: 97).

plural world of being-with in touch-separation, Xenakis's conceptualization of a universe of contiguity-separability is the prerequisite for the consciousness of time. Xenakis does use the term consciousness, but with some reservation; when he affirms that it belongs in a world of contact-separation, he also questions whether consciousness is a mental category (Xenakis 1992: 263). He does not provide an answer, but hopefully this study shows that an answer might be found in a shift of perspective from consciousness to sense.

5. Ferneyhough and Exscription

It is well known that for Ferneyhough, not only the score is not a sound-image of the work, but that the composition, in performance, is but a token of the (forced) selection-procedure by the performer. Although he employs a traditional mode of notation (that is, not graphic scores), the score is part of the work in an undecidable way (that is, according to conventional practices and uses of the terms "score," "writing," "work"). But while conventionally it might be said that Ferneyhough's scores go beyond the possibilities of representation (due to their informational overload), we see that the score operates precisely at the limits of presentation. Ferneyhough describes one of the aspects of his notational practice as the "intermediary, connecting border areas of representation" (Ferneyhough 1995: 5). He problematizes not only the notation of his own works, but the possibility of representational notation in general. This is not meant to simply say that faithful notation is impossible; beyond notation, what is problematized is the ontological status of the work itself. The work is not locatable, but is *evoked* by the notation, in a movement of a suspended presentation-withdrawal, of a syncopated presence. Thus, Ferneyhough's breaking wave is Nancy's syncope. As Ferneyhough's notation operates at the limits of representation, it invokes a function of musical notation at the "vanishing point" of musical signification. We can see this approach as *exscription*, as musical signification that exscribes a musical sense which takes place at the other side of the outer limit, as the touch-separation of sense and language.

Notation is therefore neither merely a description of sounds, nor a prescription for actions—it is not even an inscription of musical ideas; rather, the score is an exscription, an attempt to trace a specific instrumental technique and its resonance. As

such, the score is multiply removed from the sound-image of the work, although notation is as much part of the work as its performance.[22] Compositional technique is not subservient to the reproduction of internally heard sounds, but is itself an evocation of resonance (even of previously unheard-of sounds). In Ferneyhough's words, "One of the 'complex' things about 'complex' music is its quality of refusing to present a straightforward object […]: it is always perceived in the act of underlining its own ongoing and provisional nature" (1995: 69). Such provisional nature should not be taken to suggest a certain negation of the musical work; rather, it should point to the resonant nature not only of musical objects, but also of the "work" itself, indicated by the movement of the syncope (which also points to performers' and listeners' own subjectivity in Ferneyhough's feedback loop). This is what he suggests when he says that "complex" music does not rely on any representational illusion, "because of the continual problematization of the performance/interpretation context" (Ferneyhough 1995: 69).

6. Resonant Sieves

Xenakis and Ferneyhough attempted a response to the challenge of temporality in quite different ways. We see now that these responses correspond to the intricate configuration that implicates materiality and signification/representation through the movement of sense. However, it is not simply a schema of matter on the one hand and signification on the other, with sense mediating between the two. It should be clear by now that the outside/inside is not a binary opposition, but accounts for a relationship of touch-separation in fragmentary and materialist world. This is because the world is always-already constituted as sense, and in turn sense is both the possibility for language and at the same time in excess of it. According to this relation then, we can say that Xenakis's response came with a materialist world-view, a materialism that includes sound as materiality, which we can term, *sonority*.[23] In musical terms, his response took the form of pitch scales (sieves) which extend to the extremes of the audible range and which are to be performed as sonorities, rather than as scales on

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[22] Ferneyhough (1975) refers to how certain "impurities" are intended (both by composer and performer) in the attempt of a valid realisation of the score (cf. Clerc Parada 2014: 131-132).
[23] Solomos provides a post-Adornian conceptualization of sonority as the coincidence of form and (musical) material (see 1996: chapter 5). The present usage is quite different as my aims and methods here do not rely on such terms.

which melodic shapes are to be constructed. On the outside of this materialist sonorous world, Ferneyhough attempted to provide a "meaningful" place for notation, but aiming at a meaning which can only be conceived at its borders. His music ontology allows him to emancipate notation from any claims to representation, even more than language could possibly be. The latter is so because notation is implicated in a discourse of the "work" (which for Ferneyhough notation can only evoke) as an exscription at the limits of signification. What is in touch-separation with both Xenakis's sonority and Ferneyhough's exscription is precisely an excessive sense of listening: to the former listening is beyond the "liminal structures of time, space, logic" (Xenakis 1969: 51), and to the latter notating means "to listen to [the work's] echo" (Ferneyhough 1995: 5).

In other words, both composers responded to the question of temporality (and ontology) of music by dealing with two different kinds of *resonance*. Their particular responses are very close but distinct: Xenakis's sonority (as opposed to melody/harmony) is the site of touch between sense and matter (listening and resonance), while Ferneyhough's exscription (as the notation of resonance) accounts for the syncopated movement of sense at the limits of signification. Xenakis's notational practice has not received particular mention in the this article, as it never seemed to constitute a site of experimentation for him. His scores seem to mostly function as cartesian planes. In Exarchos 2015 I referred to exscription as the function of the middle category (the temporal) in Xenakis's compositional/analytical account of the 1960s. However, exscription of resonance finds a much richer meaning in Ferneyhough's approach to signification, representation and formal articulation. Similarly, Xenakis's insistent materialism is not shared by Ferneyhough, whose practice appeals more to the deconstructive function of notation, than to the physicality of sonority. Resonance therefore is to Xenakis a fundamental materiality of sound and to Ferneyhough a syncopated movement of presentation-withdrawal that implicates the subjectivity of the performer/listener and the work's sonorous presence. Interestingly, they approached this with different kinds of sieves. Although mention had been made of Xenakis's sieves as scales, Ferneyhough's sieves—to be discussed shortly—refer to formal articulation.

Xenakis utilized sieves since the 1960s, but he attempted a novel application in *Jonchaies*, as "multiplicities of timbre classes" (1977: n.p.) beyond melodic/harmonic treatment. In his own words,

> If you take a given range, and if the structure of the scale is rich enough, you can stay there without having to resort to melodic patterns—the interchange of the sounds themselves in a rather free rhythmic movement produces a melodic flow which is neither chords nor melodic patterns. […] They give a kind of overall timbre in a particular domain (Varga 1996: 145).

Later he would develop these multiplicities into a heterophonic technique that he called "artificial reverberation" (1981: n.p.); in other cases he would use sieves along with cellular automata that treat sound as a "fluid in time" (Varga 1996: 200). Sieves were used as primary material for their particular timbre, produced by playing on their continuum, linearly, as clusters, or in heterophony. A piece of this period that relies heavily on sieves is *Keqrops* (1986, for piano and orchestra). In Example 4 the winds play sieve-cluster tetrachords (each instrument plays the pitches of one tetrachord in random succession) while the piano's dense hexachords are based on a different sieve and the double basses combined with the harps play near-chromatic decachords (see Exarchos 2008: 183-184). Considering also the loud dynamics and slow tempo, the music hardly aims at any patterns other than the complex timbres thus produced. Thus, outside-time structures (sieves) are employed in order to produce resonant structures (sonorities) whose status as sonorous objects relies on a resonant materiality. To borrow Ferneyhough's image, Xenakis's music of this period corresponds more to the rock than to the wave.[24]

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[24] In a way, Xenakis's timbre classes constitute a continuation of his work on sound masses of the 1950s.

Example 4. Xenakis, Keqrops, mm. 130-33© Copyright 1986 by Editions Salabert, Paris. Reproduced with kind authorization of Editions Salabert.

In works like *Mnemosyne* (for bass flute and pre-recorded tape),[25] Ferneyhough utilizes a "filtering" of several layers, where processes might diverge or converge and thereby impulses of singular processes might coincide and even cancel each other out.[26] This kind of filtering process is as a different kind of sieve, a term Ferneyhough used to describe his compositional approach to his Second String Quartet (1995: 117-130). In this work the sieve process is aimed at "separating, as far as possible, aspects of organization from those of presentation" (Ferneyhough 1995: 118), whereby sounds stand in for silence and silences stand in for a "deliberate absence" at the "centre" of the work (1995: 117). This centre is arrived at via an accelerated convergence of musical processes (each associated with one type or sub-type of material), which interfere to the point of filtering-out or permeating each other. In Example 5 we see how m. 40, in which silence coloured by "impoverished" sounds, has undergone what the composer called a "fragile foregrounding of absence" by a multiple glissando (1995: 122). That is, two kinds of silence (literal and coloured) on two different formal layers interact in order to produce measures of one type or the other. Therefore, the method that such filtering is based on is a *formal sieve*. Such processes converge to the point of complexity shown in Example 6, where the materials seem to permeate each other; the glissandi that originally appeared as colourings of silence, now accompany the primary material in the first and then the second violin. Another instance of formal intersection between sieve-layers can be seen in the silence of m. 150. This filtering-out of the primary "unison" material by silence is not unique in the work but this time it is to be played "legato" with the same type of material of the preceding measure (unlike the abrupt "tagliare subito" in the silence of m. 133). The result is a change in the status of silence, which is now to be taken as part of the primary material (with the impossible instruction to play legato over the intervening silence). This suggests a certain absence as one "descends" to a greater convergence of musical processes, a descent that is carried out via the depth-levels provided by the layers of the sieve. The perceptual outcome of this formal sieve is for Ferneyhough a complex layering "between the

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[25] The three levels of rhythmic organization in *Mnemosyne* provide the site of multi-layered interfering functions, and they refer to (a) the downbeat stamping of the tape material; (b) the subsurface rhythmic models and their degree of explicit presentation; and (c) the interruptive activity of three independently calculated rhythmic patterns in the solo part (Ferneyhough 1995: 45).
[26] One might here note that a rhythmic model occasionally appears "syncopated" in the grammatical sense of omission.

listener and that still centre of apprehension," while listening to the work's elements "*as radiating out from it*" (Ferneyhough 1995: 118).

