SOME NOTES ON STALNAKER'S POSSIBLE-WORLD THEORY OF PROPOSITIONS*

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The notion of the proposition is somehow traditional in philosophy. Frege noticed the natural connection between the things we believe and the meanings of sentences (Frege's *thought*). In this paper I will not be focussing on Frege however, but rather on Robert Stalnaker's (1976) definition of *proposition*. There are two fundamental parts to this paper. Firstly, I will introduce some of the concepts underlying Stalnaker's view, and point out the roles of some attendant theories. Secondly, I will discuss what Stalnaker calls the serious difficulties of his view, which interestingly enough, amount to near analogues of the problems that Frege noticed arose with identity statements and statements with substituted coreferring terms, especially in opaque contexts. Throughout the paper we will see basically how his account synthesizes ideas of Russell's time, as well as the current speculation.

The first thing to understand about Stalnaker's conception of propositions is that it comes about in a modal logic where necessity and possibility are defined in terms of a structure of possible worlds. Modal logic is a branch of logic which captures the fact that the changing denotation of an expression is a function of changing facts. That is, the notion of possible worlds is a primitive in his theory. That there are different possible states of the world relative to which statements will be assigned a truth value is actually an extension of model theory. Model theory is one of the components of truth-conditional semantics because it is assumed that certain facts about the world help determine the semantic value of a sentence. Consider the statement in (1), for example.

(1) Martha is looking at the stars

The statement in (1) will be true in any model where there is an individual named Martha, who is in an appropriate relation to predicates and truth values, that is, whenever the model has Martha looking at the stars. That meaning is thought of as truth conditions is reminiscent of Davidson, Quine and even the existential conditions of Russell's definite descriptions, among others.

Stalnaker points out that once domains of possible worlds and individuals are specified, statements of necessity can have a natural interpretation. If, in all possible worlds in the domain, Martha is looking at the stars, (2) will be true.

(2) It is necessarily the case that Martha is looking at the stars.

Notice how, on a possible-worlds approach, (1) divides the set of all possible worlds into two: worlds where it is true; and worlds where it is false.

Another natural interpretation that falls out of this view is the distinction between intentions and extensions. The extension of an expression is its denotation relative to a possible world. The intention of the same expression will be a function, or a rule, mapping possible worlds into its denotation. The rule determining the extension of a sentence, then, is the proposition it expresses. That is, a proposition is that function from possible worlds into truth values; it is the function that gives you that set of worlds in which the sentence expressing the proposition is true. The relevance of intentionality will soon be apparent.

Stalnaker first argues that an independent justification for the suggestion that propositions are the objects of propositional attitudes is that the latter are functional states of

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a rational agent.[1] Assuming some theory of rationality, the common-sense view of why actions of rational creatures are appropriate is that their beliefs determine their eventual choices of alternative possible courses of events, while their desires might be functioning to order the alternatives in terms of their desirability. On a functional account then, rational creatures are disposed to behave in one way as opposed to another, because of the different features distinguishing possible worlds, which determine that belief and hence that choice of action.

Before delving into the problematical areas of this view, Stalnaker points out that if we believe that creatures such as cats are somehow rational and that they have beliefs and desires, as Jerry Fodor (1987) believes of his Greycat for example, who exhibits instances of wanting food, wanting to go outside and fearing aggressive dogs, then in that case, not only is Stalnaker's definition of proposition based on possible worlds appropriate for the functional account of propositional attitudes, but moreover his theory could not have defined propositions in any way which is dependent on language without excluding the possibility of animal beliefs, among other cases.

In a functional theory of mind we are interested in the organization of the mind, and specifically the roles of propositional attitudes. Animals then, may have beliefs and desires because these objects are understood purely in terms of their role in the rational determination of their action, and thereby are independent of any linguistic form or internal representation.

This is desirable, since it seems that there is a causal link between, say, cats' dispositions to particular behaviors, and external reality, yet it would be counterintuitive to suppose that they have mental language as humans do.

