

Reading Guide #17 - The Weasel
Joseph Melia, "Weaseling Away the Indispensability Argument"

1. Distinguish the two kinds of indispensability arguments.
2. What is an instrumentalist? How might an instrumentalist be accused of hypocrisy?
3. Describe Melia's trivial strategy for producing a kosher theory given any unkosher one.
4. What problems arise for the trivial strategy?
5. How do Melia's two mereological theories show the trivial strategy to be flawed?
6. What does Melia call a formalist theory of the applications of mathematics? How does Melia's example raise a problem for it?
7. Describe Joe's plight. Compare it to that of Carnap's scientist (at the beginning of "Empiricism, Semantics and Ontology"). Are they committing a fallacy?
8. Describe Melia's taking-back (weasel) strategy. How does it apply to the mathematical case?
9. How might we describe a two-dimensional space using three-dimensional language? What does this show?
10. How does the weasel treat Melia's story of the angels and stars?
11. According to Melia's second version of the indispensability argument, why do we accept concrete unobservables? Does that argument extend to numbers?
12. Compare Melia's T_1 and T_2 . Which is simpler?
13. "I accept that considerations of simplicity play an important role in theory choice. But I prefer the hypothesis that makes *the world* a simpler place. For sure, all else being equal, I prefer the simpler ontology. For sure, all else being equal, I prefer the theory that postulates the least number of fundamental properties and relations. But the simplicity I value attaches to the kind of world postulated by the theory - not to the *formulation* of the theory itself" (Melia 473). Explain.