# THE SORITES ARGUMENT AGAINST DESCRIPTIVISM

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2021

# THE SORITES ARGUMENT AGAINST DESCRIPTIVISM

Thesis submitted to the

Institute for Graduate Studies in Social Sciences

in partial fulfillment of the requirements for the degree of

Master of Arts

in

Philosophy

by

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Boğaziçi University

2021

# DECLARATION OF ORIGINALITY

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ABSTRACT

The Sorites Argument Against Descriptivism

In the theory of reference, descriptivism about proper names is a family of closely related theories which broadly hold that a proper name refers to an object by virtue of being associated, in the idiolect of a speaker, with a description or descriptions. The unique object, if any, that satisfies the description or sufficiently many of the descriptions is then said to be the referent of the name. It is now widely believed that descriptivism—or, at any rate, one influential version of it—was soundly refuted by Kripke's arguments against it in *Naming and Necessity*. According to this influential version, the so-called "cluster" theory of names, a name is typically associated with a vague cluster of descriptions. But if the cluster theory is somehow vague, then one would expect a sorites argument corresponding to this vagueness—for vagueness is typically accompanied by soriticality. In this thesis, I begin by offering a slightly more precise formulation of the cluster theory, in light of which I argue that it is the most general version of descriptivism possible. I then present the promised sorites argument against descriptivism, which reveals the descriptivist's commitment to the idea that names are vague predicates. I conclude by suggesting that vagueness is not an accidental feature of the cluster theory but rather an essential—if not the essential—feature of descriptivism itself.

# ÖZET

## Betimleyiciliğe Karşı Sorites Argümanı

Gönderim kuramında, özel adlarla ilgili betimlemecilik, bir özel adın, bir konuşmacının deyimiyle, bir betimleme veya betimlemelerle ilişkilendirilmesi nedeniyle bir nesneye göndermede bulunduğunu genel olarak kabul eden, yakından ilişkili bir kuramlar ailesidir. Eğer varsa, betimlemeyi veya yeterince betimlemeyi karşılayan benzersiz nesnenin adın göndergesi olduğu söylenir. Tanımlayıcılığın—ya da en azından onun etkili bir versiyonunun—Kripke'nin *Adlandırma ve Gereklilik*'te ona karşı olan argümanları tarafından sağlam bir şekilde çürütüldüğüne artık yaygın olarak inanılıyor. İsimlerin "küme" teorisi olarak adlandırılan bu etkili versiyona göre, bir isim tipik olarak belirsiz bir tanım kümesiyle ilişkilendirilir. Ancak küme teorisi bir şekilde belirsiz ise, o zaman bu belirsizliğe karşılık gelen bir sorites argümanı beklenebilir—çünkü belirsizliğe tipik olarak sorusallık eşlik eder. Bu tezde, mümkün olan en genel betimleyici versiyonu olduğunu iddia ettiğim küme teorisinin biraz daha kesin bir formülasyonunu sunarak başlıyorum. Daha sonra, betimleyicinin isimlerin belirsiz yüklemler olduğu fikrine bağlılığını ortaya koyan, betimleyiciliğe karşı vaat edilen sorites argümanını sunuyorum. Belirsizliğin kümelenme teorisinin tesadüfi bir özelliği olmadığını, daha ziyade betimleyiciliğin kendisinin temel bir özelliği—eğer esas değilse—bir özelliği olduğunu öne sürerek bitiriyorum.

# ACKNOWLEDGMENTS

I would like to extend my deepest gratitudes to Assist. Prof. Karanfil Soyhun, Assist. Prof. Sun Demirli and Prof. İlhan İnan for accepting to serve on my thesis committee. In particular, I am indebted to Assist. Prof. Karanfil Soyhun for her continual support, both academic and otherwise, and to Prof. İlhan İnan for providing extensive feedback on earlier drafts of this thesis. Last but not least, I thank Assoc. Prof. Chryssi Sidiropoulou for many things, including attending my thesis defense.

*To my parents, Gülsüm and Rahmi...*

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# CHAPTER 1

# INTRODUCTION

Do proper names have senses?[1] Or, to put it more neutrally, what—if anything at all—is the meaning of a name? This is a major question in the philosophy of language, one that has bewildered philosophers ever since antiquity. One might even argue that philosophy of language very much begins with this question, as *Cratylus*, one of Plato's middle dialogues and arguably the first philosophy of language text in Western philosophy, is exactly about this question.[2]

Although the debate around names is ancient, the question is hardly settled. As we shall see in detail later, the two competing theories of names in contemporary philosophy of language are Fregeanism and Millianism, named after Gottlob Frege and John Stuart Mill, respectively. According to the 2009 PhilPapers survey,[3] professional philosophers are almost evenly divided on the issue, with 28.7% accepting or leaning toward Fregeanism, 34.5% accepting or leaning toward Millianism, and the rest (36.8%) being classified as "other". So it is probably safe to say that the question is pretty much open.

