

24.201 Topics in History of Philosophy: KANT

Space, continued

The argument from incongruent counterparts. What could be more similar to each other than two gloves in a pair? Yet a left glove will not fit a right hand, nor vice versa. The two gloves are incongruent counterparts, exactly similar except for being mirror images of each other. Kant, and many philosophers since him, have taken the existence of incongruent counterparts to have significant implications for the nature of space. Kant does not offer this argument in the *First Critique*, but it appears in many of his other works, and is clearly relevant to the conclusions of the *Aesthetic*. In the *Prolegomena* (1783), Kant describes the existence of incongruent counterparts as a ‘paradox’, and takes it to imply that space is ideal, that it is merely a form of intuition, and hence does not belong to things in themselves. In earlier works he had used similar arguments to conclude that space is not relational, but absolute (‘On the First Ground of the Distinctions of Regions in Space’, 1768); and that our knowledge of space is not conceptual (Inaugural Dissertation, 1770.) What is the ‘paradox?’

1. Any things that are exactly intrinsically alike must be interchangeable.
2. Some spatially extended things are exactly intrinsically alike, but not interchangeable.

Since 1 contradicts 2, we need to change *something*. We could turn the paradox into an argument for a Kantian conclusion by changing 1:

First Try:

- 1*. Any *real* things that are exactly intrinsically alike must be interchangeable
2. Some spatially extended things are exactly intrinsically alike, but not interchangeable.

Conclusion: Some spatially extended things are not real, but ideal.

The conclusion certainly looks like the one Kant is after. But is it the only option? Perhaps 2 is false. Incongruent counterparts might be interchangeable after all: you would be able to fit your left glove on your right hand if only you were able to turn it through *another dimension*. To see this, consider that the letters ‘p’ and ‘d’ are incongruent counterparts, in a *two* dimensional space; but if you can turn one of them through a *third* dimension, they will coincide. (Imagine a flat-lander puzzling over the shapes ‘p’ and ‘d’ and concluding that their space, or things in space, were somehow unreal, for the reasons Kant cites.) Of course, there would be a difficulty with this option from Kant’s point of view: bringing in the possibility of another dimension is incompatible with Kant’s conviction that it is an *a priori* and necessary truth that space has 3 dimensions.

There is a further question, though, about whether *First Try* captures Kant’s argument. Consider this part of Kant’s conclusion in the *Prolegomena*:

[T]he internal determination of any space is possible only by the determination of its external relation to the whole of space, of which it is a part (in other words, by its relation to external sense).

Apart from the part in ellipses, this could be a rejection of Leibniz and defense of the *Newtonian* view of absolute space, as indeed a similar argument was in 1783. Here is van Cleve’s reconstruction of the earlier argument, which we can use as a—

Second Try: (my interpolations are in square brackets)

‘1. A hand is left or right (as the case may be) either (a) solely in virtue of the internal relations among the parts of the hand or (b) at least partly in virtue of the external relations of the hand to something outside it—if not the other material objects, then absolute space [or: ‘the whole of space’].

2. But a hand is not left or right solely in virtue of its internal relations, since these are the same for right and left. [...]

3. Nor is a hand right or left even partly in virtue of its relations to other material objects, since a hand that was all alone in the universe would still be right or left. [...]

Conclusion: Therefore, a hand is left or right (as the case may be) at least partly in virtue of its relation to absolute space [or: ‘the whole of space’]

This quotes Van Cleve, *Problems from Kant*, 231; see van Cleve for discussion of *First Try* as well.

What is the point of the reference to the ‘whole of space’? How do we get from the conclusion that the internal properties somehow depend on relation to ‘the whole of space’, to the conclusion that the space is a mere form of sensibility, ideal? Perhaps from an (obscure) assumption about the relationship between parts and wholes. For things in themselves, the whole is possible only through the parts; for space, ‘the part is possible only through the whole’. So space is not a thing in itself.

Possible responses to Kant’s argument

Option 1. You could reject 1, but it’s hard to see how.

Option 2. You could reject 2, and hold that there *are* special relations internal to the hand of standing in a left- or right-making configuration. But the ‘fourth dimension’ possibility tells against this option: how could moving something like that change its intrinsic properties so radically?

Option 3. You could reject 3, and say that a solitary hand has no orientation, but the rightness or leftness depends on relations to other existing things.

Option 4. Kant is right.

What is so interesting about Kant’s argument is that it is not at all obvious which of these options to take. Each option has something surprising about it.