

The Argument from Sideways Music

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Recently in *Analysis*, Ned Markosian (2019) has argued that a popular theory in the metaphysics of time—the Spacetime Thesis—falsely predicts that a normal musical performance is just as aesthetically valuable if it is rotated “sideways,” that is, if it is made to occur all at once. However, this argument falsely assumes that changing how something is oriented in space, and changing its duration in time, are analogous. That said, assuming they were analogous, Markosian’s argument is still unsuccessful. For the analogy on which Markosian’s argument depends entails that if one can experience sideways music as it was originally, then one can prove that sideways music is just as aesthetically valuable.

1. Introduction

Ned Markosian has recently argued that music is a counterexample to the following theory of time.

The Spacetime Thesis. The universe is spread out in four symmetrical and similar dimensions (each one orthogonal to each other one), which together make up an isotropic, four-dimensional manifold, appropriately called “spacetime.” Humans tend to perceive one dimension – the one we call “time” – as different from the others in various ways, but in reality, no one of the dimensions is intrinsically different from any of the others.¹

This thesis predicts that changing how a thing is positioned relative to another thing within the manifold makes no intrinsic difference to that thing. Assuming that beauty is intrinsic to its bearer, however, Markosian objects that beautiful music would no longer be beautiful once it is repositioned in time so that all the musical events occur all at once, which he calls “sideways music,” whereas changing its position in space would make no such difference. Markosian therefore rejects the Spacetime Thesis because music disproves that intrinsic beauty is as unchanged under temporal repositioning as it is under spatial repositioning.

¹ Markosian (2019: 2).

However, as I will show, Markosian's argument depends on a false analogy. It assumes that turning something sideways in space, which is an orientational change, is perfectly analogous to reducing how spread out that thing is across time, which is a durational change. But these are not analogous changes, as I will argue. That said, assuming they were analogous, Markosian's argument would still fail. For the very analogy on which Markosian's argument depends entails that one can prove that sideways music is just as aesthetically valuable.

2. *Rotating Music Sideways*

To foreground my counterarguments, I begin by illustrating Markosian's objection. To that end, imagine that the two figures below represent the same paintings, but the first represents the painting when it is upright, whereas the other represents it after being rotated.

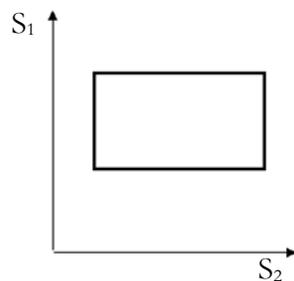


Figure 1: Normal Art

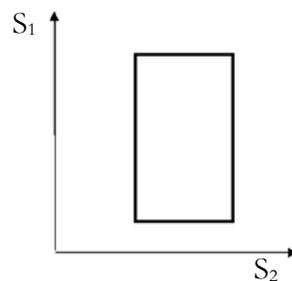


Figure 2: Sideways Art

Figure 1 does not represent a painting with more intrinsic value. After all, they represent the same painting. It might be more difficult to appreciate the sideways painting due to its disagreement with our normally vertical orientation, but we can easily overcome this by changing our own orientation in space.

Next, suppose that the two figures below represent playing the first six notes in "Mary Had a Little Lamb."

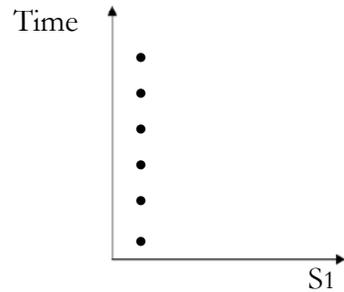


Figure 3: Normal Music

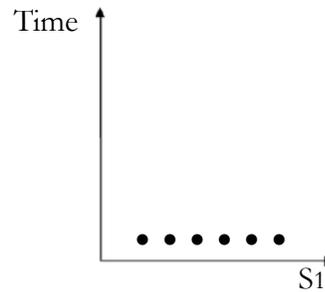


Figure 4: Sideways Music

Figure 3 represents the performance when it is normally oriented in time, as when the six notes are played over six moments. By contrast, Figure 4 represents the same performance after it has undergone what Markosian considers to be the temporal analog of rotation, which is to reposition the performance so that it occurs all at once, which Markosian calls “sideways music.”

