A Defense of Denotative Theory from Kripke's Criticism

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I n *Naming and Necessity,* Kripke criticizes the denotative theory of reference and proposes a version of the causal theory of reference. The outline of the discussion between these two theories is the following: the denotative theory is advocated by Russell, who thinks that the reference of a name is determined by the definite description the name gives. Kripke, however, opposes this idea; he thinks that names can designate objects without description, and proposes his version of the causal theory. In this paper, I attempt to examine the criticism given by Kripke and defend the denotative theory from it. I then challenge the causal theory. Finally, I will show the advantages and disadvantages of the denotative theory and the causal theory, along with a comparison between the two. To achieve this goal, it is first necessary to explain the denotative theory, the foundation of which is the notion of definite descriptions, before moving to an explanation of Kripke's version of the causal theory, the foundation of which is the notion of rigid designators.

I. Description Theory and Denotative Theory

In this section, I will explain what the description theory is,

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which is advocated by Russell. The main idea presented by this theory is that reference is determined by descriptions. Firstly, then, the notion of descriptions needs to be explained. Russell divides our knowledge into two categories: knowledge by acquaintance and knowledge by description. The former is given by direct cognition, and involves no inferences. The objects of this knowledge are sense-data, universals, awareness of objects, and relations.[1] Knowledge by description, on the other hand, is given by definite descriptions. Descriptions are represented in the phrases "a so-and-so" and "the so-and-so," the former of which is called an indefinite description, and the latter of which is called a definite description. The objects of knowledge by description are physical objects and other minds.[2] What play a central role in the theory of description are singular definite descriptions. Russell thinks that all names are descriptions; proper names are definite descriptions. Therefore, a proper name refers to an object, when the definite description given by the name determines one and only one object that is the so-and-so.

Russell also proposes the denotative theory of meaning, which asserts that the meaning of a word is the object it denotes. Then, in Russell's view, names have meanings, since they are definite descriptions which denote objects. Moreover, names have intensions as well as extensions.[3] Here, the intension of a word is the set of properties the word represents; and the extension of a word is the set of objects to which the word is applied. It seems necessary at this point to make some remarks for the sake of clarity. Russell, like Frege, distinguishes sense and meaning. Names have both sense (intension) and meaning (extension), the former of which is the definite descriptions they represent, and the latter of which is the object the definite descriptions denote, which serves as the referent of the name.

In the case of Hesperus, the name "Hesperus" is a definite description representing the certain properties such as "it is a planet seen at such and such place in the celestial sphere in such and such period of time in evening." These properties determine one and only one object, namely Venus, which is the meaning of the name "Hesperus". Hence the proper name "Hesperus" refers to the referent Hesperus, which satisfies the definite description. Kripke, however, makes an objection against this theory of description, which I will now turn to.

II. An Objection by Kripke and the Causal Theory
Kripke objects to the denotative theory by arguing that names,

especially those of natural stuffs, in fact have no intensions.[4] His refutation of the theory of description goes as follows. Objects referred by the same name can have different (accidental) properties in different possible worlds. In other words, one name can have different descriptions in different possible worlds; thus names cannot determine their unique descriptions. For instance, Hesperus in a possible world can be located at different place in space than it is in the actual world. Nevertheless, the heavenly body would still be Hesperus.

Kripke also points out the problem of identity between different names in the denotative theory of meaning. There are cases in which two different names refer to the same object, such as Hesperus and Phosphorus both referring to the object Venus. Hence the identity holds between Hesperus and Phosphorus. However, this will not do in the denotative theory of meaning, because the intensions of these names are different from each other.[5] That is, a part of the sense of "Hesperus" is "an evening star", while that of "Phosphorus" is "a morning star". Thus, there is a problem with replacing names with descriptions as Russel would have us do. That is, although Hesperus and Phosphorus name the same object, we utilize different sentences to denote them—in this case by referencing the times of day in which we encounter them.

To avoid these problems, Kripke thinks that names are rigid designators rather than descriptions. Rigid designators are terms that refer to the same individual in every possible world where the individual exists. To see how the notion of rigid designator solves these problems, I will explain how Kripke establishes the identity between Hesperus and Phosphorus. He regards this identity as *a posteriori* necessary. That is, the proposition that Hesperus is identical with Phosphorus cannot be false, and cannot be found to be true without empirical investigation. The *a posteriority* of the identity is evident because it seems impossible to know the identity without astronomical observation, and because the words "Hesperus" and "Phosphorus" did not originally have as the explicit referent Venus. Ancient people did not know Hesperus and Phosphorus are in fact Venus and thought that they are different heavenly bodies; thus the names "Hesperus" and "Phosphorus" in the ancient use did not refer to the Venus. However, the necessity of the identity requires an explanation, because it seems possible for the identity to fail to hold. Here, however, rigid designators assure the necessity of identity. In the case of Hesperus and Phosphorus, both names rigidly designate the same object, Venus, in every

possible world where Venus exists. Since the identity holds in every possible world, it is necessary.