Example 5. Ferneyhough, Second String Quartet, mm. 39-41 © Copyright 1981 by Hinrichsen Edition, Peters Edition Ltd., London. Reproduced by kind permission of Peters Edition Limited, London.

Example 6: Ferneyhough, Second String Quartet, mm. 150-4 © Copyright 1981 by Hinrichsen Edition, Peters Edition Ltd., London. Reproduced by kind permission of Peters Edition Limited, London.

Such processes, in the above and other works, provide complex temporal frames, whereby Ferneyhough's non-linear directionality of time is constantly re-evaluated also due to the disposition of the listening body in the acoustic space. Further, as they depend on different degrees of "transparency" of the musical objects, these processes allow for varying resistances within time frames. Ferneyhough talks about the "time arrow" and how this might be "bent" at such confrontational moments. We can think this in relation to Nancy's definition of rhythm as the bending of time, the "vibration of time itself;" that is, not as the time of resonance, but, in a way, as the resonance of

syncopation, exemplified by the breaking wave. In Ferneyhough's terms, such resonant temporality is the result of the "pendulum-like motion" between subsurface rhythmic processes and the emergence of sonic events (Ferneyhough 1995: 49); events that are only perceived at the time they black out. One could say then that Ferneyhough's formal sieves are aimed at activating the syncopated movement of the work's echo.

As this article has shown, Xenakis had proceeded with increasing preoccupation with the acoustic materiality of timbre, which led to sieve-construction and complex sonorities. In a very different way, Ferneyhough's approach to temporality is inextricably linked to his notational practice, where the work (as opposed to the "Work") is evoked in a syncopated movement of presentation-withdrawal. It is a matter of two different, but associated, kinds of resonance: that of sonority (sonorous materiality) and that of syncopated presence. These involve the temporality (and spatiality) of resonance as the (re)sounding of matter, and that of the resonance of the syncope. Interestingly, both composers developed different kinds of sieves and their practice can be situated in two different "outsides" of Nancy's philosophy (materiality and signification). The relation between these is indicated by exscription; likewise, listening strains both to the limits of sonorous matter and to the echo of signification. There is no evidence that Xenakis and Ferneyhough had been in contact with each other about their ideas, nor that either of them was aware of Nancy's work at the time. However, this article has been an attempt to compare the musical thinking of these composers through their writings and work of around the same time (avoiding biographical or historical sources); admittedly, the writings by Nancy referred to here span a longer period of time, up to the recent past. However, I hope that this has proved a convincing interpretation of the thinking of all three. Further research could perhaps point to new conceptions of musical ontology and subjectivity. For the moment, the present work can also be seen as a contribution to the debate of music materiality as opposed to music signification. Neither claim can be straightforward; what I have tried here was to outline, or indeed exscribe, some ideas and practices by allowing multiple registers of resonance.

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Basso: A Low Point in the Study of Musical Meaning and Metaphor

Robert Nelson, Office of Learning & Teaching, Monash University, Melbourne, Australia

Abstract

Recent literature encourages an exploration of musical meaning through metaphor, as the affective character of music is allusive, evocative and seldom literal. But while in theory metaphor can explain aspects of musical meaning, in practice the definitions of metaphor are as vague and various as the abstract sounds that they would elucidate. Scholars have not handled the awkward historical slipperiness of metaphors which, like language, change over time. Using the example of low notes, this article historicizes the metaphorical motif of deep sounds, showing how 'high' and 'low' follow a suggestive vein of poetic intuition. Historically, 'high' and 'low' carry persistent social and moral connotations. Examining the philology behind conceptions of lowness from antiquity to the baroque, this article proposes that low notes—and low instruments and their parts—have different meanings to their higher-frequency counterparts; in particular, it inquires into how much the prevailing associations of evil and inferiority are induced upon low registers and under what conditions this 'baseness' may be redeemed. Proposing patterns for the simultaneous terror and benign authority of lowness from fields beyond music, the article argues that the backdrop of evil in bass and base (basso) is a necessary semantic element in the aesthetic development of European multi-voiced music. The moral or psychological metaphor is thus integral to the aesthetic content of music.

1. Introduction

Music can be understood as meaningful without the agency of metaphor. As Eugene Gendlin has explained, meaning consists in an 'implicit intricacy' within a sonic configuration which is 'carried forward' to the configurations that follow (Gendlin 1997 and 2004). Music, and especially instrumental music, could be considered as an aesthetically pleasing abstract set of agreements or dissonance, without reference to other realities, with a self-contained flow of accords or clashes, indicating no correspondences beyond their internal relationships. Nevertheless, since Aristotle, music has been related to imitation (Sörbom 1994) and it seems difficult to detach music from expression, which implicitly acknowledges a symbolic transfer beyond the sounds themselves. Music arrives at imitation not necessarily by directly replicating the sounds of people or nature— like chirping birds—but by behaving suggestively, by proposing an analogy to other kinds of experience, like sleeping or fighting or stealth or erotic rapture. It seems logical to see such analogies as a form of metaphor.

The idea that the meaning of music is pre-eminently metaphorical has gained scholarly momentum, encouraged through compelling publications by George Lakoff and Mark Johnson (1980, 1987, 1999, 2007) which emphasized the way that human intelligence is embodied, where physical realities are described and handled intellectually by means of analogous words or images, pictures and other sensory realities apprehended through the body. These embodied motifs transfer to more abstract arguments but, by means of metaphor, poetically recover the corporal origins of abstract thought. The ideas were reinforced by the philosopher Roger Scruton who argued that we require metaphor not just to compose music or appreciate music ourselves but to imagine the musical experience of anyone listening (Scruton 1983). Although Lakoff and Johnson have been criticized by recent scholars for perpetuating dualities of mind and body (Friedman, 2014), there is widespread consensus that musical experience gains meaning through metaphorical associations.

1.1 The question

The case is not simple, however, because metaphors vary in degree and kind; and it follows that the way we understand them has an impact on the way that we construct music in our minds (Guck 1991 and Hatten 1995). It is tantalizing to posit meaning in the metaphorical agency of music, because an analysis of different kinds of metaphor could potentially explain different aspects of musical meaning. This important discourse has far-reaching implications for musical scholarship, as Andrew Friedman sums up: 'At stake, then, is nothing less than a theory of musical meaning' (Friedman 2014, 9). Potentially, metaphor explains the ineffable quality of music; but there is a problem of circularity in the quest, because metaphor is itself fugitive and hard to generalize, sharing much of the ambiguity in the phenomenon that it describes.

Some metaphors are colourful extensions of language, where we describe psychological or intellectual things by means of physical things. An example is 'a weighty discourse' or a 'lightweight theory'. As applied to people, one could describe 'a warm person', meaning a generous or encouraging person, as opposed to a 'cold individual', that is, an unsympathetic character with an impersonal manner. Both humans have a similar thermometer reading at c.37°; but we immediately know that the reference to temperature is figurative and that it refers to character. Other kinds of metaphor, however, are more an inevitable and intrinsic part of language, integral with the structure of words from their various roots, like 'interpretation', whose roots mean a 'take' on something that you communicate between people. Most abstract words have this metaphorical dimension—like metaphor itself, a carrying across or transfer (φέρω, I carry)—revealed in an etymology of physical verbs. Then there are other kinds of metaphor which also derive from an image where there is no alternative expression. Language is an example, where the word derives from the tongue; but even if we say: 'English is my mother tongue', the tongue is not the tongue itself but the structure of words and sounds—admittedly partly shaped by the tongue—which goes far beyond the physical reality of the long spongy muscle in the mouth and gullet, which is shared by dogs and cattle who do not have language. Into this category is the description of degree, like 'high and low', which can apply to so many operational things, like income tax, as well as physical things like walls or trees. When we say a high honour, we mean a great honour, a considerable gesture of praise. But the metaphor for a scale of virtue is ambiguous and seldom absolute,

as we know when we speak negatively of the 'height of rudeness', or 'highly arrogant' or even 'high hopes', which may be convoluted and sarcastic; and similarly, our positive 'weighty discourse' above can be contrasted with a 'heavy case', which is onerous and burdensome.

