

Possible Worlds

The idea of possible worlds was first suggested to explain the options available to a creator of the universe. In recent times the idea was used to clarify what we mean when we reason about necessity and possibility, in modal logic. While the idea of 'a possibility' is hard to specify, the idea of a 'possible world' seems much clearer, and is understood in just the way that we understand our own world. Instead of talking of the possibility of having soup for lunch, we can say there is a possible world in which I have soup for lunch. The possible world is assumed to be just like the actual world, except that it contains everything required for my lunch. Thus the world shows not only the possible event, but also the way in which it would be possible. We then think of all possibilities arrayed as a vast set of possible worlds, and say that if an event occurs in one of them then it is possible, and if it occurs in all of them then it is necessary. It is agreed by all that this maps the processes of reasoning about modality very effectively, but it leaves big questions: what exactly are these possible worlds, and do they change our view of modality? Are they just a convenient formal device, or do they illuminate the nature of possibility and necessity?

A possible world is usually taken to be a consistent situation, in which every proposition about the world is settled as either true or false (making it 'maximal'), and they resemble different moments in history. The systems of modal logic describe either absolute possibility (if the event occurs in some world) or relative possibility (if one possibility depends on a prior possibility in another world). One world (probably our world) is usually taken as 'actual', worlds can be 'centred' on the point of view of some individual at a time, and some worlds can also be treated as 'close' to other worlds if they are very similar. It seems obvious that impossible worlds are not allowed (if the aim is to explain possibility), but if worlds are just fictions they might contain contradictions (as novels sometimes do), and when the logic is used to describe reasoning about knowledge, it must accommodate the fact that some people believe impossibilities. Some people ('dialetheists') say that even the actual world contains contradictions.

There are three main positions on the nature of these possible worlds: take them very seriously indeed, or derive them from the only real world (this one), or treat them as mere convenient linguistic fictions. The boldest and most surprising claim is the first one (called 'Realism'), which says they should be understood as real, concrete worlds, and all that distinguishes this world from among them is that we happen to be in it. Possible worlds are said to give the 'truth-conditions' for modal sentences, just as this world give truth-conditions for ordinary statements about it. The worlds may even be the 'truthmakers' for the modal sentences. To do these jobs, they need to be real substantial entities. It is cheating to explain meaning by possible worlds, and then deny that those worlds exist.

The second view is called Actualism, which denies existence to any world apart from our own, and then uses this world to construct the possible worlds, perhaps by considering all the combinations of properties, relations and substances which are available in the actual world. The idea is that possibilities are just wild and pointless if they are not grounded in the world we know. The third view (sometimes called 'Ersatzism') says they are nothing more than sets of propositions or sentences, perhaps resembling very coherent novels, which are invented by us to clarify our modal talk. Philosophers talk of 'regimenting' the things we say (in order to clarify them), rather than actually committing us to a concrete foundation for language.

The creation of possible worlds semantics for modal logic was a huge success, elevating modal logic from a side show to a major player in analytical thought. Yet each of the three accounts of possible worlds is fraught with problems. The idea that each of this multitude of worlds has concrete existence is too incredible for most philosophers, and even if they did really exist, they may not do the required job. Why is an event possible in this world, just because it happens in some other world? How can we know these worlds, if they are entirely separate from ours? There is also the suspicion of circularity – that you must already understand 'possible' *before* you begin to talk of the possible worlds. If it just happened that every possible world contained some stars, why would that make it a necessary truth? Why must we assume classical logic (to make the worlds maximal)? If possible worlds are linguistic in character, there doesn't seem to exist sufficient vocabulary to fully name and describe them.

The most important difficulty for the modal logic is how to understand the occurrence of a single individual in many different possible worlds. To draw modal inferences about them, they need to remain the same entity in each occurrence, but if I say 'I might have been taller' this seems to refer to someone taller than me. If that is not a problem, then what about 'I might have been a poached egg'? The three options here are either 'rigid designation', a stipulation that you are referring to precisely the same thing (despite any differences), or 'haecceitism', sayings things really can remain identical even when they change, or 'counterparts', which says they are not identical, but are relevantly similar versions of the thing.

If I rigidly designate an object (asserting that it is the same thing in any possible world) we can still ask which version is being 'rigidified'; is it the current me, or the taller me? A solution is to fix the entity by its origin (my birth), since any entity seems to be necessarily connected to whatever origin it had. Alternatively, we might designate my unchanging 'essence', which endures through changes such as growth. Haecceitism (from Latin 'haec' – this) takes it as a fact that something actually remains the same, despite possible changes. A weaker version of haecceitism allows that the properties of the thing are relevant to deciding whether it is 'this' thing. The strongest version says identity is preserved through any change at all, and so my being a poached egg is a real possibility. Many thinkers resist haecceitism precisely because it has such an implausible consequence.

The idea of counterparts arose from the idea that possible worlds are real concrete things, because I would then have to be in many different places at once. Instead, my close counterparts embody my possibilities. We may need to say a counterpart is the 'same person', or the 'same car', to ensure the connection. The counterpart relation is a little vague, and it is not clear how the poached egg counterpart could be ruled out. The standard objection is that we only care what happens to identical things, not what happens to some loosely resembling counterpart.