Markosian reasons that if there is an aesthetic value symmetry between a painting when it is upright and when it is sideways, then by analogy the Spacetime Thesis predicts that there is an aesthetic value symmetry between music when it is normal and when it is sideways. But Markosian judges that sideways music is a cacophony that has either no or negative aesthetic value, so he rejects the Spacetime Thesis. He refers to this as the “Argument from Sideways Music” and anticipates three defensive responses. First, one might deny the assumption that there is intrinsic aesthetic value in the world. Second, one might argue that music is just as aesthetically valuable when it is sideways. Finally, one might concede that there is some intrinsic difference between time and space, which is the difference that accounts for the aesthetic value asymmetry.² Markosian responds to each response and rejects them for reasons that I will not rehearse here.

² Markosian (2019: 8-10.)

Instead, I offer two new reasons to reject the argument. The first is that normal music is no longer the music it originally was once it is “rotated” sideways in time, whereas this would not happen to art when rotated in space, therefore this analogy between them is false. The second reason is that if we can prove that aesthetic value is preserved under spatial rotation by making the right changes to our positioning in space, then the analogy on which Markosian’s argument depends entails that we can prove that aesthetic value is preserved under temporal “rotation” by making the right changes to our positioning in time.

3. *Not Music to My Ears*

When a painting is rotated sideways, its distinct identity does not collapse. By contrast, when music is transposed sideways in time, its distinct identity collapses. Unlike a painting that will not resemble any other sort of painting after it is rotated sideways, certain pieces of music will sound indistinguishable from one another if they are made to occur all at once. For example, suppose we play two very different piano pieces that use the same notes in the same style, but the only difference between them is the ordering of the notes. Were these performances made to occur all at once at the same time, we would hear the same cacophonous sound. By contrast, no two paintings that look different upright will look identical when you rotate them both sideways to the same degree. Yet two musical performances that sound different when played normally can sound the same, and thus their identities collapse, when they undergo the presumed temporal analogue of spatial rotation. Sideways music is thus not an alternative way for the original music to be, whereas sideways art is an alternative way for the original art to be.

However, one might object that spatial relations can be used to preserve the distinct appearances between two pieces of music that sound the same sideways.³ If we can hear where the sounds are located, for example, then one might be able to distinguish the difference between the two pieces according to differences between their direction or distance. But this is a highly problematic objection for two reasons. The first is that if their distinctness can be preserved through such spatial relations, then their distinctness is extrinsic because the relations that putatively preserve them are themselves extrinsic. If so, then it is possible for spectators on opposite sides to disagree on which sideways music corresponds to which normal music because the spatial relations that supposedly preserve the sideways music are opposite relative to each spectator. Secondly, this objection is inconsistent with Markosian's line of reasoning, according to which how something is spatially related is not an intrinsic way for that thing to be. For the objection assumes that how the sideways music is spatially related determines its identity.

In sum, the analogy between sideways art and sideways music is false. Changing something's duration so that it occurs all at once is not like changing something's orientation so that it is turned differently around a center. I suggest that the correct spatial analog is changing something's extension in space so that it occupies a single point rather than the region of space that it normally occupies. Reducing a painting in this manner would, for example, result in a merely colorful dot that has no aesthetic value whatsoever. And the explanation for why it would lack such aesthetic value is that it is not an alternative way for the original painting to be just as sideways music is not an alternative way for the original music to be.

³ Thanks to an anonymous referee for raising this objection.

4. *Rotating ourselves sideways*

Markosian's argument would fail even if one assumes that durational changes and orientational changes are analogous. The motivation for this argument follows from the following consideration. If we can change our orientation in space so as to experience sideways art as it was oriented originally, thus proving that its intrinsic value was unaffected by the rotation, then if it is possible to change our position in time so as to experience sideways music as it was originally, then by analogy one can prove that the intrinsic value of the sideways music was unaffected. To show this, I assume a popular theory in the metaphysics of persistence that is usually built into the Spacetime Thesis: namely, perdurantism. On this theory, persistence through time is not metaphysically importantly different from extension in space, which means that an ordinary thing persists by having temporal parts at different times which are the way that thing is at those times.