We are used to metaphors applying to music such as walking and running or fighting, already enshrined in tempo markings like *andante* and baroque suite names such as *courante* or *battaglia*; and literal associations with corporal movements are the origin of any dance like *gavotte* or *passacaglia*. It seems semantically obvious to describe these musical ideas as metaphor; if anything, the question is whether they are more like dead metaphors, commonly accepted phrases, which some scholars consider hardly to be metaphors at all (Pawelec 2006). So too with the description of pitch. When we speak of pitch as high and low, how much might the description be considered metaphoric, before we imagine the rising and falling induced upon the emotions through melody? Can we even say what is a metaphoric description and what is an awkwardly *de facto* physical description, albeit with metaphoric origins? Recent scholarship has brought us to a paradox, where we understand that music gains meaning through metaphor but we have difficulty identifying where metaphors start and stop. Because the metaphors are so basic to the way that we describe even the most technical aspects of music, it seems hard to judge where the metaphors go beyond their physical origin. So while there is much promise that metaphoric readings might be possible, the tempting link between music and metaphor is deadlocked by vagueness, and we are frustrated in gathering useful semantic corollaries. Further, though recent scholarship has scrupulously parsed the most philosophically interesting interpretations of musical metaphor in its symbolic elasticity, none, it seems, has considered that metaphor is also a shifting linguistic phenomenon that must be historicized to make sense when applied to any example of music in history.

This article examines one example which typifies the ambiguity of musical metaphor of a technical nature, namely the description of pitch at one end of the scale, that is, lowness. Like so many other terms where language scrambles after the sensual uniqueness of music, low notes are not pre-eminently understood as metaphorical but rather the notes to the left on the keyboard, or the notes at the bottom of the stave. Exactly how much metaphorical pregnancy should be ascribed to this sense of the scale remains open to question. Rather than seek to answer the question in the abstract, the method

followed in this article is to open up the historical perspective, where various perceptions of lowness from antiquity to the baroque help us understand the suggestiveness of low notes in music; and in this way, the inquiry also helps us understand how metaphor builds meaning in music.

1.2 A Method to Triangulate Lowness

The method followed in this article is designed to establish a third point against the apparently inscrutable line between music and metaphor. This point is the history of the chosen metaphor, independently garnered from the history of ideas and at times poetic phenomenology. The key to the method is to scrutinize the metaphor in general language, as far as possible from the technical acceptation of 'low notes' as opposed to 'high notes'. As the first study of its kind, the article identifies the way that lowness was spoken of in general narratives throughout formative periods of western music, art, literature and design, from antiquity to the baroque. It does not follow a canonically musicological method so much as an independent philological analysis, to be brought back to the application of music throughout the periods in question.

2. Can Lowness be Metaphorical by Coincidence?

High and low, like long and short, are among the most pervasive metaphors in common language and are also the organizing metrics of music and compositional forms like architecture. We find it hard to talk about mood or psychological processes or social status without using such metaphors (and of course the very word 'hard' involves an analogous metaphor, also used in music in some languages for major and minor, like the German *dur* and *moll*). All the basic physical properties that function dichotomously—like sharp and blunt, push and pull, light and dark, shallow and deep, thick and thin, point and area, heavy and light, head and bottom, to say nothing of relational prepositions like on and off, over and under, to and from—are drawn into abstract language through metaphor. We would have a much impoverished vocabulary for abstract thought without the agency of metaphor. Abstract words are frequently based on metaphors, like 'conception', which is a 'grasping' (*cepo*, Latin for 'I grip'). Many lofty abstract ideas are expressed by means of an earthy expression of direction or size or mass or pointedness and so on.

Aesthetic metaphors are complicated because they are seldom purely aesthetic but often carry moral connotations. High and low are a case in point. In music, there may be no implications of high and low notes having a different moral value; but in common speech, high is associated with excellence and low is associated with the abject. Certainly, the notes in music may all have a similar merit; but in common speech, we may still say that the performance will be a 'high-point' or a 'low-point' of the season; and a musician, just like a dentist, will be held in high esteem or low regard. There are few areas of life that avoid these connotations; and so a question arises as to whether or not lowness in music itself is conditioned by the prevailing metaphor. As already intimated—and as will be investigated closely—the word for bass is derived from low in Italian (*basso*) which is also the origin of our word for evil or turpitude, base.

Could it just be an accident? After all, there are other metaphors by which we can describe the low notes in music. Low notes can be called deep, a word which has positive associations when contrasted with 'shallow'. It works in other languages, too, where deep (like Italian *profondo*, German *tief*) has connotations of penetrating intellectual or spiritual powers, in contrast to the superficial. Again, leaving aside the notes, one prefers a composition which is deep rather than shallow, where shallow would mean frivolous or full of clichés. So with the notes, perhaps it is nothing but a coincidence that we speak of high and low; surely it belongs to the natural elasticity of language that we immediately adjust from a judgemental perspective to a physical one. Words are never entirely adequate to the phenomena that they describe, which depend on context to be exact; and in music, in particular, we can expect a gap between common usage and technical acceptation. An example might be the terms 'major' and 'minor', which normally suggest a hierarchy or scale from important to trivial, whereas musicians impute no more greatness to 'major' than to 'minor'; and, as noted, a different metaphor might apply to the same phenomenon in another language. If anything, we would attach less triviality to the minor keys, as they communicate gravity and pathos. Bass may share a derivation with base; but we instantly switch our frame of reference in the same way that English spelling indicates (bass or base); and so too with low, which in one context means inferior but in another might have neutral connotations, as when one apartment is lower than another, which casts no necessary reflexion on its merit. Language is never perfect; and the association of low with baseness has no great relevance to a musical scale, especially

when we can describe low notes or parts in music as deep, with positive and flattering connotations of profundity which offset the philological accident of bass aligning with baseness.

2.1 Is Deep Good?

But is it true that deep and profound always had such grand and sympathetic connotations? In renaissance and baroque times, deep is more usually associated with negative conditions than positive ones. We tend to see deep—as in deep emotion or deep thinking—as the opposite of shallow; but in older usage, the pattern was reversed: deep was more likely to have been opposed to the heavenly. A strong spatiality haunts the metaphor, in which deep is literally low or nethermost, equated with the bottom (*ima e profonda*, Tasso, *Rime* 120.3). As in the well-known hymn *De profundis*, out of the depths I cry to thee, the depths represent the dark and abject crisis, as in Tasso (*dal profondo oscuro a te mi volgo*, 747.4.9). One powerful image-root for the word is the tomb—'to see how deep my grave is made' (Shakespeare, *2 Henry VI* 3.2)—where the coincidence of low and abject is somehow fateful and gloomy, in effect 'the profoundest pit' (*Hamlet* 4.5) because it buries life itself.

Never far from the motif of burial, the metaphor struck sinister roots. Depth is frequently linked to forgetfulness (*profondo oblio nel core*, Tasso, *Rime* 129, 1085.1.11 and 1094.4.4), as in Shakespeare's 'deeper than oblivion' (*All's well that ends well* 5.3) or Racine's profound forgetfulness (*en un profond oubli*, *Phèdre* 2.6). From the fourteenth century to the baroque, shades of the mortal occur often in the description of deep scars or wounds (*la sua piaga aspra et profonda*, Petrarch 342.4, 'Deep scars to save thy life', *Comedy of errors* 5.1; 'The private wound is deep'st', *Two gentlemen of Verona* 5.4), though deep wounds could also be valued from early times as the invasion of the erotic into the fibre of soberness (*le prime piaghe, sí dolci profonde*; Petrarch 196.4), in the same way that you might poetically celebrate a deep river of tears (Petrarch 230.9–11) which Shakespeare still enjoys in 'My heart's deep languor and my soul's sad tears' (*Titus Andronicus* 3.1).

