

**The Possible World Machine: Essay question 1-3**

David Clark  
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Q. Explore the use of "possible worlds" in philosophy, illustrating your argument with an example of a problem that involves the notion of possible worlds.

Possible worlds are a very valuable tool for philosophers. Where empirical studies are useful when working in the perceptual realm, possible worlds are a powerful tool for dealing with things that exist in the conceptual realm, which is where philosophers spend most of their time working. They allow us to consider things that don't exist or cannot make sense in this world and see if they could exist or make sense in another, a world where certain elements have been changed. In Modal Logic they are used to consider if propositions could be true and separate these propositions into a number of categories: true, false, possible, contingent and necessary, the latter being such truths as mathematics.

When trying to consider a particular problem it sometimes helps to consider it in terms of the categories listed above. So for example say Sam arrived on time for his meeting, the proposition "could Sam have arrived late for his meeting?" is one we can use a possible world for. Although the fact that Sam did not arrive late makes it impossible in this actual world (our world being the actual world) and thus a false proposition it is conceivable that he did for we can imagine of another world where he turned up late for his meeting. That thinking leads us to say that the proposition is possible, given that it is true in at least one possible world.

In areas other than Modal Logic I tend to see possible worlds as similar to analogies. An analogy switches frames of reference to something the listener has more experience and given knowledge with, such as when we use the analogy of the foundations of a house to illustrate strength and support, you then apply that idea to the given situation. A possible world scenario allows for those reference shifts on a much more dramatic scale. At their best they allow penetrating considerations of complex ideas and theories by allowing steady construction of a "world" where the idea in question takes place. This is illustrated perfectly in the following example which deals with considerations of Time. As Theodore Slider puts it in his essay "The Flow of Time" – "Questioning the nature of time can be dizzying" – and as such it is exactly where a powerful tool like possible worlds becomes so valuable.

This example of possible worlds in use appears in Sydney Shoemakers work "Time Without Change". To give a succinct summary of his argument and example, he is arguing that Time is independent from change against statements

like Aristotle's that Time does not exist without change. Shoemaker argues that it is only Humans that use change to measure time and that Time could exist without change and we would have no concept of it. Given the very abstract nature of Time he uses a possible world to make his argument more manageable.

He creates a world which has three regions, he calls them A,B and C. This world exhausts its universe. It is possible for the inhabitants of the world to pass back and forth between regions and to observe what happens in the other regions. All three regions periodically experience "time freezes", where all processes in the region come to a complete halt including movement, growth, decay etc, but upon their ending things continue exactly from where they left off. The frozen inhabitants are completely unaware of the freeze. The regions all experience their freezes at different intervals and as such it is possible for at least one location to observe another that is undergoing its regular time freeze. The inhabitants calculate that the intervals of these freezes overlap every sixty years, when all three regions will experience their time freezes simultaneously. Given that all three regions experience the freeze at the same time none of the inhabitants can observe it but they can be very sure that time has passed without change occurring, thus making Shoemakers argument.

This is where the use of possible worlds is so powerful, as a device for conceptualizing abstract problems which have no perceptual basis here in our actual world. Using Shoemakers model it is easy to push the argument around with one's mind and see real and possible outcomes.



*Additional comment*

I agree that this is a simpler unit than some of the others, and it is fun to contemplate. One thing to keep in mind is that possible worlds is a modal logic construct and is different than the many worlds or infinite worlds popular now in quantum physics. Mode being a modality or mood represented in modal logic—the three modes are possibility (true in at least one possible world), probability, and necessity (true in all possible worlds). All of this comes out of Leibniz but really took hold under Lewis and Kripke.

But you are right in that its applications are widespread—we've already covered the zombie argument and physicalism. Philosophy of religion also has had more vibrant discussions because of it. Even literary criticism (Thomas Pavel is one critic, there are others, I'm sure) has benefited by applying possible world logic to analyses of fictional worlds—supported by the idea that a fictional world is much the same as a possible world and thus can benefit from the vocabulary and principles of modal logic.

One thing I like about possible worlds is the ontological arguments about their nature—in what sense do they exist and in what sense is their existence similar to or different the existence of the real world (think *The Matrix Trilogy*: which world was more real, the one in the mind or the physical one?).

Another interesting question that is not adequately resolved in the literature (the broad area of study, not just these units) is how we know what is possible. For example, I can assert a possible world in which President Obama was never born because it is possible that his parents decide to never marry or never have children—those are choices people routinely make. I can even assert a possible world in which a horse evolves with a single horn as I have understanding that species can adapt over time and horns are a feature that other animals have. Can I assert with the same “certainty” that there is no possible world with life forms other than those found in this actual world? In a sense, “all things are possible”, which means that I can imagine any kind of world, with or without alien life forms. But does that really count as a possible world in the logical sense?