On the basis of rigid designators, Kripke establishes his version of the causal theory of reference, which states that what links names with referents is a causal chain, and in his version is rigid designator. The sketch of the causal chain of reference is shown as follows: firstly, Kripke says that, in order for a name to refer to objects, the speaker of the word must intend to do so. Then the speaker's intention is maintained through language communication, thereby a name refers to the same objects in the practice.[6] For instance, let us consider the name of a man, say, John. When he was born, his parents named him John in the initial baptism. In this step, the name "John" gains its referent. Then his parents talk about John to other people, or John himself says "My name is John" when he introduces himself. In these instances people learn the referent of the name "John". In suchways the name "John" spreads through communications, preserving its referent. Thus names can refer to its refferent without definite descriptions.

III. Consideration of the Debate between the Denotative and Causal Theories

In this section, I will consider the advantages and disadvantages of the denotative and causal theories. The above discussion of Kripke, presented some of the disadvantages of the denotative theory; the difference of intensions of names in different possible worlds cannot explain the trans-world identity between objects referred by the same name, and the identity between different names referring to the same extension fails. Accordingly, denotative theory has difficulty handling identity relations. If Kripke is correct in these points, denotative theory would be fatally damaged, because the fundamental notion of description is ineffective. Unfortunately, his arguments seem plausible.

Should then we abandon the denotative theory and accept the causal theory? My answer is no; the denotative theory surely has an advantage over the causal theory in the clarity of the referential relation between names and referents. In denotative theory, names and referents are closely linked by the relation of description. A name refers to object if the object satisfies the definite description given by the name. Kripke thinks that names do not give descriptions, because different descriptions are attributed to the same name in different possible worlds. However, I oppose this view, because the consideration of descriptions in the non-actual possible worlds seems to miss the point.

When we concentrate on the determination of the referent of a name in the actual world, we can do without the consideration of other possible worlds. For example, when we use the name "Hesperus" this name gives us only one definite description, that is, "it is a planet seen at such and such place in the celestial sphere in such and such period of time in evening." The referent of the name "Hesperus" can be clearly determined by the definite description given by the name (even though restricted in the actual world). The extension of a name is thus clearly determined in terms of its intension. Despite of the problem of identity, the denotative theory explains more about reference than the causal theory and is thus preferable.

In the causal theory, on the other hand, the relation between names and referents is unclear. In other words, it is unclear how rigid designators can rigidly designate referents without description or intension. Rigid designators, in Kripke's explanation, designate the same object in every possible world where it exists. However, in the case of Hesperus in a possible world where it is located in a different place than in the actual world, how can we determine the referent of "Hesperus" without the definite description of it? Moreover, how can we say that the heavenly body in the possible world is Hesperus? Kripke's answer with the speaker's intention is unsatisfactory, because the referents of a name can change through the advancement of time. Thus, the speaker's intention of the use of a name cannot be retained. Therefore it seems impossible for extension of a name to be determined without its intention.

Kripke's argument that names do not have senses or intensions is problematic as well. While the example of the determination of the referent of the name "John" seems successful, in the case of the referent of "Hesperus", the causal-theoretical explanation seems to fail. If the explanation is applied to that case, the scenario would be the following. In the first place, an ancient astronomer named an evening star Hesperus. Then through communication, the use of the name "Hesperus" spread. After a while, however, it was discovered that Hesperus is in fact the planet Venus. At this point, people would have thought that the name "Hesperus" got some alternation. In Kripke's view, names have no intensions, but only extensions. In this case, however, the extension of the name "Hesperus" remains the same. Thus it seems inevitable to think that what got the alternation is the intension of "Hesperus", and names indeed have intensions.

IV. Conclusion

This paper has presented the debate between the denotative theory and Kripke's version of the causal theory. The crucial point of this debate is whether names are descriptions or rigid designators. As a result of our analysis, we can say that the advantage of the denotative theory is the clarity of the referential relation between names and referents, whereas its disadvantage is its difficulty in treating identity relations. On the other hand, the advantage of Kripke's causal theory is the preservation of identity between names; whereas its disadvantage is its difficulty in explaining reference without the intention of names.

Notes

1. Grayling 2014, 105
2. Grayling 2014, 105
3. Reimer and Michaelson 2014, 2.1
4. Kripke 1981, 116-129
5. Kripke 1981, 28-29
6. Kripke 1981, 91-97)

References

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Kripke, Saul A. 1981. *Naming and Necessity*. Oxford: Blackwell Publishing.

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