

Special Classes of Propositions

Philosophers sit around in offices with no experiential equipment, no historical texts (except, usually, texts that other philosophers wrote), etc. Yet they say they can tell us about: personal identity, time, what makes us able to think and have minds, the most general nature of the physical universe. How is this possible?

Philosophers have often claimed that they can do this because they have access to a special class of information. There are special bits of information—special in terms of their generality, the nature of our access to them, or the certainty with which we can know them. We've already got the resources to distinguish one special class of propositions.

A proposition is *metaphysically necessary* if it is true at all metaphysically possible worlds (that is, if it is true at all worlds that are possible, in the 'broadest' non-epistemic sense of possibility).

A proposition is *metaphysically contingent*: if it true at some metaphysically possible worlds, but not others.

This is a metaphysical distinction. Let's consider two more distinctions.

A Priori v. A Posteriori

Distinguish two ways propositions can be *known*.

A proposition is *a priori* (or *knowable a priori*): if it is knowable in principle without justification from experience.

A proposition is *a posteriori* (or *knowable only a posteriori*): ...otherwise.

This is an epistemic distinction. E.g. the following are a posteriori.

- (1) Caesar crossed the Rubicon in 49 BCE.
- (2) For every action there is an equal and opposite reaction.

You need "observations" (i.e. testimony, texts, experiences, etc.) to learn these claims are true or false. Other claims can be known without making such observations.

- (3) $87 + 95 = 182$
- (4) It's sunny today in Pittsburgh or it isn't.

Some clarifications:

(A) A proposition *a priori* if it is knowable without justification from experience. That "able" is important, since it might be possible to get knowledge of *a priori* truths both by observational and non-observational sources.

(B) A proposition *a priori* if it is knowable *in principle* without justification from experience. The "in principle" is important because we don't care about our contingent cognitive limitations. We don't want to rule out that these are *a priori*, or this class of propositions would be one shaped in odd ways by contingent facts about our psychology.

Analytic v. Synthetic

Our final distinction is a *semantic* one: two ways in which propositions (or maybe sentences) can be picked out on the basis of their semantic make-up. There are some sentences whose truth we can know just by knowing the meanings of the words making them up. For example,

- (5) All bachelors are male.
- (6) A square has four sides.
- (7) Pediatricians are doctors.

These are sentences such that if someone didn't know them to be true, you'd probably suspect them of not understanding the meaning of some of their words (they might not know, e.g., that "pediatrician" just means "children's doctor").

Here we need to be careful. Is this a distinction *among propositions*? Only if propositions have semantic constituents (not everyone agrees to this—consider the possible worlds theories). So perhaps this is better cast as a distinction among sentences.

A sentence is **analytic** just in its truth is ensured by the meanings of the words in that sentence and the way they are combined.

A sentence is **synthetic** otherwise.

It would be nice for philosophers if these classes (a priori, necessary, analytic) coincided: then the things we could discover sitting in our armchairs would be deep truths of metaphysics, and we could understand how we come to know them: by knowing the meanings of our words. But are these classes the same?

Necessity A Posteriori

Kripke argues that informative identity claims are *necessary a posteriori*. Remember, a claim is metaphysically necessary if it is true at all possible worlds. But we know a claim like

- (10) Superman is Clark Kent

is metaphysically necessary given that names are rigid designators. (A slight wrinkle: maybe we need "If Superman exists, then Superman is Clark Kent"). But is this something, say, Lois *can in principle figure out without justification from experience*? It seems like not.

What is happening here? We're appealing to:

Essentialism: the view that some objects have some of their properties *essentially*.

In the idiom of possible worlds: some objects have certain properties at every world in which they exist. Kripke (on one interpretation) seems to be doing the following

- (A) We have conditional knowledge of essential properties.
- (B) We can only discharge the antecedents of those conditionals with empirical justification. _____
- (C) So there are necessary truths which can only be known on the basis of empirical justification.

So, for example, we know:

- (11) If Superman is Clark Kent, then necessarily Superman is Clark Kent.
- (12) If Superman is not Clark Kent, then necessarily Superman is not Clark Kent.