2.2 Depth and Damnation

Directly moral conditions described through depth are mostly negative. For example, shame is deep, as in Shakespeare's 'deep shames and great indignities', (*Comedy of errors* 5.1) or 'Deep shame had struck me dumb' (*King John* 4.2). It arises with deprivation, as in 'deepest winter in Lord Timon's purse' (*Timon of Athens* 3.4) or hatred, as with 'The deepest loathing to the stomach' (*A midsummer night's dream* 2.2) or malice and evil: 'Deep malice makes too deep incision' (*Richard II* 1.1) or 'the deepest malice of the war' (*Coriolanus* 4.4), like Macbeth's murderous 'black and deep desires' (*Macbeth* 1.4) or grief and pain, as in 'the poison of deep grief' (*Hamlet* 4.5) or Racine's '*douleur profonde*' (*Phèdre* 1.2). Most memorably, depth is linked to hell, as in Racine's deep abode of the dead (*des morts la profonde demeure*, *Phèdre* 2.1) or Shakespeare's 'pond as deep as hell' (*Measure for measure* 3.1) or 'deep as hell I should down' (*Merry wives of Windsor* 3.5) or the sin that takes you there, 'such deep sin' (*Richard II* 1.1) or 'Would I be guilty of so deep a sin' (*Richard III* 3.1). Thanks to its abiding physicality, depth is profoundly linked to the abyss (*ne gli oscuri d'oblio profondi abissi*, Tasso, *Rime* 107.14) or Shakespeare's 'deep pit, poor Bassianus' grave' (*Titus Andronicus* 3.1) or Racine's '*Les abîmes profonds qui s'offrent devant moi*' (*Esther* 3.1), '*Dans un gouffre profond Sion est descendue*', (*Athalie* 3.8) and hence Shakespeare's 'deep damnation' (*Macbeth* 1.7). For that reason, too, it goes with gaol (*dal mio carcer profondo*, Tasso, *Rime* 668.8; *Ora, in carcer profondo, o son cresciuti, ibid*. 696.1.9 and *cava profonda*, 698.1.12). More than any image, deep is associated with the ocean, often threateningly, as in Tasso (*alcun'onda nel profondo letto*, 1149.7 or 1354.1.5) or Shakespeare, 'Into the fatal bowels of the deep' (*Richard III* 3.4) or Racine (*dans la profonde mer Œnone s'est lancée*, *Phèdre* 5.5).

2.3 Depth and Awe

Sometimes, depth is associated with calm and sleep, as in Racine ('Dans un calme profond Darius endormi', *Alexandre le Grand* 1.2, 'Jérusalem goûte un calme profond', *Athalie* 2.5, 'Tout d'un calme profond lui présente l'image', *Athalie* 5.3) or silence ('è profondo silenzio in umil core', Tasso, *Rime* 351.15, 'profond silence', *Athalie* 1.2 or 5.1) and peace ('une paix profonde', *Alexandre* 2.2 and *Bérénice* 2.2) and quite often the night, as in Shakespeare's 'deep of night' (*Julius Caesar* 4.3 and *Merry wives of Windsor* 4.4)

or Racine's '*nuit profonde*' (*Britannicus* 2.3) or the horror of a deep night ('l'horreur d'une profonde nuit', *Athalie* 2.5, *Athalie* 3.4), which is so often both calm and black. Shade, of course, is related both to depth and to hell, as in Racine ('des cavernes sombres / Lieux profonds et voisins de l'empire des ombres', *Phèdre* 3.5).

Occasionally, depth is related to respect, as in Racine ('Par de profonds respect', *Bajazet* 3.2; 'mes respects profonds', *Bajazet* 3.3, 'ces profonds respects que la terreur inspire', *Esther* 2.7) which express sentiments of awe and, from early times, the heart was often described as deep (*cor profondo*, Petrarch 94.1, 310.9–11) and sometimes the deep heart is revealed by the surface of expression (*le paure et gli ardimenti / del cor profondo ne la fronte legge*, Petrarch 157.5–6). So too the deep breast (*nel profondo petto / i gran secreti suoi nasconda e cele*; Tasso, 238.6–8) which is echoed in Shakespeare's 'profound heart' (*Twelfth night* 1.5) and which perhaps resonates with sighing in Shakespeare: 'Why sigh you so profoundly?' (*Troilus and Cressida* 4.2) and 'He raised a sigh so piteous and profound' (*Hamlet* 2.1), which can also betoken something dangerous in 'these sighs, these profound heaves' (*Hamlet* 4.1).

2.4 Depth and the Treachery of Thought

Depth is connected with thinking in a dubious way, as in Shakespeare's line that 'the conceit is deeper than you think' (*Taming of the shrew* 4.3). It can be linked to wisdom ('sa sagesse profonde', *Athalie* 3.6); and when the renaissance Tasso speaks of it, he poetically relishes the paradox that knowledge can be both high and deep ('sì alto sapere e sì profondo', *Rime* 891.1.4, *cf.* 985.4.11 and 'sì che traluce al mio pensier profondo', 1355.2.3), which is like the contemporaneous Bandello's high and deep questions ('questioni altissime e profonde', *Novelle* 2.50). Bandello also describes someone as so deeply steeped in love (*sí profondato nei suoi pensieri amorosi*) that he forgot to eat (1.23). Although one can laud deep science ('profonda scienza', Bandello 1.35), it seems telling that when Bandello describes a deep theologian (*profondo teologo*, letter at 3.9) the example is Martin Luther, a rogue heretic to be trusted in no circumstance. Luther for Bandello is like Shakespeare's Gloster, 'a man / Unsounded yet and full of deep deceit' (*2 Henry VI* 3.1). Most strikingly, depth is associated with duplicity: 'both dissemble deeply their affections (*Taming of the shrew* 4.4). It calls for 'deep suspicion: ghastly looks' (*Richard III* 3.5) and 'So deep suspicion, where all faith was meant' (*Henry VIII*

3.1). Thus does one 'take deep traitors for thy dearest friends' (*Richard III* 1.3). Depth is not to be trusted, like 'some shallow story of deep love' (*Two gentlemen of Verona* 1.1). It toggles treacherously with emptiness and deception (Deep, hollow, treacherous, and full of guile, *Richard III* 2.1) and so too can one 'counterfeit the deep tragedian' (*Richard III* 3.5). Depth seems never far from concealing evil, 'with a virtuous vizard hide deep vice!' (*Richard III* 2.2), and is apt to describe a malevolent pact: 'She's with the lion deeply still in league' (*Titus Andronicus* 4.1). The same twist occurs with the English word profound: 'A huge translation of hypocrisy, / Vilely compil'd, profound simplicity' (*Love's labour's lost* 5.2). To be deep is possibly to be fake: 'to be dress'd in an opinion / Of wisdom, gravity, profound conceit' (*Merchant of Venice* 1.1).

2.5 Depth and Fear

Caution must be exercised in these associations, because the metaphor of deep might be seen as merely a statement of degree; so like the word 'extreme', it has no intrinsic value or meaning of itself but only represents an intensity of the thing that it describes, whether good or bad. So Shakespeare's 'deep demeanour in great sorrow' (*2 Henry IV* 4.5) or 'deep melancholy' (*2 Henry VI* 5.1) or 'deep despair' (*3 Henry IV* 3.3) or even 'profound sciatica' (*Measure for measure* 1.2) and 'deep rebuke' (*2 Henry IV* 4.5) are not in themselves telling signs of negativity in depth. In a neutral way, one can laugh so hard or deeply that you split your sides: 'With such a zealous laughter, so profound, / That in this spleen ridiculous appears' (*Love's labour's lost* 5.2).

There is no doubt that profundity can be positive, as with religiousness, 'More holy and profound' (*Coriolanus* 3.3). Shakespeare acknowledges 'profound Solomon' (*Love's labour's lost* 4.3) and there is something wrong if 'fools should be so deep contemplative' (*As you like it* 2.7). But the trend is to identify depth on an axis that has divinity up high and the tomb down low. Only occasionally is deep associated with sound, as in 'the deep dread-bolted thunder?' (*Lear* 4.7) and 'the thunder, / That deep and dreadful organ-pipe pronounc'd' (*Tempest* 3.3) where it is directly intimidating; though as we will see with the Italian baroque, it can also be benign, albeit in a spooky way, evoking the death-rattle: 'O, but they say the tongues of dying men / Enforce attention like deep harmony' (*Richard II* 2.1). It is wholly benign in another rich analogy: 'For government, through high and

low and lower, / Put into parts, doth keep one in consent, / Congreeing in a full and natural close / Like music." (*Henry V* 1.2).

Although there is no absolute certainty, it seems that things that are deep have a sinister fearsome resonance, threatening and grave, which aligns with both the tomb and gravity. When in music, a low voice underlies a high voice, it seems likely that the sighs and groans, the deep rebuke, suspicion and dread transfer somewhat to the great abstraction of music. Subjectively speaking, some of the counterfeit survives in the counterpoint, as if the instruments of different pitch are in contention, with the high notes figuratively seizing the high moral ground and the lower notes bringing to them the condiment of gravity—but with lots of clashes and piquant discord—, something dark and dangerous, a bit threatening and matching the flight of certain melodic high voices with gloomy horror.

3. Dynamic Metaphors

Metaphors are capable of inversion. For example, in painting, the beauty of light (extolled by poets as divine and hallowed) owes its lustre to darkness, which explains why so many luminous renaissance and baroque masters like Titian, Guercino or Rembrandt preferred a dark background. In the art of painting—where the purest white is still quite dull compared to sunshine—the light takes on a richness not by dint of white paint but the contrasty support of luminous shadows; and, as Tasso says, a painter never threw in colour to depict the beautiful night just as you do not mix fine light with deep shadow (*né mesce a sì bei lumi ombre profonde*, 411.3). Under the title of *chiaroscuro*, darkness, typically associated with evil and ignorance, is paradoxically integral to virtue (Nelson 2011). The element which is stigmatized turns out to be the platform upon which the glory relies. It is true of all illusionistic painting, not just the tenebrism of the baroque. There is nothing in a picture which appears as light unless a couch of shade can allow it to assume its radiant definition, else we look at whitish paint of no evocative properties.