In this thesis, my approach will be less historical and more systematical. In order to render the thesis relatively self-contained, however, I will spend some time in this chapter with providing some historical background. Although, as I have noted, the history of the philosophy of language can be traced back to as early as Plato, for our purposes the right place to start seems to be John Locke.

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[1] In this thesis, I will not be concerned with the question of what a proper name is; rather, I will assume the notion of a proper name to be basic. Also, in what follows, I will drop the adjective 'proper' and simply use 'name' instead of 'proper name'.

[2] More specifically, the subject of the *Cratylus* is the "correctness of names".

[3] See Bourget and Chalmers (2014).

Locke's views on language is found in Book III of *An Essay Concerning Human Understanding*. Simply put, Locke's view is that language is a means of communicating thought. An immediate corollary of this is that words and other linguistic expressions, by virtue of being components of language, signify components of thought.[4] Locke calls these components of thought *Ideas*. The term 'Idea', with a capital 'I', is a technical term in Locke's philosophy. For our purposes, we may think of a Lockean Idea as some sort of a private mental image.

Although sensible at first sight, it is not hard to notice the big problem that Locke's view immediately runs into: it makes communication, the very function of language, apparently impossible. For communication seems to require understanding, and understanding requires that one speaker knows what the other means. But how could one person ever know what another meant, if thought is indeed private?

Just as philosophy of language can be said to have begun with a debate over the correctness of names, modern philosophy of language can be said to have begun with a debate over the meaning of words: Against the mainstream Lockean view, a revolutionary idea—generally associated with Mill and Frege—was eventually advanced: i.e. the idea that our words mean not things in our minds but rather things in the world.[5] Today, as I have noted, most philosophers self-identify as either Millian or Fregean—or somewhere in between. In this sense, the Lockean conception of language has clearly lost the debate.

Although driven by the same underlying principle, i.e. the principle that the meanings of our words are not things in our minds but things in the world, Millians

[4] Locke (2017) seems to use the notions of *signification* and *meaning* interchangeably.
[5] Several words or phrases that could replace 'mean' in this context include: 'concern', 'refer to' and 'pick out'.

and Fregeans are sharply divided on another major question, seemingly none other than the one that had informed Plato's *Cratylus* in the first place: is there any more to the meaning of a name than the object, if any, to which it refers?

Millianism answers this question in the negative: it holds that there is no more to the meaning of a name than its referent. Mill argues for this simple yet compelling view in Chapter 2 of Book I of *A System of Logic*. According to Mill (2017), names denote but do not connote. We could paraphrase this in more modern terms as: names (at most) refer but they do not (necessarily) describe. Mill's argument involves the famous example of 'Dartmouth':

> A town may have been named ‘Dartmouth’ because it is at the mouth of the river Dart, but its name doesn’t mean that. If an earthquake changed the river’s course, putting a distance between it and the town, the town’s name would not have to be changed. (p. 14)

As simple and common-sensical as it may be, Millianism is not without problems. In fact, it was precisely these problems that enabled Frege to revolutionize the philosophical scene of the time and to mark the very beginnings of the analytic tradition in philosophy. Frege ingeniously noticed not just one but several problems with Millianism, which have come to be known as *Frege's puzzles*.[6]

The first and simplest problem with Millianism concerns empty names. A name is said to be *empty* just in case it does not refer: i.e. it lacks a referent. The classic example is 'Santa Claus'. Consider the sentence

[6] The term 'Frege's puzzle', in the singular, may legitimately refer to any one of the four problems to be discussed below. However, in the literature, it most commonly refers to the third problem: i.e. the problem about informative identity statements.

(1) Santa Claus loves children.

By any standard, (1) is perfectly meaningful. Remember, however, that according to Millianism there is no more to the meaning of a name than its referent. On the plausible assumption that Santa Claus is a fictional character, Millianism implies that the name 'Santa Claus' lacks meaning—for it lacks a referent. As a consequence, Millianism implies that (1) as a whole is meaningless. And that is a problem.

The second problem is a natural amplification of the first one. Consider the sentence

(2) Santa Claus does not exist.

A sentence of this form is known as a *negative existential*: it makes an existential claim, not by saying of something that it exists but by saying of it that it does not exist. Again, by any standard, (2) is meaningful. What is more, on the same assumption that Santa Claus is a fictional character, (2) is not only meaningful but it is actually true. Millianism, however, can not appreciate even the meaningfulness of (2), let alone its truth—for how can a sentence ever be true without being meaningful in the first place?

The third problem, probably the most well-known of all, concerns informative identity statements. Consider the sentence

(3) Hesperus is Phosphorus.

The story goes that the ancient Babylonians gave the names 'Hesperus' and 'Phosphorus' to two bright celestial objects, one in the morning sky and the other in the evening sky, respectively. What they did not know, however, was that they have given two different names to one and the same object, none other than the planet Venus. In short, the names 'Hesperus' and 'Phosphorus' refer to the same object: i.e. the planet Venus. What Millianism implies this time around is that (3) says, in effect, that Venus is Venus. In other words, Millianism implies that (3) is an uninformative identity statement, whereas it is clearly an informative one.[7] And that is another problem.