Next, my argument invokes the distinction, due to David Lewis, between external time, which is time itself, and personal time, which is time as measured relative to a certain regularity that a person experiences.⁴ This distinction will be used to explain not only why sideways music appears less intrinsically valuable, but also how it is possible for a perduring subject to experience sideways music again as it was originally. A thought experiment involving time travel will be presented shortly to illustrate this possibility, but it is first worth describing the conditions under which a perduring subject usually experiences music in order to show that these conditions are reproduced by the perduring subject in my thought experiment.

⁴ Lewis defines personal time as that which occupies the same role in the pattern of events of a particular thing's life as the role that time itself plays in anyone's life (1976, 146).

To that end, consider a case in which a perduring subject plays Mary Had a Little Lamb normally. In that case, the twenty-six notes from the piece are played over twenty-six moments, and the perduring subject has a temporal part at each moment who hears each note and vividly remembers each previous note that becomes less memorable as the music progresses. This means that usually, when music is played, the timing of the performance in external time agrees with the personal time of the perduring subject as measured by, for instance, their wristwatch at each moment. By contrast, were the performance rotated sideways in external time, then the external timing of the performance would disagree with the perduring subject's personal time as measured by their wristwatch. This disagreement makes sideways music appear to have no or negative aesthetic value. However, a perduring subject can resolve this disagreement and restore their access to the unaffected value of the music. To illustrate, consider this thought experiment:

Sideways Music in Spacetime. Emmett builds a house with twenty-six identical rooms. Each room is equipped with a sensor that will play, once it detects some presence, one of the twenty-six notes from Mary Had a Little Lamb whose ordinal number in the piece equals the room number. Then, Emmett procures a time-travel machine and programs it to bring himself not only to the same moment in the immediate past twenty-six times, leaving only enough time to hear each note between each trip, but also to each room in the house from smallest to greatest room number. Emmett executes the time-travel machine. In doing so, from a timeless perspective, the twenty-six notes from Mary Had a Little Lamb are played at the same time, and Emmett is there in each room, at the same time, to hear each note being played. To an outsider whose wristwatch reads that a moment in external time has yet to pass, the music would sound cacophonous. But depending on which room he is in, Emmett experiences it differently as some time has passed according to his wristwatch. Because the rooms are indistinguishable, Emmett cannot register the changes in his spatial position as the machine brings him to each room in ascending order. In the third room, Emmett hears the third note but, at the same time, he retains a vivid experience of the second note playing in the previous room and has a less memorable experience of the first. Understood as such, Emmett feels like he is listening to Mary Had a Little Lamb normally in the very same room.

Although Emmett is multiply located at the same time, were he wearing wristwatches at each location, each of them would measure a different time. Given that his personal time is measured by these wristwatches, different moments in his personal time are thus located at the same external time, and the way his personal time is spaced out at that external time conforms to the way the sideways music is spaced out. As a result, Emmett has brought his personal time and the external timing of the sideways music back into the same sort of agreement that obtains when a perduring subject experiences that music normally. This rebuts Markosian's judgment that rotating music sideways affects its value because if one can reproduce in their experience of the sideways music the conditions under which they normally experience the music, then there is no intrinsic basis on which to judge that the sideways music is not as aesthetically valuable. Ultimately, sideways music is not any more problematic for the Spacetime Thesis than a sideways painting is, and sideways paintings are not problematic at all because, as even Markosian himself agrees, we can change our own orientation in space:

If we rotate the painting...so that it is hanging sideways on the wall, its aesthetic value will be unaffected. It might be harder for us to appreciate the value of the painting after it has been rotated in this way, but this problem could be easily overcome by changing our own orientation in space.⁵

By the same token, the problem of appreciating the value of sideways music can be overcome by changing how we are located in time. And we are committed to this conclusion for the same reasons that Markosian concludes that changing our own orientation in space can restore our access to the unaffected value of a sideways painting.⁶

⁵ Markosian (2019: 4).

⁶ For helpful comments on this paper, I would like to thank M. Oreste Fiocco.

Bibliography

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