In aesthetic terms, high and low are even more integral to one another. A tune—setting aside the invention of harmony or vertical sound—consists entirely of higher and lower notes by longer or shorter durations; and, because in a melody we love all the notes irrespective of pitch, there may be no pre-eminence of the higher ones. If language credits higher things with greater virtue, it seems immaterial in playing or listening to music.

However, in some music, it seems as if the higher registers have a more prestigious role because they seem to spearhead the melody; further, in some music, very high notes are hard to reach with accuracy, as with a triumphant vocal *coloratura*, clinched at its tense heights with great relief to the audience once achieved. High notes may be hard to reach (as with a recorder, once it goes beyond two octaves) but the low notes are also often hard to play with force. In one sense, however, it makes little sense to say that the high notes in a single line of melody are more valuable than the lower notes, because they all manifestly form an integral and organic totality which we call melody.

Why, in any case, musical notes should be described as high and low—when physics distinguishes them by frequency—has been questioned by scholars from psychonomic disciplines (Maeda, 2013) who argue that auditory pitch induces a visual motion illusion and hence attracts the metaphor which it would not take on by qualities inherent in the sounds. A more prosaic response might be to draw attention to the conventional structure of writing music on the stave, in which the high notes are literally higher up on the graph, arguably with no necessary logic. Alas, we cannot easily test the theory that the stave determines high and low, because western vocabularies do not reveal a time when high and low were used of musical sounds prior to the epoch of written music. Music was already written down in ancient Greece, leaving only the Homeric period as prenotational. Homeric Greek, however, does not apply high and low to music. It is also notable that while there may be a more flattering alternative to express low notes—namely 'deep' notes, though it remains uncertain—we cannot see a parallel with high notes, which have never been described as shallow, even if sometimes the colour might be described as 'shrill'. If we use another generic word, it might be the 'top' notes. Wherever the metaphor of high and low prevails, implicit value judgements are not far away, favouring high and begrudgingly admitting the low.

3.1 The Application to Music in Multiple Parts

Just as we might feel inclined to see music resisting the implicit morality of high and low (high being the good and low being the bad or base, *basso*, by that telling ambiguity of language), music is much more than melody. Melody may be the pre-eminent quality of western metrical music; but in most performed genres since the middle ages, music was arranged in different voices. Initially, this may have involved little more than a drum or

drone that accompanied one voice, more or less providing padding or a beat for the single voice that rose above it. But the bulk of early music already reveals a bass part. With the development of the keyboard, the bass notes could even be played in the left hand by a single performer while the right hand typically provided the melody on the higher side of the scale.

The continuity of the drone is perhaps recalled in the delightful Italian baroque term *basso continuo*, a bass line that keeps going, or as English musicians would say in the same period, a 'thorough bass', meaning a bass that runs through the piece ('through' and 'thorough' possessing the same etymology). Romantic music makes us think that high and low instruments are put together to make a duet; but that conception does not belong to earlier music, right through the baroque. Even in the romantic period, a piece for violin and piano is not referred to as a duet but a violin sonata (with accompaniment). In the baroque a solo which is unaccompanied is rare and will often be published with the stipulation of being unaccompanied, so that there is no confusion and musicians do not go hunting for the missing part or invent one for good measure.

3.2 The Authority of the Bass

Baroque music is metrically regular but the most regular aspect is always the bass part. The final note tends to be the keynote in the bass part rather than in the treble part if the two do not agree; and the rhythm is maintained most metronomically by the bass. Sometimes, as with an *ostinato* or a ground (and what a telling word that is!) the bass has a role little different to beating time, but lending agreeable harmonies as it goes. Ornament on the bass is not indicated and rapid sequences are often reserved as a kind of wobble that underscores a longer note in the alto voice. Although such moments invite virtuosity in the bass player, there is little doubt that the glory goes to the high voice, while the low voice pumps beneath, acting a bit like a spongy mattress while the alto has all the cerebral fun on top.

There is a physiological basis to high and low as a means of describing frequency or pitch. Deep notes, like those made by a drum or an organ, are felt deep in the chest and belly in a way that reverberates within the internal cavities, whereas the high notes sit rather in the intellect. Eiichi Tosaki (2013) has suggested that this deeper corporal resonance is also the reason that low notes are preferred for collective contexts, like the

drums of war or protest that awesomely shake all lungs—underscoring the solidarity of the troops and bringing terror to the quaking adversary—with the same kind of thud by which we might beat our chest. It might also account for the popularity of the deep beat for dancing in rock music, which is dominated by the electronic bass guitar as well as deep percussion.

A wise anonymous reader, presented with these conundrums involving moral links to high and low, suggested that one might also consider the way that the bass in vocal solos aligns with darkness, giving Handel's *Messiah* as an example. In the *Messiah*, the solos for bass are

5. Thus saith the Lord of hosts

10. For behold, darkness shall cover the earth

11. The people that walked in darkness have seen a great light

40. Why do the nations so furiously rage together

47. Behold, I tell you a mystery

48. The trumpet shall sound.

Meanwhile, the reader notes, 'the other voices comfort the people, express prophecies, tell good things to Zion, tell the people to rejoice, describe the Lord feeding the flocks, tell the story, give voice to angels, and know that the Redeemer lives.' An analysis of solo pieces and choral movements started by the bass voices is beyond this study; however, in baroque opera, the bass voices, though often aligning with severe characters, are frequently benign, like the avuncular Solone in Cesti's *Orontea* of 1656. The investigation proposed by this article, however, is not about a voice *qua* protagonist but a voice as integral to the total sonority, as in an instrumental sonata or any SATB composition of the period.

3.3 Bass by Convenience rather than Design

Instruments in early music were somewhat interchangeable, provided the notation did not exceed the range that the instrument comfortably plays; and even eighteenth-century composers like Telemann sometimes indicate flexibility, labelling the solo as for violin or flute or oboe, meaning that there is nothing lower than a middle C or higher than a

D#'', which would also fit on a tenor recorder. But when it comes to the *basso continuo*, anything goes. Scores by Handel and others provide the traditional 'figured bass', which means a single line, so that it could easily be played by almost any deeper instrument, a viola da gamba, a bassoon or a bass recorder, anything that might reasonably interpret the line, from a single one-note-at-a-time instrument to ensembles of viol and theorbo. Beneath the stave, there are numbers which indicate the way the single line can be interpreted with chords on a harpsichord or chamber organ, which of course gives the cue to modern editors to create versions for violin and piano, the combination of choice in modern music. But the solo scores that Handel left us, like most composers before him, have the typical thorough bass, written as one note at a time, that allows for chords or single notes in the depths behind the melodic voice.

The bass in much western music means the background. There is undoubtedly a solo repertoire, especially for the beautiful bass viol, which enjoys its own company and received special attention from composer-gambists such as Sainte-Colombe; and the *Six suites for unaccompanied cello* by Bach count among the masterpieces of western music. But these are the exceptions that prove the rule. If one considers all music in which bass instruments feature (and especially baroque music), the bulk of it consigns the beautiful deep company to a lower profile relative to the higher voices. In later music, there are notable and memorable exceptions, such as the sombre bassoon part that begins Tchaikovsky's *Fifth Symphony*; and the epoch of electrical bass guitars introduces another order again.

3.4 Bass and Gender

High and low become predictable because of hierarchies and scales. In a choir, for example, the bass voices are sung by the men, who naturally stand at the back because they are taller, perhaps to one side; and in any case, the audience cannot easily detect where their voices come from because the long sound waves have no directional address, like the woofer in a sound system which engineers have decided does not need to be split into stereo, as its inscrutable long sound waves always come from no discernable quarter, regardless of where the unit is placed. The bass and baritone voices are rich and impressive, with all the seduction of the *viola da gamba* or any other bass instrument of suave sonorities; but they are sent to the back because the weighty notes are made by big

men who chivalrously recede in space, whose role is to provide the loyal harmonies and to let the women or children—who stand out sonically and spatially in the foreground—seize the limelight with the more melodious parts. It could also be suggested that the higher frequency tones do not travel as well as the deeper, and so need to be placed closer to the audience. With instrumental music today, there may be no correlation between bass instruments and male gender; however, it is notable that in certain traditions, the very deep instruments, like the didgeridoo in Australian Indigenous culture or the dungchen in Tibetan culture, are exclusively played by men.