We can acquire the necessary knowledge in the consequent, only by discharging facts in the antecedent, and we can only do that by some empirical investigations. Here's another of Kripke's examples.

- (13) Gold has atomic weight 79.

We may know ahead of time that *whatever* atomic weight gold has, it has necessarily. But we don't know what that weight is yet. So we know, for example,

- (14) If the atomic weight of gold is 78, then it is necessary that gold has atomic weight 78.
- (15) If the atomic weight of gold is 79, then it is necessary that gold has atomic weight 79.

And so on. Again, we can't get to knowledge of the necessary truth without discharging the antecedent. Again, to get the claim that there are necessary a priori truths, you don't need any any *particular* conditional essential claim to be true. You just need some one or other to be true. Kripke makes many claims about essence (e.g. of origins, of constitution, etc.) but you don't need to buy all of Kripke's claims about essential properties. Just some of them.

Synthetic Necessity, A Posteriori Analytic

Is "Superman is Clark Kent" analytic or synthetic? There are reasons for going either way. Some (Naïve) Russellians might say that they are analytic. Others will say it cannot be analytic because of its informativeness. If one accepts Kripke's claims, though, one has the following claims:

- (i) If informative identities are analytic, there are analytic a posteriori claims.
- (ii) If informative identities are synthetic, there are necessary synthetic claims.

Contingent A Priori

Kripke tried to effect a complete divorce of our metaphysical distinction (necessary/contingent) from our epistemological one (a priori/a posteriori). We've already seen why Kripke thought there could be necessary a posteriori truths. Kripke also argued that there were contingent a priori truths.

His example drew on the "standard meter"—a bar in Paris used to *define* the length of a meter (at least until around 1960).

(16) The standard meter bar at time t_0 is 1m long.

Kripke claims this statement expresses an a priori truth. We *can know* without justification from experience that the standard meter bar is 1m long. Once we know the definition of "1 meter" we know the truth of the claim in question. This is most plausible if we imagine the person who made the stipulation as to how to use the word.

Nonetheless, Kripke claims (16) expresses a contingent fact. For it could have been the case that the standard bar had some other length than it did at the time in question. Suppose it were in some very hot environment at the relevant time. Then its length might change every so slightly from a meter. So it's possible that the standard meter could have been slightly less than a meter in length at t_0 .

Note: in this scenario, perhaps people would have still *called* the standard meter "1 meter long". But their word "meter" arguably would mean something different from ours. For example, if the meter shrank as per our supposition, we wouldn't say that everything else *grew* (that everyone would be taller than they are now), even though every true report of a person's height in that scenario would be higher.

Contingent Analytic

There are some grounds for thinking that (16) is analytic (Kripke talks this way). After all, it is true by definition—what better candidate could there be for an analytic claim? If so then (16) would also be a contingent analytic claim.

Synthetic A Priori

The possibility of synthetic a priori statements is importantly connected with foundational issues in the philosophy of mathematics. Are mathematical statements analytic? There was an important historical project that tried to show they were, but this project fell into disrepute for reasons that are difficult to get into here.

Suffice it to say: if this project fails (and we don't make mathematical claims a posteriori), it seems like there are good reason to take there to be synthetic a priori propositions: the claims of mathematics. Kant (working with a different, but related notion of "analyticity") famously tried to show how such a class of judgments could even make sense.

There are some other examples of alleged synthetic a priori truths, but they are usually contested. For example:

(17) Something red all over cannot be green all over.

Summary

Proposition Type	... is possible?
A priori, analytic, & necessary	Yes
A potesteriori, synthetic, & contingent	Yes
Necessary a posteriori	Contested (e.g. identity claims)
Analytic a posteriori	Contested (e.g. identity claims)
Necessary synthetic	Contested (e.g. identity claims)
A priori contingent	Contested (e.g. standard meter)
A priori synthetic	Contested (e.g. mathematics)
Analytic contingent	Contested (e.g. standard meter)