

ARE KRIPKE'S THEORETICAL IDENTIFICATIONS NECESSARY TRUTHS?

M. PERRICK

In his *Naming and Necessity*⁽¹⁾ Kripke claims that the so-called theoretical identifications are necessary truths in the strictest possible sense.

Let us consider the following example of such a supposedly necessary truth:

(1) Gold is an element with atomic number 79.

Kripke sums up⁽²⁾ his argument for the necessity of (1) as follows: 'Given that gold *is* this element, any other substance, even though it looks like gold and is found in the very places where we in fact find gold, would not be gold. It would be some other substance which was a counterfeit for gold. In any counterfactual situation where the same geographical areas were filled with such a substance, they would not have been filled with gold. They would have been filled with something else.

So if this consideration is right, it tends to show that such statements representing scientific discoveries about what this stuff *is* are not contingent truths but necessary truths in the strictest possible sense'. (1.c.320)

(1) In *Semantics of Natural Language*, ed. Davidson and Harman, Dordrecht 1972, pp. 253-355, 763-769.

(2) With regard to (1) the following qualifications are practically equivalent according to Kripke:

- a) (1) is (metaphysically) necessary, or true in all possible worlds.
- b) (1) is a truth expressing an identity between rigid designators.
- c) (1) is a statement expressing the *essence* (or a necessary property) of gold.

In arguing for the (metaphysical) necessity of (1) it is, of course, not permitted to presuppose either b) or c), on pain of begging the question. The starting point of Kripke's argument for the necessity of (1) is the assumption 'that it is part of the very nature of this substance, so to speak, that it have the atomic number 79' (1.c. 319).

As there is, in our opinion, no difference between 'the very nature' and 'the essence' Kripke's argument seems to be begging the question from the very outset.

Does it follow from this that a counterfactual situation, in which gold were not this element, would be (metaphysically) impossible?

Consider the following statement:

(2) Reagan is the 40th President of the U.S.

Kripke would undoubtedly classify (2) as a *contingent* truth. This is to say that in a counterfactual situation Reagan might *not* have been the 40th President of the U.S. But now, given that Reagan *is* the 40th President of the U.S., could someone, not being President of the U.S., be Reagan? Clearly not. Given that Reagan *is* the 40th President of the U.S., nobody (nothing), however much resembling Reagan, but not being President of the U.S., could be identical with Reagan, neither in the actual world nor in any counterfactual situation.

Generally, for any object *a* and any property *P*, given that *Pa* is true, it is impossible that something which lacks *P* is identical with *a*; the assumption of the contrary involves a straightforward contradiction, whether *Pa* is a necessary or a contingent statement.⁽³⁾ Thus we see that Kripke's argument for the necessity of (1) equally applies to the supposedly contingent statement (2).

Although in itself correct, Kripke's argument is still inadequate, as it fails to distinguish between the statements (1) and (2).

To point out more clearly the failure of Kripke's argument for the necessity of (1) let us first ask: on what grounds do we decide whether something is necessary or contingent?

Kripke answers this question as follows:

'If it is true, might it have been otherwise? Is it possible that, in this respect, the world should have been different from the way it is? If the answer is 'no', then this fact about the world is a necessary one. If the answer is 'yes', then this fact about the world is a contingent one'. (l.c. 261).

⁽³⁾ It would be no use to point out that there is an important difference between (1) and (2), that (2) contains a description while the referring terms of (1) are rigid designators.

Apart from being pointless – Kripke's argument applies to any truth whatever – it would be question begging. For, whether one says that (1) is a truth expressing an identity between rigid designators or that (1) is a necessary truth comes practically to the same thing. (Cf. the preceding note). What is at issue is precisely whether (1) – unlike (2) – *is* a necessary truth or, for that matter, a truth expressing an identity between rigid designators.

So, assuming that (1), 'Gold is an element with atomic number 79', is true, we should ask: might it have been otherwise? Kripke's argument gives no answer whatever to this question as can be seen by considering the following statements:

- (3) Gold is an element with atomic number 79, and a counterfactual situation, in which gold were not this element, is (metaphysically) impossible.
- (4) Gold is this element, but in a counterfactual situation gold might have been a compound.⁽⁴⁾
- (5) Given that gold is this element, nothing, however much resembling gold, but not being this element, could be gold.

(3) expresses the view that (1) is a necessary statement, and is what Kripke *should* have argued for, according to the text just quoted; (4) says that (1) is contingent, and (5) gives, in a concise form, Kripke's argument for the necessity of (1).

Does (5) lend any support to (3), that is, to the necessity of (1)? One easily sees that it does not. For although (3) and (4) contradict each other and (5) is intended as an argument for (3) i.e. for the necessity of (1), it is evident that (5) is compatible with (4) as well. That is to say, Kripke's purported argument for the *necessity* of (1) is compatible with the statement claiming the *contingency* of (1). The fact that (5) is compatible both with (3) and (4) makes it quite clear that Kripke's argument is *irrelevant* in respect of the metaphysical status of (1). Kripke's argument contributes as little to the necessity of (1) as the following statement

- (6) Given that Reagan is the 40th President of the U.S. nobody, however much resembling Reagan, but not being President of the U.S., could be Reagan.

⁽⁴⁾ Unlike Kripke we intend (4) as a statement about *gold itself*, not as a statement about a *counterpart* of gold. (Cf. Kripke 1.c. 332-333; 1.c. n 72). It would be a *petitio principii* to object to our interpretation of (4) that 'might' here can only be *epistemic*. We would be committed to take 'might' here as epistemic only if it were an established fact that (1) is necessary. But whether (1) *is* necessary is exactly what is at issue and must not be presupposed.

detracts from the supposed contingency of (2).

Instead of arguing for the necessity of a statement p Kripke actually argues⁽⁵⁾ for 'Necessarily, if p , then not non- p '. This argument, although incontestably correct, cannot establish, however, the supposed difference between (1) and (2).

University of Nijmegen
NETHERLANDS

M. PERRICK

(⁵) We think that the gold example here discussed is quite representative of Kripke's view of and his arguments for the necessity of theoretical identifications. Our criticism of Kripke equally applies, of course, to similar arguments of other philosophers; for instance, to Putnam's argument for the necessity of 'Water is H_2O '. Putnam: 'In fact, once we have discovered the nature of water, nothing counts as a possible world in which water doesn't have that nature. Once we have discovered that water (in the actual world) is H_2O , *nothing counts as a possible world in which water isn't H_2O* ' (H. Putnam: *Meaning and Reference*, in Stephen P. Schwartz (ed.): *Naming, Necessity, and Natural Kinds*, Ithaca 1977, p. 130).

It is not difficult to see that this argument fails for the same reason as Kripke's argument for the necessity of the gold example.