3.5 Bass and Abstraction

The abstraction of the keyboard conceals this somewhat logical equation of bass with big, where the long and deep 'male' wires are struck or plucked by keys that all look alike irrespective of their pitch. The abstraction is completed with the design of the upright piano which encases all wires in an even horizontal box, unlike the grand piano or a harpsichord whose irregular shape acknowledges the longer wires on the left. But even with an organ, whose display of enormous bass pipes seems so radically demonstrative, an F at one end of the keyboard looks just like an F at the other end. One makes a high note and the other a low note; and even using our figurative imagination at its most elastic, we have difficulty imagining that the right hand side of the keyboard is like the female part of the choir and the left hand is like the male. If we think that way at all, it would be to confirm the association of evil with the left (*sinistro*, sinister, αριστερός, σκαιος, ὑπόσκαιος, all of which have negative associations). In practice, keyboard music is complicated and does not always encourage such dichotomies. Sometimes the left hand is reserved for underlining and keeping the beat but usually both hands have so much to do that we would not easily notice that the deep hand does obeisance to the slightly livelier one on the right, much less impute anything untoward in its rumblings.

4. The History of Lowness from Archaic Times

The history of lowness reveals disconnected levels of physicality and abstraction. It was long used as a metaphor for class; and, as Naoko Yamagata (2003) has shown, the metaphor is not only common to different epochs but different geographies. In ancient Greek, one could evoke lowness or lying low (βαθύπεδος) by speaking of depth or

deepness, as in the verb to utter low-pitched sounds (βαρυφωνέω). Sometimes, the idea of moaning in a low tone (ὑποστένω, ὑποστενάζω) or uttering low moans could be conveyed by coupling the motif of pressure with the preposition of 'beneath' (ὑπο-); but low in this sense can also mean low or little volume rather than low tone, if one thinks of a moan as the quietest form of a cry or yell.

There is also an almost onomatopoeic vocabulary to describe grumbles (μινυρός), complaining in a low tone, whining, whimpering (τρύζω), to make a low murmuring sound. And most relevant to music, there is a technical vocabulary to describe the lowest of the three strings (νεάτη, by contrast to the middle, μέση, and ὑπάτη); tellingly, however, the lowest string (νεάτη) is the highest in pitch (Plato, *Republic* 443d, Aristotle, *Physics* 224ᵇ34, *Metaphysics* 1018ᵇ28, 1057ᵃ23), so the lowness describes its physical location on the fingerboard rather than the sound that it makes. This inversion could be taken as indicating that the more metaphoric idea of 'low' as a sound was weak compared to the physicality of 'low' as a position in space. Also, if a hierarchy is to be observed, it too is in reverse order. The string which is highest on the fingerboard makes the deepest sound, and is described as the consular or governing string (ὑπάτη). Finally, the root for the lower string that makes the higher sound (νέατος) only takes on the meaning of lowest in the sense of 'the uttermost'. It seems archaic and does not feature in Greek much later than Homer (*Iliad* 11.712, 9.153, 295) where it is always spatial (*Iliad* 5.293, 857, 15.341) and sometimes simply means extreme or outermost (*Odyssey* 7.127).

To indicate directionality, one could also use the preposition of 'down' to describe the lower (κατώτερος) and lowest (κατώτατος), which really mean 'further down' and 'downmost' respectively. An authentically 'low' is hard to find. Classical Greek recognized the nether regions of the underworld (νέρτερος), belonging to the lower world of a theology (Sophocles, *Oedipus at Colonna* 1548, *Antigone* 602, Aeschylus, *Persians* 622), the nether ones (νέρτεροι), meaning the dead (Aeschylus, *Persians* 619), those domiciled in the earth, (Sophocles, *Oedipus at Colonna* 1576). But these are archaic in exactly the same way that the word 'nether' in English only survives in the word netherworld or jocular uses.

4.1 Low and Humble in Ancient Greek

It is not necessary to investigate our concept of low through all prepositions, which even in the English language are complicated in their application, as with 'under' in underdog or understanding. The prepositions signal the inferior and the lofty depending on the words to which they are attached, where the concept of 'beneath' is either an expression of indignity or solidity, with the implication of providing a base upon which one stands. But the outstanding Greek concept to describe lowness in a metaphorical way is the humble lowness (ταπεινότης) which arose in classical language but became powerfully inflected in biblical Greek. Originally, the concept was geo-physical and applied to low lying places or areas (χώρη, Herodotus 4.191) or low regions (Pindar, *Nemean odes* 3.82) but extended to people of humble or powerless station (Herodotus 7.14, Aristophanes, *Prometheus* 322, Xenophon, *Anabasis* 2.5.13) or 'abased in pride', as a famous lexicon has it (LSJ *sv.*).

4.2 The Elevation of Low in Hebraic and Christian Tradition

The great enrichment of the concept arose in Hebraic Greek where this condition of disempowered humility precisely expressed the pious ideal of devotion to God. Consider terms like 'of humble mind' (ταπεινόφρων), which signified mean-spirited or base in the classical tradition (Plutarch 2.336e) but shed its pejorative sense in biblical Greek, where it denoted the opposite of arrogance or presumption but lowly in mind or humble (*Septuagint*, *Proverbs* 29.23, *1 Peter* 3.8). Given that God is supremely high, it is a great temerity to vie with him; and the person who submits to being extremely low must be considered more pious than the proud. Jesus himself says that 'I am meek and lowly in heart' (ταπεινὸς τῇ καρδίᾳ, *Matthew* 11.29) and commends this condition to us all. If follows that in Christian philosophy, there is at least a theoretical inversion of high and low, because God 'hath put down the mighty from their seats, and exalted them of low degree' (ὕψωσεν ταπεινούς, *Luke* 1.52) which extends to geography (3.5). The apostle Paul exhorts the good people of Rome: 'mind not high things, but condescend to men of low estate. Be not wise in your own conceits' (*Romans* 12.16), advice which is echoed frequently (*Ephesians* 4.2, 4.9): 'Let nothing be done through strife or vainglory; but in lowliness of mind let each esteem other better than themselves' (*Philippians* 2.3).

The promise in Christianity is that 'the brother of low degree' can 'rejoice in that he is exalted', while 'the rich…is made low' (*James* 1.9–10). In later epochs, this thought would be matched to classical stoicism, where one sees the humble exalted not so much because of a promised afterlife as avoiding the corruption of ambitious courtly wealth. As the seventeenth-century Italian poet Giambattista Marino says, by this lowly state, a kingdom is nothing; because despising treasure nor caring for gold, that is the golden age; that is the treasure' (*Adone* 1.147). Roman culture would not have immediately recognized the topsy-turvy logic of the *New Testament*. In Latin, which was at its height around the time of Christ, the dichotomy of high and low could hardly have been more rigid. We still use the words by which they describe the twin poles of fortune—superior and inferior—as if orthographically unchanged from antiquity. But the terms have indeed mutated semantically, because their meanings were originally physical (high up and low down or upper and lower), whereas our understanding of them is social, moral or aesthetic by metaphor.

4.3 Coincidence of Base and Base

Whatever the word or language, the concept of low is apt to descend into abjection. The Latin *inferior* was almost predestined to become lesser, poorer and shabbier in the modern languages. So too with the late Latin *bassus*, which is the origin of the Italian *basso* and which, as noted, is our 'bass' but also base in the sense of Shakespeare's 'degenerate and base' (*Two gentlemen of Verona* 5.4). In Latin, it remains an obscure etymology of uncertain origins in a person's name. It is possible that Bassus—indeed a person's name in Roman times—was a bit like Mr Short or Mr Low (though not Lowe, which is a lion in German, *Löwe*). The only times when the English 'base' is positive are when it is derived from the entirely independent Greek word basis (βασις), as in a statue standing upon a podium or base, or an argument having a good base in a bed of fact, as in Shakespeare's 'on base and ground enough' (*Twelfth night* 5.1), in which the ground simultaneously suggests a sound base in the sense of basis, just as the word for ground in German (*Grund* and the plural 'grounds' in English) means cause or reason. This noble meaning has a musical corollary in the ground of baroque music, an *ostinato* in the bass voice.

It is a coincidence of language that base and base (a) sound the same and are spelled in the same way and (b) both indicate something low down. They are identical phonologically and parallel in meaning; but they are unrelated in origin and have no philological connexion, a little like sorrow and sorry, imminent and immanent, grave (Latin heavy *gravis*) and grave (Germanic tomb, *Grab*). When derived from the Latin (*bassus*), base is evil and rotten, as in Milton's 'basest things' that 'Ambition and Revenge descend to' (*Paradise lost* 8.168–71). Whoever aspires to soar high 'must down as low' (*Paradise lost* 7.149). Already in Shakespeare, the spatiality would provide scope for jokes: 'I do affect the very ground, which is base, where her shoe, which is baser, guided by her foot, which is basest, doth tread' (*Love's labour's lost* 1.2) and, long before, Dante had explained that the lower foot is always the firmer ('sì che 'l piè fermo sempre era 'l più basso', *Inferno* 1.30).