The fourth and final problem is similarly an amplification of the third one. Consider the sentence

(4) Sam believes that Hesperus is Phosphorus.

A sentence of this form is known as a *propositional attitude report*:[8] as the name suggests, it reports the attitude of a subject toward a proposition. It has long been acknowledged that propositional attitude reports give rise to referentially opaque contexts.[9] Thus, the sentence

(4*) Sam believes that Hesperus is Hesperus,

[7] Imagine an ancient Babylonian getting informed on the fact that Hesperus and Phosphorus are actually one and the same thing.
[8] More specifically: the form 'S Φ's that P', where 'S' denotes a subject, 'Φ' denotes a propositional attitude verb (such as 'believe', 'wish', 'hope', etc.) and 'P' denotes a proposition.
[9] A linguistic context is said to be referentially *transparent* just in case any term in that context can be replaced with a co-referring term *salva veritate*. A linguistic context is said to be referentially *opaque* just in case it is not referentially transparent.

obtained simply by replacing 'Phosphorus' in (4) with 'Hesperus', does not necessarily have the same truth value as (4).[10] Millianism, on the other hand, requires that not only (4) and (4*) can not differ in truth value, but also the stronger claim that this is so precisely because (4) and (4*) express, in effect, the same proposition: i.e. the proposition that Sam believes that Venus is Venus.

Frege's puzzles have motivated many philosophers to answer the question "Is there any more to the meaning of a name than its referent?" in the affirmative. Chief among them was Frege himself, hence the name 'Fregeanism', who posited abstract and mind-independent entities called *Senses* as that which is more to the meaning of a name than its referent. Frege thought that the Sense of an expression was its mode of presentation and that this mode of presentation was in a crucial respect more basic than the expression's reference: it was through the Sense of an expression that its reference was determined. In slogan form: sense determines reference.

Frege further thought that the Sense of a name could be captured, at least in principle, by a definite description. On Frege's view, speakers typically associate a definite description with each name they use. For example, Sam, an ancient Babylonian, might have associated 'the evening star' and 'the morning star' with 'Hesperus' and 'Phosporus', respectively. The description gives the name's meaning, or simply determines its reference, whereas the name "abbreviates" the description. In the next chapter, we will consider this descriptive theory of names—or *descriptivism* for short—in more detail.

[10] Imagine that Sam is an ancient Babylonian who does believe that Hesperus is Hesperus but does not believe that Hesperus is Phosphorus.

# CHAPTER 2

# DESCRIPTIVISM

Descriptivism comes in a variety of forms. In this chapter, we will consider two major versions of the theory that, following Devitt and Sterelny (1999), I will call *Classical Descriptivism* and *Modern Descriptivism*. Before proceeding further, however, we must introduce two basic distinctions that apply equally well to any version of descriptivism:

The first distinction concerns two grades of descriptivism, descriptivism as a theory of reference vs. descriptivism as a theory of meaning, depending on how far one is willing to go with the theory. Descriptivism as a mere theory of reference is less ambitious and simply involves the claim that descriptions play a role in fixing a name's referent. Descriptivism as a full-blown theory of meaning, on the other hand, is more ambitious and involves the additional claim that descriptions play a role in giving a name's meaning: i.e. the additional claim that the name is synonymous with the description(s).[11]

The second distinction concerns two types of descriptivism, pure descriptivism vs. impure descriptivism, depending on what kind of descriptions are allowed. Pure descriptivism allows only pure descriptions. Impure descriptivism, on the other hand, allows both pure and impure ones.[12]

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[11] Obviously, it is descriptivism as a full-blown theory of meaning that is more interesting and worthy of attention. On the other hand, since the claim about reference-fixing is common to both grades, and therefore the more ambitious grade logically implies the less ambitious one, any argument against reference-descriptivism is also an argument against meaning-descriptivism. Therefore, unless specified otherwise, I will hereafter use 'descriptivism' to mean descriptivism as a theory of reference.

[12] A description is *pure* if it contains no names, indexicals or demonstratives; otherwise it is *impure*. Similarly, it is impure descriptivism that is both more interesting and more plausible. Therefore, unless specified otherwise, I will hereafter use 'descriptivism' to mean impure descriptivism.