More evidence that the objects of propositional attitudes are essentially nonlinguistic is that, while we normally may speak of true, false, incompatible and independent beliefs, which are properties of statements as well, other linguistic properties such as "the first constituent" or a subordinate clause are not naturally attributable to propositions. On this account, propositions have no syntax, no "exact words." We also know this by the fact that we can have propositional attitudes about people or objects to which we cannot give a name or unique reference.

Now then, besides what Stalnaker calls problems of general skepticism about whether a theory of possible worlds can have productive application, which, according to Stalnaker is not an independent reason to reject the idea (it is simply rejecting the existence of possible worlds), Stalnaker discusses the problem of codesignating terms. Recall that Frege's sense attempted to account for such problems. Here, the problems arise in connection with the logical equivalence and the necessary truth of statements and propositions. Stalnaker explains them separately, but they are closely related enough so as to have parallel solutions, and given this, I will discuss the case of necessary truth because it is more interesting. and indicated where it crucially differs from the case of logical equivalence. Notice how the necessary truth that two objects be identical is similar to the notion of logical equivalence, except that in the first case, two objects of propositional attitudes will be logically equivalent when they hold in exactly the same possible worlds.

We assume that a desideratum of this theory is that the proposition expressed coincide with the proposition believed. Suppose the statement in (3) expresses a necessary truth that can be known a priori, or independently of observation.

(3) The Evening Star is the Evening Star.

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[1]In this theory, speech acts can, more or less, be thought of as propositional attitudes, as well.

And hence we can say (4).

(4) It is necessarily the case that the Evening Star is the Evening Star.

Now suppose that (5) is true.[2]

(5) Martha believes that the Evening Star is the Evening Star.

This is plausible since (5) will be true if there are one or more certain possible worlds in which (5) is true, and (3) must hold in every possible world in the domain.Now consider Kripke's (1972) claim that there are necessary truths that can only be known a posteriori, that is, only after one has been convinced of the empirical evidence. Suppose that (6) is such a necessary truth.

(6) The Morning Star is the Evening Star.

Notice that now that we have substituted a coreferring term, which we should be able to do by Leibnitz' Law, the proposition expressed in (6) is only contingently true. To verify it, we go out into the world and look for the relevant facts (i.e., not linguistic objects). We cannot go on to say, analogously to (3), (4) and (5), that the following is true.

(7) It is necessarily the case that the Morning Star is the Evening Star.
(8) Martha believes that the Morning Star is the Evening Star.

By saying that the proposition expressed in (6) is only contingently true, we are pointing out the fact that the set of true statements is the set of necessary truths together with a complement set of contingent truths: those that are true as a matter of fact, although they might have been otherwise had the world been different. In the case of (7) or (8), we can imagine possible worlds compatible with our knowledge (which Stalnaker suggests might be an aspect of the definition of possible world) in (6) which will be false (making (7) false, as well), namely those in which the relevant facts are different. For example, if two planets different from Venus (the referent of both names in (6)) had been called "the Morning Star" and "the Evening Star," (7) would definitely be false and (8) could very well be false, too.[3]

The problem arises when we consider what it means to say that the proposition expressed in (6) is not necessarily true. How can an object sometimes not be identical to itself? By appealing to the contingency of naming, Stalnaker argues that we are invoking irrelevant facts. Any argument that the Evening Star itself is distinct from the Morning Star itself is incoherent.

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[2]It is not clear whether we can have false beliefs about tautologies (i.e., a priori necessary truths) on this view, for instance, the problem of *logical omniscience*, the view which seems to entail that everyone knows all logical truths, because they cannot have any false beliefs about them unless these are really false beliefs about which proposition certain sentences express. But, an additional question arises: are there no such things as logically true propositions? If we assume the proposition to be devoid of linguistic structure (constituent structure), you should not be able to say that (5) must be true. But it would be hard to defend the claim that we do not recognize such fundamental concepts.

[3]Example (7) is false if the Morning Star and the Evening Star are *really* possible worlds. It is not clear what to say about (8), that is, whether its truth depends on really possible worlds or just epistemically possible ones in which the Morning Star is not the Evening Star.

