

# The Material and English-Language Conditionals\*

## Philosophy 3

The material conditional codifies the logical notion of implication in propositional logic: it is true just in case its antecedent is false, its consequent is true, or both. But does it also capture the truth conditions of the English-language conditional?

Perhaps not. Consider the sentence:

- If dogs are reptiles, then the world will end at midnight.

Dogs are mammals, not reptiles, so the antecedent of the conditional is false. That means the conditional is true. But suppose dogs were reptiles. Why should we then think that the world is going to end at midnight? Intuitively, conditional statements in English tell us that there is some connection between the antecedent and consequent, such that the truth of the antecedent guarantees the truth of the consequent.

Some philosophers, linguists, and logicians maintain that English-language conditionals are material conditionals nonetheless. They believe we have a habit of reading more meaning into conditionals than they actually have. But that's a discussion for a philosophy of language class, not an introduction to critical thinking.

In any case, there is another big problem with interpreting English-language conditionals as material conditionals. Consider the following argument:

- Premise: It is false that if God exists, then God doesn't exist.
- Conclusion: God exists.

If the English-language conditional is the material conditional, then this argument is sound! To see why, consider the truth conditions of "If God exists, then God doesn't exist" are if it is a material conditional. But this argument is bizarre, and it *shouldn't* be convincing.

Nevertheless, the material conditional is the simplest logical translation of the English-language conditional, and the only truth-functional one. Other analyses exist, but they are far too complex for a lower-division logic course like ours to cover.

---

\*This handout is largely based on Dr. Justin Khoo's video "Conditionals Pt. 2", found at <http://www.wi-phi.com/video/conditionals-pt-2>.