According to the original version of descriptivism, Classical Descriptivism or (CD) for short, a name refers to an object by virtue of being associated, in the idiolect of a speaker, with a (single) description.[13] The unique object, if any, that satisfies the description is then said to be the referent of the name. For example, the name 'Aristotle' may refer to Aristotle in Sam's idiolect by virtue of being associated by Sam with the description 'the author of the *Metaphysics'* and then Aristotle uniquely satisfying this description.[14] (CD) is mostly due to Frege (1948) and Russell (1905). Although it was meant, first and foremost, as a solution to Frege's puzzles, this version of descriptivism has its own problems which have motivated some philosophers to come up with a more sophisticated version.[15]

According to this more sophisticated version of descriptivism, Modern Descriptivism or (MD) for short, a name refers to an object by virtue of being associated, in the idiolect of a speaker, not with a single description but rather with a vague "cluster" of descriptions—hence the better known name, the *cluster theory*. The unique object, if any, that satisfies sufficiently many of the descriptions is then said to be the referent of the name. For example, the name 'Aristotle' may refer to Aristotle in my idiolect by virtue of being associated by me with a (vague) cluster of descriptions including 'the author of the *Metaphysics*' as well as many others—such as 'the student of Plato', 'the teacher of Alexander the Great', 'my favorite ancient

[13] In some sources, rather than simply 'description', the term 'definite description' is used for formulating (CD). This is probably because (CD) requires that the (single) description in question be uniquely satisfied by an object for that object to qualify as the referent of the name. Since indefinite descriptions are typically not satisfied uniquely, this usage of 'definite description' is somewhat understandable. However, strictly speaking, (CD) does not require that the description in question be a definite one.

[14] Imagine that Sam is a high schooler who knows nothing about Aristotle except for this: One day Sam goes to the library, pickes up a book at random, reads its cover (which reads '*The Metaphysics* by Aristotle') and puts down the book immediately.

[15] Devitt and Sterelny (1999) call these problems *principled basis*, *unwanted ambiguity* and *unwanted necessity*.

philosopher' etc.—and then Aristotle uniquely satisfying sufficiently many of these descriptions. As Devitt and Sterelny (1999) aptly put, "[i]nstead of tying a name tightly to one definite description, as the classical theory does, the modern theory ties it loosely to many" (p. 50). The inspiration for (MD) apparently comes from Wittgenstein (1953). It is mostly due to Searle (1958), but also to Strawson (1990). Although (MD) handles well the problems of (CD), it faces its own set of problems which could not escape the attention of certain philosophers—chief among them Kripke.[16]

In fact, it is now widely believed that (MD) was soundly and definitively refuted by Kripke's arguments against it in *Naming and Necessity*. Kripke's (1980) arguments are often categorized by commentators into three types: modal, epistemological and semantical.[17] Of the three, the first two are believed to refute descriptivism only as a theory of meaning; only the last one, the semantic argument, is believed to refute it both as a theory of reference and *a fortiori* as a theory of meaning.[18] Devitt and Sterelny (1999) refer to the semantic argument, the most celebrated one of the three, as *the argument from ignorance and error*. As the name suggests, the major achievement of the semantic argument lies in the observation that it does not take much to refer: reference is successfully brought about even in the presence of widespread, actual or merely possible, ignorance and error about the true nature of the object referred to.

[16] Devitt and Sterelny (1999) call these problems *lost rigidity* and *ignorance and error*.
[17] This threefold categorization is first due to Salmon (1981). See Braun (2006) for an overview of the arguments.
[18] Strictly speaking, only the semantic argument is *uncontroversially* believed to refute descriptivism as a theory of reference: it is controversial whether the epistemological argument works against descriptivism only as a theory of meaning (like the modal argument) or outright as a theory of reference (like the semantic argument).

Kripke's achievements include not only a refutation of (MD) but also a positive theory—or "picture" as he likes to call it—of reference. According to this positive theory, the *causal theory of reference*, a name is a *rigid designator*: i.e. it refers to the same object in all possible worlds, by virtue of standing in a causal relation to that object through a chain of reference borrowings following an initial "baptism".[19] The causal theory is mostly due to Kripke (1980) in the case of names and to Putnam (1975) in the case of natural kind terms.[20]

In the remainder of this chapter, I will use Kripke's (1980) formulation of (MD) as a blueprint to come up with a slightly more precise formulation of my own. Kripke takes Searle (1958) as the best representative of (MD) and provides a detailed formulation of the theory consisting of six theses followed by a non-circularity condition. Kripke's formulation differs from Searle's in two crucial respects: First, whereas Searle requires that "a sufficient but so far unspecified number" of *descriptions* be true of an object in order for that object to be the referent of a name, Kripke requires instead that "most or a weighted most" of *properties* be satisfied by the object. Second, Kripke introduces the notion of *weighting*, the basic idea behind which is that some of the properties in the cluster will typically be more "important" than others in determining the referent. In what follows, I will adopt Kripke's "undemocratic" formulation (in terms of "a weighted most"), based on the simple observation that the "democratic" formulation (in terms of "most") can be regarded as a special case of the "undemocratic" one where each property receives equal

[19] The causal theory may be regarded as a species of the more general *theory of direct reference*, although the two theories are often referred to interchangeably.
[20] One might wonder whether and to what extent the considerations of this paper could be extended to natural kind terms, arguably another class of directly referential expressions very much discussed in the literature along with names. However, in this thesis, I will avoid this question altogether for the sake of a more focused approach.

weight. Building on Kripke's "undemocratic" formulation, then, we can set the stage for a slightly more precise formulation of (MD) as follows:

Let S be a speaker, O be an object, and N be a name in S's language L.[21] Then, according to (CD), there is exactly one property φ such that S associates φ with N. Accordingly:

(CD) N refers to O if and only if φ is uniquely satisfied by O.