Notice that this is where the similarity of logical equivalence to necessary truth diverges. If Martha believed only a proposition P and not its logical equivalent Q, we need only remind ourselves that P and Q stand for expressions that denote things that express the proposition that P, in order to see that, according to Stalnaker, Martha does believe that Q, but just does not express it that way.

Unfortunately, this same rationale does not extricate Stalnaker from the quagmire that the existence of necessary a posteriori truths is incompatible with a possible-worlds account of knowledge. The thesis that propositions are objects of propositional attitudes predicts that we have beliefs about some possible world, or that we may have no beliefs about some possible world, or that we have false beliefs about these. The paradox is that when there are propositions whose necessary truth can only be discovered by knowing the relevant evidence, any rational agent among us might be inadvertently left in the dark with regard to this proposition and she will have a false belief (i.e., no belief) about the necessary truth of that proposition. That is, there is no way to represent this false belief, since it ought to be a relation to the possible worlds in which the sentence is false, but there *are* no such worlds.

Stalnaker backtracks slightly at this point to distinguish contingent propositions from necessary ones. He argues that the hope for a solution to this problem is to exploit the gap between the statement and proposition. This means that, according to Stalnaker, somewhere in the relation between the propositions and their expressions will be found the fact that there are actually two propositions in the case in question, the contingent one and the necessary one, the first being a function of the rules determining the second. This way, if I edify Martha regarding the relevant identities and she believes it, now when she asserts (6) for example, she is asserting a contingent proposition, whereas the necessary proposition exists somewhere "out there," not contingent on any combination of syllables or sounds for formal instantiation (or, a name). Notice how there actually may be no point in asserting a necessary proposition, which is distinct from a necessary truth, as these are often reasonably asserted.

By way of concluding remarks, let me highlight two features of this possible-worlds approach to propositions. Number one is that we could object to the fact that Stalnaker commits himself neither to the view that meaning can be used to explain modality (i.e., necessity, possibility) as does Carnap (1947), nor to using modality to explain meaning, nor does he commit to the view that we understand necessity and possibility independently of meaning. Secondly, we notice that Stalnaker's account involves something like an intermediate entity. Recall that when Carnap (1947) coined the term "intention," he meant to formalize Frege's notion of sense. While Stalnaker does not explicitly say it, there is an intuitive notion of some level of meaning staying the same, while the referring expression changes, as in the current speculation about the meaning of indexicals where their meaning is just that which stays the same: the function from contexts to referents.

We can see how this intermediate level stays the same in the case of intentions if we substitute a Russellian disguised description for one of the referring expression(s) in (6), something along the lines of (9).

(9) The star that shines bright in the morning

The proposition expressed in (9) is sense-like and description-like in that you understand more detail by it than by the referent alone. In the same way, the intention of a predicate is the property it expresses, not just a class of objects. The properties expressed in (9) can stay constant while names for the referent can vary as a function from possible worlds into

sets of objects.[4]

To summarize this paper, Stalnaker defines the proposition as a set of possible worlds, and as the object of propositional attitudes in a functional theory of mind. The consequence of this is that, not only do we have a common-sense theory of various dispositions to behave in a particular way based on deliberations over possible-world outcomes, but in addition, Stalnaker and Carnap have salvages from Russell and (especially) Frege what it was that was intuitively correct but formally intractable about an informative middle layer of meaning. Even in the paradoxical case of rational agents ignoring necessary truths, which the functional theory allows, we can appeal to their ignorance of the abyss between statements and propositions for a solution, an avenue which Stalnaker clearly hopes can be pursued.

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[4]It is not always clear how much will be different in a possible world compared to the actual world. For example, the referring expression "9" and its referent do not change from possible world to possible world (I am told), while "the number of planets" is changeable. If there could have been any number of planets in the solar system, why does there necessarily exist a planet Venus in every possible world? If we stipulate, even by indicating with examples, what things would be different or similar, this would lessen the force of the theory.