4.4 The Charms of *Basso* in Italian

The same *basso* that gives us base also gives us bass. Like the bass in music, *basso* means low but does not necessarily carry the opprobrium of inferior. In the Italian poetic tradition, *basso* has a more redemptive trajectory. As if recalling the modesty of the first Christians, Italian poets approved of a humble mien with low gaze ('la sembianza umile / con gli occhi bassi', Dante, *Vita nuova* 13; *cf.* 'li occhi vergognosi e bassi', *Inferno* 3.79, or Petrarch's damp and lowered eyes ('occhi humidi et bassi', *Canzoniere* 304). The attribute is especially admired when brought on by the modesty of a knowing sexual attraction, a titillating gestural coyness which is echoed in later poetry. By the sixteenth century, low looks could take on a distinctly naughty complexion. Tasso, for instance, lavishes praise on the goddess-like Countess of Scandiano, but his eye is really taken by her maid who has a cute and lascivious aspect (*vezzosetto e lieto viso*) with low and stolen glances (*sguardi bassi e furtivi*) directed to him (*Rime* 369.1.18); and in the following century, Marino describes Venus as cutely ashamed (*vergognosetta*), holding her brow low and her eyes cast downward ('tenea bassa la fronte e gli occhi chini', *Adone* 7.219), which is later rehearsed by Adonis (8.42). Given this saucy kittenish tradition, it seems devalued currency when Tasso pretends with appeal to biblical lack of pride that in Pratolino lowness in others becomes sublime and humility is exalted (1285.1–2).

Biblical resonances aside, the artful fourteenth century—the period of international gothic—sees Petrarch launching poetry on its course of paradoxical contraries, which sometimes involve high and low: 'love spurs me and simultaneously halts me, reassures and frightens, burns and freezes, pleases and scorns, calls me and chases me away; now it holds me in hope and now in pain; my heart leads me up high and down low' (*Canzoniere* 178). It is the same poet who admires the 'sweet pious and low murmurings of lovers' ('dolce mormorar pietoso et basso', 286.10; *cf.* Marino, 'mormorio languido e basso', *Adone* 16.43.5 and Shakespeare's 'Nor are those empty-hearted whose low sound / Reverbs no hollowness', *Lear* 1.1) and who observes that a lofty woman can be in a low and humble place (294). When a woman is labouring, one gives prayers toward the birth in low tones (*bassi accenti*, 780.4). Though perhaps echoing the gravid condition, these low accents are not grim.

4.5 The Resonance of Renaissance Basso

Then, in the epoch of the most atmospheric painting and landscape, poets also find prestige in the lower woods rather than the lofty peaks, the foothills or low and humble hills, as Tasso says, where the woodland nymphs and shepherds tryst (455.1) and, in the same *Canzona*, he hopes that his song will reach his woman wherever she be, in parts high and bright or low and gloomy (*bassa e fosca parte*, 455.80). In a sonnet to the image of Boccaccio—who did a line in the depiction of low-life—Tasso says that even Olympus or the leafy Arden can appear to be low (*par basso*, *Rime* 1133.12); and it is a commonplace to describe one's own verses as low (Petrarch, 332.24) or even one's very name (*oscuro e basso*, Tasso, *Rime* 1138.11). Using the same phrase, Tasso elsewhere says that dim and low can turn to bright and high (*Rime* 1475.5) by the influence of a charismatic soul.

5. The Baroque Apotheosis of Basso

For the greater redemption of lowness, however, we enter the baroque, where high and low are less often contrasted as good versus miserable and more often seen as necessary complements in a dynamic continuum, like the in-and-out of architectural detail in a façade and, of course, the meanderings of a melody or the settled sonorities of harmony in ensemble or even keyboard playing. In the colossal erotic epic of Giambattista Marino,

Adone, the sensual universe opens up to metaphor, like the sea responding in low and raucous voices (4.78.7–8) or the beautiful flight of a bird, which is rhythmically repetitive in going low and high (*or basso or alto*, 1.66.1–2). Marino still retains the conventional gestural vocabulary of eyes or brow lowered for shame (*basso tien per vergogna a terra il ciglio*, 5.13) but also notes that the sleepy physiognomy of an old duke appears lazy and slow but the low eyebrow conceals a vigilant and sharp wit with prompt discourse and high counsel (16.115).

5.1 Baroque Analogies with Nature

In Marino's sensual epic, sound features in a rich atmospheric context. If a warrior shouts out in the woods, the sound is returned in a low murmuring echo from the deep rock (5.76.7–8). Music begins low and rises with the concord of various instruments in the same way that it is sharp and quick, grave and slow (5.146.1–5). These indices of change match the baroque sensibility for variety and surprise, the accommodation of impulse within a matrix, which is a signal part of seventeenth-century aesthetics. In this delight in variety, the image of the bird has some felicitous magic, because its sonorous chirping accords with its flight. The garrulous creature features extensively in the seventh canto of the *Adone*, its sweet language supplicating the dawn: it descends slowly from the peak to the lower branches, taking up the extreme cadences (7.43). It flies and does not stop singing but a witty musician (*sonatore arguto*) joins in emulation with high contrasts, making a competition (*paragone*); and together they rise and fall and swell in labyrinthine sounds that mingle and implicate one another (7.48). Their fantasy plummets (*s'abbassa*) and rises to the sublime with both trills and profound gravity (7.50), flying now low, now high (*or basso, or alto,* 7.51).

5.2 Baroque Spectacle, Seduction and *Basso*

The other spectacular motif of high and low in Marino is the fountain, with undoubted appeal to the grand examples that had been built in the mannerist period, like in the grounds of the Villa d'Este, and would continue to provide ceremony in so many town squares, courtyards, city corners and quadrangles. Where urban architecture is solid, with top remaining high and bottom forever low, the fountain is in constant transition: its moving water rises and falls, spilling always to a lower point. Marino loves this liquid

cadence of falling moisture (*umor cadente*) whose humour immediately triggers images of mood and impulse. The motif is expressed in lines that themselves find a sympathetic cadence, as the water turns out slowly and, in this elaborate imaginary structure, slips lazily in ample conches and proceeds to the lower balconies. As the bright wave slowly passes in crystalline steps—always with the sense of downward movement—it acquires a delight in its ambition (8.51.1–8). Spilling over, crashing, rebounding, the lower down, the darker it becomes. The image of lowness is naturalized, almost like the keynote in music upon which the progression settles. The contention of the water, vying in its different currents and spurts, resolves itself in the direction of the lowest part. This motif can be seen as celebrating the lower.

Elsewhere, as if drunk and spellbound by the hypnotic effect of the beautiful waves passing beyond the precipice, one witnesses the rhythms from the highest conch to the lowest, which receives the water in the largest basin, whereupon, in the lowest circle, the divided water is for drinking (9.104). Later still in this enormous epic, Marino gives us a sense of relief, as potential energy in the water exhausts its gravitational fall and reaches equilibrium upon the lowest rocks (11.44), which recalls baroque music whose tendency to move in a cadence to the keynote (and again 12.150) has just been observed. These images of a cadence that spills from level to level also has appeal to the lyrical character of Marino's verse, rolling over one stanza into the next. The parallel with contrapuntal music is striking. Also from Marino's epic, another pictorial motif of great prestige in lowness is the height of the sun, which may be scorching at midday but serene and moody later in the day when the sun is lower, which is still known among photographers as 'the golden hour'. Most baroque painting that pictures the outdoors has lateral light, the softer warm glow that swipes a form from the side to reveal its fullness. Together with this lowness of the sun, the sky takes on a richer set of colours, which justifies orange and magenta in the landscape (Nelson 2011). In poetry, too, this glamorous radiant time is enjoyed in rich verses, with the horses of the sun cantering downward toward the setting position (*ponente,* literally putting, *sc*. putting down) to occupy the valleys and in short order even take on the shadows cast by the mountains (*Adone* 12.97; *cf*. 16.111 and 18.132).

This painterly image of visual richness at the lowest point of the sun's arc describes a cyclical phenomenon, where the low answers the high, as by the diurnal rhythms of the

planet. But for Marino, as for any musician, high answers low and *vice versa* for cosmological reasons which describe the logic of harmony. A gypsy explains the perfect harmony and interchangeable ties and correspondences that link earthly and celestial things by the beautiful sympathy that passes between the sovereign machine and the low one (15.41). Though expressed as a kind of lofty science, this harmony is based on the same sense of continuity that spells out the joy of a road that winds up and down (14.22.1–4) or the balletic movements of fencers who duel with constant rebound, now high, now low (19.43; *cf.* 20.392). There is a peculiar mystique in things that are deep, like deep waters (*acque più profonde e basse*, 17.123.4) which has to do with unreachability but also something inscrutable, an enigma arising from the self-muffling quality of long waves. In Marino, one does not sense the sinister in the deep or the low.