On the other hand, according to (MD), there is a set Φ of properties $\varphi_1, \varphi_2, \ldots \varphi_n$, for some positive integer n, such that S associates $\varphi_1, \varphi_2, \ldots \varphi_n$ with N. Accordingly:

(MD) N refers to O if and only if a weighted most of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are uniquely satisfied by O.

Letting R stand for the referent of N, we can also express (MD) as follows:

(MD*) O is R if and only if a weighted most of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are uniquely satisfied by O.[22]

[21] As Braun (2006) notes, "most [descriptivists] think of language L as the speaker's idiolect" (p. 495).
[22] This move from the formal mode of speech (i.e. speaking about language) to the material mode of speech (i.e. speaking about the world) is known as *semantic descent*. (Conversely, *semantic ascent* is the move from speaking about the world to speaking about language.) Cf. Searle (1958): "'What is Aristotle?' and 'What are the criteria for applying the name 'Aristotle'?' ask the same question, the former in the material mode, and the latter in the formal mode of speech" (p. 171).

We can further make the notion of satisfaction of properties a bit more precise by letting P stand for the set of all properties $p_1, p_2, \ldots p_m$ of O and $W : \Phi \rightarrow R^+$ stand for the weighting function from $\varphi_1, \varphi_2, \ldots \varphi_n$ to positive real numbers such that

$$\sum_{i=1}^{n} W(\varphi_i) = 1.$$

Intuitively, the weighting function W reflects the aforementioned fact that some of the properties in the cluster will typically be more important than others. A weighted most of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are satisfied by O just in case

$$\sum_{i=1}^{m} W(p_i) > 0.5$$

where $W(p_i) = 0$ for all $p_i \notin \Phi$.

Building on this formalism, we can further symbolize (MD*) as follows:

$$O = R \leftrightarrow \left( \sum_{i=1}^{m} W(p_i) > 0.5 \;\&\; \forall O' \left( \sum_{i=1}^{l} W(p'_i) > 0.5 \rightarrow O = O' \right) \right)$$

where P' is the set of all properties $p'_1, p'_2, \ldots p'_l$ of O'.

Finally, generalizing, we get:

$$\forall O \, \forall R \left( O = R \leftrightarrow \left( \sum_{i=1}^{m} W(p_i) > 0.5 \;\&\; \forall O' \left( \sum_{i=1}^{l} W(p'_i) > 0.5 \rightarrow O = O' \right) \right) \right)$$

It should be evident from the foregoing analysis that (MD*) simply does not care which properties, or even how many of them, are in any cluster. This indifference to descriptive content, together with the noted vagueness incurred by leaving *n* (the number of properties in a cluster) indeterminate, affords (MD*) a generality by which it is able to include some other versions of descriptivism as special cases. For example, it includes (CD) as a special case where *n* is simply 1. Moreover, it seems also to include two non-standard versions of descriptivism, *causal descriptivism* and *metalinguistic descriptivism*, as special cases where, again, *n* is 1.[23] In fact, it seems that (MD*) is general enough to include all possible versions of descriptivism, i.e. that it is the most general version of descriptivism possible, as it is hard to see whether there can be any version of descriptivism not included by (MD*) as a special case. With this note about generality in mind, I will hereafter refer to (MD*) simply as *Descriptivism*.

[23] See Braun (2006) for an overview of these two non-standard versions of descriptivism. The differences between all these special cases would be made manifest in the content of their one description in question; but, again, (MD*) just does not care about descriptive content.

# CHAPTER 3

## THE SORITES ARGUMENT

The vagueness of Descriptivism has been acknowledged and widely discussed ever since the theory's first clear presentation by Searle (1958). The received view, as I shall call it, on the vagueness of Descriptivism locates the theory's vagueness in actual and widespread semantic indecision. The received view finds its best expression, in my opinion, in the following quote from Ahmed (2007):

> How many associated descriptions—and which ones—need to be shown empty or mistaken before we can count ourselves as having discovered the non-existence of Moses as opposed to widespread error about him? The theory gives no answer. But then it doesn't need to; there seems to be nothing in the rules governing linguistic practice to determine the answer. The vagueness of the cluster theory seems genuinely to reflect an appropriate semantic indecision. Nothing in reality settles whether we should say 'Moses was never rescued by Pharaoh's daughter; nor did he lead the Israelites out of servitude; nor did he receive the Ten Commandments' or 'Moses never existed'. 'You can say what you like as long as you know all the facts.' (p. 15)

But if Descriptivism is somehow vague, then one would expect a sorites argument corresponding to this vagueness—for vagueness is typically accompanied by soriticality.[24] *The Sorites Argument Against Descriptivism*, as I will call it, does exactly this:

Let's instantiate Descriptivism about the name 'Aristotle', in the form of a necessary condition and a sufficient condition, as follows:

[24] In fact, Bueno and Colyvan (2012) offer the following as a theory-neutral definition of vagueness: "A predicate is vague just in case it can be employed to generate a sorites argument" (p. 29).

(D-N) O is Aristotle only if a weighted most of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are uniquely satisfied by O.

(D-S) O is Aristotle if a weighted most of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are uniquely satisfied by O.

The Sorites Argument Against Descriptivism takes the form of two tokens of a single type of argument, one against (D-N) and the other against (D-S):

*The Sorites Argument Against (D-N):* Consider a possible object $O_n$ by which all of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are uniquely satisfied. Then, in particular, a weighted most of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are uniquely satisfied by $O_n$ and so, by (D-S), $O_n$ is Aristotle. But if $O_n$ is Aristotle, then arguably $O_{n-1}$ is also Aristotle (where $O_{n-i}$ is the possible object different from $O_n$ only in that it does not satisfy the properties $\varphi_1, \varphi_2, \ldots \varphi_i$, for some positive integer $i \leq n$, from among the properties $\varphi_1, \varphi_2, \ldots \varphi_n$). After all, $O_n$ and $O_{n-1}$ are only incrementally different; if one is Aristotle, then why not the other? But if $O_{n-1}$ is Aristotle, then, by the same token, $O_{n-2}$ is also Aristotle. And if $O_{n-2}$ is Aristotle, then $O_{n-3}$ is Aristotle. And so on until it follows that $O_0$ is Aristotle. But (D-N) says otherwise: clearly, it is not the case that a weighted most of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are (let alone uniquely) satisfied by $O_0$—for in fact none of them are satisfied—and so, by (D-N), $O_0$ is not Aristotle. Therefore, (D-N) is false.

*The Sorites Argument Against (D-S):* Consider a possible object $O_0$ by which none of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are (let alone uniquely) satisfied. Then, it is not the case that a weighted most of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are uniquely satisfied by $O_0$ and so, by (D-N), $O_0$ is not Aristotle. But if $O_0$ is not Aristotle, then arguably $O_1$ is also not Aristotle (where $O_i$ is the possible object different from $O_0$ only in that it satisfies the properties $\varphi_1, \varphi_2, \ldots \varphi_i$, for some positive integer $i \leq n$, from among the properties $\varphi_1, \varphi_2, \ldots \varphi_n$). After all, $O_0$ and $O_1$ are only incrementally different; if one is not Aristotle, then why the other? But if $O_1$ is not Aristotle, then, by the same token, $O_2$ is also not Aristotle. And if $O_2$ is not Aristotle, then $O_3$ is not Aristotle. And so on until it follows that $O_n$ is not Aristotle. But (D-S) says otherwise: clearly, a weighted most of the properties $\varphi_1, \varphi_2, \ldots \varphi_n$ are uniquely[25] satisfied by $O_n$—for in fact all of them are satisfied—and so, by (D-S), $O_n$ is Aristotle. Therefore, (D-S) is false.

Let's reconstruct the above arguments in the standard form as follows:

The Sorites Argument Against (D-N)

(1N) If (D-N) is true, then $O_0$ is not Aristotle.

(2N) $O_n$ is Aristotle.

(3N) $\forall k$ (If $O_k$ is Aristotle, then $O_{k-1}$ is Aristotle.)

(4N) $O_0$ is Aristotle.

(5N) (D-N) is false.

[25] Suppose, moreover, that $O_n$ is the only object, in the possible world in which it exists, that satisfies a weighted most of the properties $\varphi_1, \varphi_2, \ldots, \varphi_n$.

The Sorites Argument Against (D-S)

(1S) If (D-S) is true, then $O_n$ is Aristotle.

(2S) $O_0$ is not Aristotle.

(3S) ∀k (If $O_k$ is not Aristotle, then $O_{k+1}$ is not Aristotle.)

(4S) $O_n$ is not Aristotle.

(5S) (D-S) is false.

Since they are two symmetric and complementary tokens of the same type of argument, I will hereafter refer to The Sorites Argument Against (D-N) and The Sorites Argument Against (D-S) collectively as The Sorites Argument Against Descriptivism—or simply *The Sorites Argument*.

Before evaluating The Sorites Argument, I want to embark on a brief digression to compare it with the semantic argument due to Kripke (1980), as the two arguments seem to possess certain similarities:

First of all, like the semantic argument, The Sorites Argument is an argument against Descriptivism as a mere theory of reference. Second, like the semantic argument, The Sorites Argument too proceeds by the counterexample method. To show that Descriptivism is false, the argument needs only to show that there is some case, actual or merely possible, to which Descriptivism does not apply. Third, like the semantic argument, The Sorites Argument too relies on an independently motivated principle—of which (3N) and (3S) are two instances.[26] Following Wright (1975), I will call this principle *The Tolerance Principle* or (TP) for short.