6. In Search of the Glorious in the Bass

Given that the renaissance and baroque gradually lifted the dismal overtones of lowness, one might better understand the value of the *basso*, especially in music where the melody is borne by the treble voices, which naturally assume a leading role in the music. The musical glory still accrues to the treble instruments; but the low parts nevertheless have enormous prestige, like the instruments themselves. At a given standard, a bass recorder, a bassoon, a cello or double bass, is likely to be more expensive than a soprano or alto recorder, an oboe or a violin respectively: there is so much more wood and joinery involved, and engineering to match. And with the voice, as noted, the deep notes are made by men, who in no epoch had less status than boys or women (Warman, 2009).

6.1 Why did Men Sing in their Head Voice?

Still, it is remarkable how often in baroque opera the heroic male roles are cast for countertenors. The high voice of Giasone in the opera of the same name by Cavalli or of Giulio Cesare in Handel's opera of the following century is a kind of gorgeous perversity, in which the authority of pitch is inverted. The bass voice is given to sages, the Solon archetype, who admonishes the impetuous and proffers a normalizing prudence to the powerful. Perhaps reserving the high pitch for the male heroes was intended to express their genius, their youthful *élan*, their *estro*, their brilliance. Another explanation might be the fetishization of difficulty, which music delights in almost by nature. In the same

way that it is very difficult to play semi-quavers very rapidly, so it is hard to sing the higher notes, just as we reach a point where the low notes are hard to voice. Normatively, men err to the baritone range rather than tenor, frustratingly for choristers—given that the tenor part is often more prestigious—and annoyingly for amateur choir-masters who sometimes have difficulty fielding suitable tenors; and likewise, far more women would naturally sing in the alto range than the more stressful soprano; but tenors and sopranos are cultivated throughout the classical repertoire, perhaps because they symbolically reach higher into a world beyond.

6.2 Melody and Architecture

Aristotle conceived of the world in tripartite structures with two extremes and a middle, as when a parent could either be very severe or very permissive, with a recommended balance achieved in the middle (μεσοτης) or the golden mean. Music puts this classical favouring-of-the-mean to the test, where the sway of melody climbs the stave in aspirational stages and reaches expressions of ecstasy, even if it is also inclined to descend. A good analogy might be architecture, where buildings are dignified not just because they are very tall but because they proceed in intelligent stages and demonstrate an argument of support and gravity. The prestige of the high is also true not just of soaring cathedrals but tenements as well. The façades are robust at ground level, with the heaviest rustication and blocky carriage of weight, suggesting a burly and immovable disposition, very reliable and rather staunch. In the three-storey urban archetype of the Palazzo Ruccellai or Medici Riccardi or Strozzi in Florence, the next level is the most prestigious, the noble level (*piano nobile*) which would accommodate the owners' family chambers. The upper level would be accorded less ornament and, becoming unpleasantly hot in summer, was devoted to staff.

The vertical dynamism of the building would sometimes find verbal expression as well. In speaking of a house on the main road, the Italians could say 'above' the main road (*in su la strada maestra*, Bandello 1.26). If someone calls you to come out, you are called 'down' to the street, as in Castiglione, where a person knocks at a door and calls another down (*chiamandol giù*) from below (*da basso*, *Cortegiano* 2.75). The street is always understood as below and the houses above. But that means that the lower is the point of access, the concourse, the civic zone, the platform that is shared as public space.

The higher zones are points of withdrawal. This paradoxical prestige of the base parallels the logic in painting, where low in the canvas means your space, the location closest to you, and higher on the canvas typically means further from you, till you reach the infinity of the horizon or sky.

The analogy with music is imperfect but still valuable. The building is a totality, with the higher needing the lower and, up to a point, *vice versa*. However, the might of the lower storey is not only flattered by the relative elegance of the upper storeys but earns such prestige as it has by virtue of a somewhat threatening aspect: it presents an encounter which is tough and burly, somewhat bullying, with the heavy rustication and blind windows or small windows above harm's way. The ground floor is paradoxically capable of festivity in its own terms, as the point of contact with the concourse; but it accepts the charge of gravity with a slightly grim disposition that expects trouble. In due course, the ground floor would become the most conspicuously grand, with its inviting internal colonnades and arcades, as in the Palazzo Barberini or the Louvre.

7. Conclusion

There are many paradoxes in the conceptualization of high and low that equate with good and bad in complicated ways, always in a state of flux and always poetically available for creative interpretation by musicians, as for architects or painters. We will never know high and low as anything but the terms of something else; but they do not have an absolute essence, as of numbers in maths and nor are they totally abstract. They are rooted in experience and historical associations and act metaphorically; and sometimes, going against the general consensus that high is good and low is abject, low nevertheless historically achieves grand status and underlies everything that ever has meaning. Lowness thereby gains a seduction both as a support for something high and as something in its own right. The metaphoric agency of lowness is far from a platitude—as in a dead metaphor, where colourful language contracts to a sterile technical name—but is metaphorically dynamic, shifting its meaning from the humdrum to the evocative over time.

This article does not argue, however, that the connotations of evil or baseness were magically overcome by some prevailing lyricism whose grand harmonics redeemed depth and lowness, as if the logic of vertical sound and melody negated the alignment of low

and evil. Still less does the article argue that the terms are arbitrary—a typical slippage of language—and that low in music exists in an entirely separate semantic field to low anywhere else. On the contrary, the argument is that the low parts in music owe their mystique and musical charm to the slightly menacing associations of depth and lowness that literature is witness to. Low notes resonate, so to speak, with lower forces, the somewhat dire and threatening quality of the deep, which is sublime not in the direction of heaven but in the sense of the abyss, the unsounded volume that you can measure from the awesome vibrations that you feel in your chest or stomach, even if it can also be associated with a coy and seductive downward gaze. In the process of measuring musically how far the sound can plummet and rise, we mentally synthesize the notes in their abstract argumentative integrity but, because high and low never merge, we still retain the dichotomy of deep and high and constantly wrestle with their resolution. We are always more likely to pay attention to the higher voices but we musically apprehend the totality that subsumes the deep as a great sonic richness that enhances the melodic pre-eminence of the higher voices. Within that fullness, however, the sonata with *basso* carries something grave and grim through its deeper voice, florid in connotations of gloom, from a dusky downward gaze to the authority of the fearsome, which resolves itself happily with the alto, to the greater delight of the listening subject. Musical writing in the baroque which incorporates a bass part, where the main melodies are given to the violin or alto recorder or oboe, have an awesome condiment: they contain a terror which is aesthetically miniaturized, a male greatness which is ideally yoked to female superiority, an element of dread which is borne by harmony as an adorable politeness. It is a beguiling symbolic logic destined to inform the subsequent development of western music; and it conclusively reveals that metaphor, with all its vague but evocative twists and turns over time, is an ideal method to understand meaning in music.

Note on references to classical texts
Numbers to classical and biblical texts follow the standard reference system derived from the canonical editions used in lexicography. Different editions and translations have disparate pagination, whereas the canonical numbering is consistent. Similarly, the numbering used in renaissance and baroque texts follows the order of canto/stanza for epic poems, act/scene for plays or book/story for *novelle* or essays.

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Author Biographies

James O. Young is professor of Philosophy at the University of Victoria. He is the author of *Global-anti-realism* (1995), *Art and Knowledge* (2001), *Cultural Appropriation and the Arts* (2008) and more than 50 articles in refereed journals. His latest book, *Critique of Pure Music*, is forthcoming from Oxford University Press.

Torben Sangild was a scholar and lecturer at Department of Arts and Cultural Studies at University of Copenhagen 1997-2013, with a PhD as well as two postdoctorals. His main research field is contemporary art, aesthetics, philosophy, music and sound. He is now a freelance writer, critic, lecturer, editor, radio host and consultant. He has published two books in Danish: *Støjens æstetik (The Aesthetics of Noise)* and *Objektiv sensibilitet (Objective sensibility)* as well as numerous articles in English, German, Swedish and Danish.

Dimitris Exarchos is a theorist and musicologist specialising in contemporary music. He holds a PhD in Theory and Analysis from Goldsmiths. He has published in books and journals, delivered talks in the UK and abroad, organised symposia at Goldsmiths' Contemporary Music Research Unit (CMRU) and curated concerts and events (Southbank Centre, Goldsmiths). For a number of years he also taught Music Analysis and History at the University of Surrey. Recently he was a Research Fellow at the State Institute for Music Research in Berlin, Germany and is currently Visiting Research Fellow at CMRU. His research explores the intersections between post-structuralist philosophy and contemporary composition, including computational and mathematical approaches.'

Robert Nelson is Associate Director Student Learning Experience at Monash University (Melbourne, Australia), where he was also Head of Department of Theory in what is now the Faculty of Art Design and Architecture. He holds Masters and PhD degrees in Art History from La Trobe University and has been art critic for The Age for 20 years. He was also the scene painter for the photographic artist Polixeni Papapetrou (polixenipapapetrou.net). Robert has published many articles and books concerning the overlap of the aesthetic and the moral across several genres, from performance to furniture. In his research, he tries to explain the structure of imaginative expression by connecting it with the history of ideas.