[26] In the case of the semantic argument, one might call this independently-motivated principle the *causality principle*.

We may now return to The Sorites Argument for an evaluation: The argument is valid: the conclusion, (5), follows from (1) and (4) by *modus tollens*. But is it also sound? (1) can be regarded as simply a definition or as following from the definition of Descriptivism itself. (2) follows from the definition of Descriptivism, whereas (4) follows from (2) and (3) by mathematical induction. So the usual suspect, as it were, seems to be (3): i.e. The Tolerance Principle (TP).

In fact, I believe that there are at least two reasonable ways of rejecting The Sorites Argument, in both cases by rejecting (TP).[27] First, one might accept *Aristotelian Essentialism*, the idea that objects have essential properties without which they could not exist. One could then reject (TP) on the grounds that it is not necessarily true: we never know that one single property does not make a difference, for we never know that it is not an essential property.

However, there is a good chance that Aristotelian Essentialism is incompatible with Descriptivism, at least as a theory of meaning. The very same essentialist reasoning used for rejecting (TP) could just as well be used for rejecting Descriptivism itself. In fact, the modal argument due to Kripke (1980) seems to be the perfect case in point. In the imaginary scenario where Aristotle never did any of the things commonly attributed to him today, the individual in question is (identical to) Aristotle not by answering to any description but rather by clinging to some essential property or properties.

Thus, second and even better, one could accept *Counterpart Theory*, the idea that there is no transworld identity (i.e. identity across possible worlds). One could

[27] Like any tolerance principle employed in a sorites argument, the force of (TP) lies in its *prima facie* plausibility: tolerance principles in typical sorites arguments are initially plausible principles that are often rejected only after one finds out that they lead to unwelcome consequences.

then reject (TP) on the grounds that it is necessarily false: we know that even one single property makes a difference, resulting in a new object not identical to the original one.[28]

So it seems that The Sorites Argument is valid but not necessarily sound. One might therefore be tempted to dismiss the argument altogether, on the grounds that it does not achieve what it was supposed to do—i.e. to refute Descriptivism. What I want to suggest, however, is that not only The Sorites Argument does not refute Descriptivism but that it wasn't even meant to. Rather, the actual value of The Sorites Argument lies in what the argument reveals about Descriptivism:

The observation that has prompted The Sorites Argument was: if Descriptivism is somehow vague, then one would expect a sorites argument corresponding to this vagueness. But what exactly is a sorites argument?

According to Hyde and Raffman (2018),

> [a]t least three conditions must be met for an argument to be an instance of the sorites paradox. (1) It must be possible to construct a sorites series for the predicate in question, viz., a finitely-membered ordering of values on a dimension decisive of the predicate's application. . . . (2) Neighboring values in the series must be only incrementally different, i.e., either indiscriminable or just slightly different. . . . (3) The predicate must be true of the first value in the series and false of the last.

It seems that The Sorites Argument meets all three conditions specified above, thereby qualifying as an instance of the sorites paradox: (1) It seems possible to construct a sorites series, going from $O_n$ to $O_0$ (or from $O_0$ to $O_n$), for the predicate in question. Moreover, the predicate in question seems to be 'Aristotle'. (2) Neighboring

[28] See Lewis (1968) for the original treatment of counterpart theory. Aristotelian essentialism was so dubbed by Quine (1980) and was championed, among others, by Kripke (1980) and Putnam (1975).

values in the series seem to be only incrementally different—in fact, as incrementally different as possible. And (3) the predicate seems to be true of the first value in the series and false of the last.

If the foregoing analysis is correct, then it reveals something interesting about Descriptivism. It reveals that the vagueness of Descriptivism consists, just like any other case of vagueness, in the existence of a vague predicate. Descriptivism is committed, implicitly if not explicitly, to the rather strange idea that names are vague predicates—which can then be employed to generate sorites arguments.[29]

Therefore, I offer the following (second-order) formula as the ultimate definition of Descriptivism:

$$\forall O\, \forall N\, (N(O) \leftrightarrow (\sum_{i=1}^{m} W(p_i) > 0.5\ \&\ \forall O'\, (\sum_{i=1}^{l} W(p'_i) > 0.5 \rightarrow O = O')))$$

where, in addition to the specifications already made, N stands for a name: i.e. a vague predicate.

[29] The view that names are predicates—although not necessarily vague predicates—is nothing new. See Bach (2015) for an overview of the predicate view. See also Fara (2015) which Bach (2015) praises as making "the strongest case to date for [the predicate view]" (p. 781).

# CHAPTER 4

# CONCLUSION

What does it mean in the grand scheme of things if Descriptivism is indeed committed to the idea that names are vague predicates? Let us first remember that we find something very close to this idea in no one other than Wittgenstein (1953):

> 79. Consider this example: if one says “Moses did not exist”, this may mean various things. It may mean: the Israelites did not have a single leader when they came out of Egypt—or: their leader was not called Moses—or: there wasn’t anyone who accomplished all that the Bible relates of Moses—or: . . . According to Russell, we may say: the name “Moses” can be defined by means of various descriptions. For example, as “the man who led the Israelites through the wilderness”, “the man who lived at that time and place and was then called ‘Moses’”, “the man who as a child was taken out of the Nile by Pharaoh’s daughter”, and so on. And according as we accept one definition or another, the sentence “Moses did exist” acquires a different sense, and so does every other sentence about Moses. And if we are told “N did not exist”, we do ask: “What do you mean? Do you want to say . . . or . . . and so on?” (p. 41[e])

What Wittgenstein seems to be saying is that a name is vague in meaning and consequently a sentence containing a name is indeterminate in truth value. Almost two decades after Wittgenstein, Kripke (1980) had memorably pronounced Descriptivism "wrong from the fundamentals" (p. 93). It seems that according to Kripke what is essential to Descriptivism—and, if wrong, essentially wrong with it—is the conviction due to Strawson (1990) that "[o]ne cannot significantly use a name to refer to someone or something unless one knows who or what it is that one is referring to by that name" (p. 181). Against this, Kripke forcefully argues that it does not take much to succeed in referring to an object other than getting caught up in a chain of reference borrowings going all the way back to that object in a causally

relevant manner. However, rather than being a whimsical, stand-alone aphorism of Strawson's, can not this conviction be just an implication of a more general one, a symptom of an underlying condition: i.e. the Wittgensteinian idea just mentioned?

If names are indeed vague predicates, then of course one can not significantly use a name to refer to a thing unless one knows what thing one is referring to, just as one can not significantly use 'outback' to refer to a thing unless one decides to be "fool enough" to declare one thing among many as the official referent of 'outback'.[30] After all, it is not that 'outback' has no referent but that it has too many referents.[31] In other words: if names are indeed vague predicates, then one can not significantly use a name to refer unless one precisifies that name in one way or another. Looked through this lens, the vagueness of Descriptivism at least begins to make more sense: Descriptivism is not accidentally but essentially vague. The most general version of descriptivism would somehow have to incorporate vagueness as an essential element if that is what lies at the heart of this theory.

This brings us finally to what I have called the received view on the vagueness of Descriptivism. As I have noted, the received view locates the vagueness of Descriptivism in actual and widespread semantic indecision. As such, it seems to amount to semanticism about vagueness. However, if what is essential to Descriptivism is its vagueness, then appealing to semantic indecision must be only

[30] Cf. Lewis (1986): "The only intelligible account of vagueness locates it in our thought and language. The reason it's vague where the outback begins is not that there's this thing, the outback, with imprecise borders; rather there are many things, with different borders, and nobody has been fool enough to try to enforce a choice of one of them as the official referent of the word `outback'. Vagueness is semantic indecision" (p. 212).

[31] Similarly, according to the descriptivist, it is not that a name has no meaning but rather that it has too much meaning. Cf. Searle (1958): "[Names] function not as descriptions, but as pegs on which to hang descriptions" (p. 172).

one way of explaining this vagueness—for there exist theories of vagueness other than semanticism.

Since I am only interested here in making the point that there are other ways of explaining the vagueness of Descriptivism, I will not go into a detailed exploration of various theories of vagueness but rather take two such theories (other than semanticism) as examples and use them to illustrate my point:

One alternative theory of vagueness is *epistemicism*.[32] According to the epistemicist, vagueness is ignorance: although a vague predicate (like 'Aristotle') picks out a perfectly sharp property (like being Aristotle), we just don't (and possibly can't) know about that sharp cut-off line that separates Aristotles from non-Aristotles. To apply epistemicism to The Sorites Argument: we just don't know for which value of *k* (TP) turns out to be false.

Another alternative theory of vagueness is *onticism*.[33] According to the onticist, vagueness is a feature of the world itself—hence, it is perhaps better known as *worldly vagueness* or, even better, *metaphysical vagueness*. Accordingly, vague predicates pick out vague properties; in fact, the reason why 'Aristotle' is a vague predicate is precisely because being Aristotle is a vague property and, consequently, Aristotle a vague object.

Finally, a brief remark on where this thesis is intended to fit in the literature on reference is in order: Ever since the Kripkean revolution in the theory of reference, many have regarded descriptivism in its various forms as dead. This thesis, therefore, has no such ambition as to overkill an already dead theory. In fact, I have already acknowledged that The Sorites Argument is not sound. However, the

[32] Epistemicism has been defended most notably by Williamson (1996).
[33] Onticism has been defended, among others, by Barnes and Williams (2011).

considerations (i.e. modal, epistemological and semantic) that Kripke's critique of descriptivism is based on have evidently nothing to do with the theory's vagueness. As such, my main interest in this thesis has been to bring into focus the vagueness of descriptivism in such a way that it is seen for what it is: not simply a funny and accidental feature of just one version of the theory, but rather an essential—if not the essential—feature of the whole theory itself.

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